CHAPTER ONE: INTRODUCTION

The use of psycho-active or psychotropic drugs - drugs that act on the mind and change the way we think, feel and behave - is not unique to modern societies. The desire to alter our experience of self and perceptions of others and the world around us may simply be part of, or a consequence of, the human experience. It is thought that there has yet to be a culture within the recorded history of humankind that has not used psychotropic substances of some kind to enhance, distort or escape reality and alter a person's relationship with self and others, to increase a sense of well being, to reduce tension, relieve pain or simply to relax and experience pleasure (Ryder, Salmon & Walker 2001; Lang 2004). Whereas the benefits of such drug use to the process of socialisation, recreation and human pleasure are acknowledged, a contemporary and enduring concern is the significant and indeed unacceptable human costs directly and indirectly associated with use of psycho-active drugs that cause harm to self and others.

Harmful use of alcohol, tobacco, and other drugs (ATOD), including pharmaceuticals, is recognised as a major cause of serious health, social and economic problems in Australia (Single & Rohl 1997; Collins & Lapsley 2002; AIHW 2003a). The far ranging harmful effects of ATOD use; intoxication, drug interactions, regular excessive use and dependence on individuals, families and communities have attracted the attention of economists, politicians, and legislators, especially in the last two decades in Australia (Single & Rohl 1997; Ministerial Council on Drug Strategy 1998; Miller & Weisner 2002; Dietze, Collins & Lapsley 2002; Laslett & Rumbold 2004; Hamilton & Rumbold 2004; Ministerial Council on Drug Strategy 2004). The nature of physiological and psychological harms engendered by harmful drug use means that in Australia, as in other societies, individuals and families with ATOD-related problems present to an already over-burdened health care system with alarming regularity (Ministerial Council on Drug Strategy 1998; Ridolfo & Stevenson 2001; Dietze, Laslett & Rumbold 2004; Ministerial Council on Drug Strategy 2004).

The focus of this study (as reflected in the aims, objectives and research questions stated at the close of this chapter) was registered nurses in practice in the State of New South Wales (NSW), Australia, and the role they have to play in the assessment, recognition, intervention and prevention of ATOD-related problems in their day to day practice in diverse settings. Of particular concern was the investigation of factors that influence nurses' self-reported motivation and ability to effectively assess their patients for these common problems, and ability to offer brief and other timely interventions.

Quantitative analysis of a pilot survey (n=550) and that of a mass population survey of practising registered nurses (n=1281) identifies the variables associated with pertinent nursing knowledge, therapeutic attitudes and clinical activity in regard to caring for the individuals with ATOD-related problems. A multi-variate regression model determined the factors that predicted the desired clinical activities of assessment, information-giving and brief intervention. Qualitative analysis of the responses of 1017 registered nurses to an open-ended question allowed the voice of these nurses to be included and considered, in their reported perceptions of factors influencing their ability to intervene with patients with ATOD-related problems.

1.1 ATOD-Related Problems: How Big is the Problem?

The epidemiology of ATOD-related harm was the driving force behind the *National Drug Strategic Framework 1998-99 to 2002-03: Building Partnerships* (Ministerial Council on Drug Strategy 1998), and remains the central concern of the Commonwealth of Australia's Ministerial Council on Drug Strategy as promulgated by *The National Drug Strategy: Australia's Integrated Framework 2004-2009* (Ministerial Council on Drug Strategy 2004). Continuing high rates of ATOD-related mortality and morbidity remain major sources of preventable death, injury, disability and disease (Ridolfo & Stevenson 2001; Hamilton & Rumbold 2004; AIHW 2005). Nearly one in five deaths in Australia are ATOD-

related (AIHW 2003b), a mortality rate in which the licit drugs tobacco (approximately 19,000 deaths in 1998) and alcohol (2,524 deaths in 1998) predominate (AIHW 2003b). This study was thus concerned with ATOD-related morbidity experienced by an estimated 200,280 Australians hospitalised for health problems as a result of ATOD use (AIHW 2003b), and many more individuals and families who seek advice, information, counsel, and support from community health nurses and care agencies (de Crespigny 2002; Dietze, Laslett & Rumbold 2004; Hamilton & Rumbold 2004).

1.2 The Role of Nurses in Responding to Alcohol, Tobacco, and Other Drug-Related Problems

Nurses are the largest group of health professionals in this country, and have frequent and often prolonged contact with the patients in their care. Nurses therefore, have the potential to play a crucial role in the screening, prevention, assessment, and clinical management of ATOD-related problems for a large number of Australians. As a professional group, however, nurses have been slow to capitalise on their primary position in this regard. Lack of confidence, knowledge and skills, as well as prevailing beliefs and attitudes towards causes and consequences of ATOD-related problems, have been cited as major constraints to nurses undertaking prevention and timely intervention (Murphy 1989; Goodin 1990, Goodin, Bell & Powell 1993; Rassool 1993; de Crespigny 1996; Arthur 1998; Conway 1999; Martin; Rassool 2000; de Crespigny 2002). Nurses, by their own estimation are poorly prepared to assist individuals with ATOD-related problems, and are reluctant to apply the strategies of early recognition and early intervention in their general health care roles (Goodin, Bell & Powell 1993; Church & Babor 1995; de Crespigny, 1996; Arthur 1998, 2001; de Crespigny 2002; Naegle 2003; Lopez-Bushnell & Fassler 2004).

Perceived limitations of nurses' ability to recognise and intervene in ATODrelated problems must be considered in the light of now clear evidence that screening, assessment, early recognition, and intervention for these highly prevalent problems can significantly reduce the associated morbidity, mortality and social harm (Babor & Grant 1992; Kendall & Kessler 2002; Heather 2004; Yang & Skinner 2004; Room, Babor & Rehm 2005). Effectively caring for those who present to hospital and primary health settings with the more readily identifiable moderate to severe consequences of ATOD use is necessary, but clearly not reliable or sufficient, when the full spectrum of ATOD-related harm is considered (Hamilton & Rumbold 2004). Early intervention has been consistently recommended as a priority treatment strategy for over fifteen years in Australia (Carless &Hall 1990; Babor & Grant 1992; Wutzke et al. 2002; Hamilton & Rumbold 2004), with early intervention and timely treatment and rehabilitation, and the attendant strategy of harm minimisation, remaining the major foci of *The National Drug Strategy: Australia's Integrated Framework 2004-2009* for both State (New South Wales) and Australian Federal Governments (Ministerial Council on Drug Strategy 1998, 2004).

1.3 Context

Nurses across the public and private health care system of New South Wales (Australia's most populous state) provide health care to the community twentyfour hours a day. Nurses in any practice setting are in prime positions to recognise physical and psycho-social sequelae of ATOD use and to offer a range of interventions - **if** they perceive themselves as being able to do so, and have sufficient opportunity, education, support, and motivation to do so.

The active concern of this investigation was why the pragmatic and humane value of early interventions for ATOD-related problems are poorly accepted or understood by nurses and those who prepare them for service, or provide preparatory and continuing professional education. Further, there is strong and consistent evidence that health professionals' awareness of, and sensitivity to, ATOD use issues have a marked effect on their willingness and ability to respond to ATOD-related problems (Goodin Bell & Powell et al, 1993; Church 1995; Roche, Parle & Saunders 1996; Norman 2001; Albery et al. 2003; Anderson et al. 2004).

Nurses' reluctance to question and respond to the individual with ATOD-related problems presents a serious barrier to screening, early recognition and

intervention strategies (Watson 1999a; Arthur 2001; de Crespigny 2002; Foster & Onyeukwu 2003). The high numbers of ATOD-effected patients presenting in the broad spectrum of health care settings who are undetected and/or poorly managed, seriously undermines the effective use of costly health services (de Crespigny 1996; Wutzke et al. 2001; Collins & Lapsley 2002; Hamilton & Rumbold 2004). Review of the international nursing literature and expressed concern of the World Health Organisation and International Council of Nurses, show a marked disparity between a high prevalence of ATOD-related problems a low rate of detection and management by primary health care workers such as nurses, is not solely an Australian phenomenon (Rassool 2000; Naegle 2002; Rassool 2004). It is noteworthy, for example, that in the United States of America, in response to the long held concern over poor nursing responses to ATOD-related problems, funding is provided by The National Institute on Alcohol Abuse and Alcoholism (NIAAA) and National Institute on Drug Abuse (NIDA) for three nursing education projects to support curriculum development related to ATOD-related problems (Church & Babor 1995; Miller & Weisner 2002). In the United Kingdom, after years of advocacy for curriculum development for ATOD issues in undergraduate and postgraduate nursing, Hassool (2004) reported on the development and evaluation of a multi-professional course (with National accreditation for nurses) leading to a Certificate in Substance Misuse.

Similar systematic approaches to ATOD specific education and training for nurses in Australia have been slower to emerge (de Crespigny 2002; Kennedy & Roche 2003), and remain sporadic and difficult to clearly identify and document. The particular concern of this study has therefore been the investigation of factors associated with therapeutic attitudes, requisite knowledge and clinical practices that maximise nurses' ability to identify and intervene in ATOD-related problems in Australia's most populous state.

1.4 Alcohol, Tobacco, and Other Drug-Related Knowledge Among Nurses

It is clear from the limited extant nursing literature that the level of nursing knowledge related to ATOD use, and its impact on patient care, is low. Few

published surveys or other studies are available; this gap in the literature demonstrates a longstanding and wide spread, international deficit in ATOD curricula content and practice skills training across undergraduate and postgraduate nursing programs (Hoffman & Heinemann 1987; Murphy 1989; Falkowski & Ghodse 1990; Church & Babor 1995; Arthur 1998; Rassool 2000; de Crespigny 2002; Naegle 2003; Pillon et al. 2004). Further, nurses' response to on-site staff development or in-service education has been found to be variable (Tolley & Rowland 1991;Goodin, Bell & Powell 1993; Happell & Taylor 1999; Watson 1999b; Lopez-Bushnell & Fassler 2004). In summation Hassool (2004) contends that despite efforts made, the growth in nurses' ATOD knowledge has not matched the global growth in ATOD-related problems. A reasonable assumption, therefore, is that if ATOD knowledge and skills (theoretical and clinical) are not actively incorporated within undergraduate programs and inservice education and training, low levels of knowledge and skills will be found in nursing practice.

Concern about the low levels of ATOD knowledge among nurses has been consistent in the small number of published studies over the last twenty years. Noticeably, despite the persuasive nature of the need for an increase in nurses' knowledge and skill to address the impact of ATOD problems, both in the community and acute nursing practice, there has not been a commensurate growth in research endeavour. Studies regarded as important to this investigation and published over the last two decades are briefly discussed below.

Poikolainen (1988) in a study using a random sample of 225 physicians, 296 nurses and 279 clerical personnel in Helsenki, Finland, found that physicians had marginally more knowledge of the aetiology, outcome, prevention and treatment of alcohol-related problems than nurses. The response rate to the questionnaire however was higher for nurses (89%) than physicians (64%) (Poikolainen 1988). Watson (1994), as an integral part of her study of the effectiveness of minimal interventions for problem drinkers, conducted a postal survey of 260 nurses practising in acute care settings in Scotland, 230 nurses working in nurse education, and 63 nurse managers working in large teaching hospitals. Response rates were 65% (168), 33.2% (74), and 34.9% (22) respectively (Watson 1994). Knowledge questions in Watsons' survey, as in the study of Poikolainen, focused

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on alcohol use and alcohol-related problems only. Watson found between 42% and 52% of respondents were able to correctly state Standard Units of Alcohol, depending on the beverage involved, for example, beer (42%), and whisky (52%). Watson noted that 71% of respondents reported having obtained their knowledge about standard drinks from sources outside of nursing, such as public awareness campaigns. Forty-one percent of respondents were able to correctly identify 'sensible' (safe) drinking limits for men, and 42% for women. Again it was noted that the source of nurses' knowledge in regard to "safe drinking" was reported as coming from "... without nursing", by 66% of respondents. Watson further noted that when nurses were asked to list health problems associated with drinking excessively, the problems they identified were stereotypical, particularly late stage problems, such as dependence.

In an Australian study of nurses' knowledge, attitudes and beliefs regarding substance use researchers surveyed 378 mental health clinicians working in Crisis Assessment and Treatment Teams (CATT) in Victoria (Happell, Carta & Pinikahana 2002; Pinikahana, Happell & Carta 2002). Of these mental health clinicians, 302 were nurses. Happell, Carta and Pinikahana (2002) reported that of the 132 nurses who responded to the self-completed questionnaire, 12.7% correctly identified the number of grams in a standard drink and 20.9% reported the correct maximum daily consumption of alcohol for men and non-pregnant women (Happell, Carta & Pinikahana 2002). This latter finding compares similarly with that of the general population survey: "2004 National Drug Strategy Household Survey" (AIHW 2005) in which 20.2% of all respondents (almost 30,000) were able to identify the correct maximum daily consumption of alcohol for men, and 24.2% for women (AIHW 2005). Whereas Happell, Carta and Pinikahana (2002) reported that the majority of these nurses working in mental health reported themselves as "moderately knowledgeable", in response to items about the level of perceived knowledge about dealing with clients with drug and/or alcohol problems (Happell, Carta & Pinikahana 2002), the conclusion that "...overall knowledge levels were adequate" (p. 193), seems surprising as one might expect health professionals such as nurses to have superior knowledge compared with the general population.

A broader view of the Australian context is noted in a key directions paper of 1996, 'Alcohol and other drug problems in Australia: the urgent need for nurse education'. de Crespigny contended that undergraduate, postgraduate and continuing education in nursing had a vital role to play in providing the profession with the knowledge, skills and research base to meet the challenge of increasing prevalence of ATOD-related problems in the Australian community (de Crespigny 1996). Subsequent to this and following concerted advocacy, nursing ATOD policy development, and the implementation of core ATOD subjects in undergraduate and postgraduate nursing programs, the following unsatisfactory situation still prevailed in 2002:

"In Australia and New Zealand there has been scant provision of AOD nursing education within undergraduate or postgraduate education courses, or staff development programs, despite the pervasive nature and impact of AOD problems. Many calls have gone virtually unheard by the profession for AOD nurse education for the last 15 years" (de Crespigny 2002, p. 13).

To this day de Crespigny remains Australia's only professor of ATOD nursing, with the position being jointly funded by the South Australian government and the university where it is based.

Of issue, where purposeful attempts to increase nurses' ATOD-related knowledge in undergraduate curricula have been undertaken and the outcome measured, good effect has been shown. In Australia, a well designed study using a quasiexperimental pre-post test design demonstrated that undergraduate nurses who completed a problem-based, five-week Alcohol Early Intervention Education Package (AEIEP) had significant gains in knowledge as a result of undertaking the education package (Arthur 2001).

Internationally, Stefanini and colleagues surveyed 193 trainee nurses in Italy using a specific questionnaire, investigating the awareness of alcohol-related problems. The results suggested scant awareness and interest in alcohol-related problems among these nurses, but showed that specific courses and lectures were more effective than simply directing nurses to scientific printed material (Stefanini et al. 1999). In a small sample (n=98) of psychiatric nurses in the United Kingdom, Barry, Tudway, and Blissett (2002) found in analysing their data that ATOD knowledge was low and training in ATOD knowledge and skills was inadequate in both length and depth, as confirmed by the expressed views of the nurses themselves. The most recent published study of nurse education and ATOD knowledge comes from Brazil, a descriptive survey conducted among students enrolled in 25 schools of nursing in Brazil. The authors, Pillon, Ramos, Villar-Luis and Rassool begin at a familiar starting point, that of lamenting a dearth of research into the educational preparation of nurses in the care of ATOD-related problems, and conclude in familiar manner consistent with findings of others, that as elsewhere, nursing students in Brazil receive limited, insufficient training and education in ATOD issues.

Beyond the above, published nursing literature reveals no other recent quantified estimates of nurses' ATOD-related knowledge, and studies reviewed have been limited by often focussing on alcohol alone. Church and Babor (1995) have argued the strategic value of conducting surveys on knowledge, attitudes and skills of nursing faculty and students is their importance in helping overcome resistance to change within nursing. An important outcome of this doctoral study has been the measurement of existing levels of ATOD-related knowledge among nurses practising in the State of New South Wales, thus providing a basis for further research, curriculum and other targeted interventions.

1.5 Nurses' Attitudes Towards Patients with Alcohol, Tobacco, and Other Drug-Related Problems

Prolific published research exists about doctors' attitudes and practices regarding ATOD use and related problems. Discussion of nurses' attitudes and practices however, has been limited in both quantity and quality. The extant nursing literature reveals discussion and non-research based commentaries, or is based on research undertaken by researchers from disciplines other than nursing. What is known and remains of concern is that nurses in non-specialised ATOD settings, like their medical counterparts, have been found to be unreliable in identifying any other than the most severely ATOD dependent patients, and therefore inadequately identifying or missing problems that can complicate other conditions, and/or be prevented from progressing along the continuum of ATOD-

related harm (Bartek et al. 1989; Goodin 1990, 1993; Novak & Burns 1994a; Roche, Parle & Saunders 1996; Schuckit et al. 1998; Happell & Taylor 1999; Rassool 2000; de Crespigny et al. 2002; Albery et al. 2003).

Prevailing beliefs and attitudes have been reported as major constraints to timely identification and intervention (Hasin & Carpenter 1998; Roche, Hotham & Richmond 2002; Anderson et al. 2004). Tweed (1989), for example, found that the common belief among nurses that problem drinkers are 'alcoholics' who are intractably non-compliant to treatment, revealed marked continuity with nurses' negative attitudes towards all alcohol-related problems. A 'Drunk' is a 'Drunk' by any other name (Tweed 1989). Nurses seem to uncritically accept the stereotype of the 'alcoholic', with 'alcoholics' being variously described by nurses as 'weak-willed', 'hedonistic', 'hostile', 'combative', 'uneducated' and 'difficult to nurse' (Goodin 1990; Sullivan 1995; Bendtsen & Akerlind 1999; Pillon et al. 2004).

It is thus likely that nurses' beliefs about the aetiology of ATOD-related problems are influential in their willingness [or not] to assist patients with these problems. Casswell and McPherson's (1983) analysis of 431 New Zealand general practitioners 'responses found that the majority supported "a traditional disease conception of alcoholism", and this was correlated with prognostic pessimism; that is, the belief that advice was ineffective, the 'revolving door' syndrome was inevitable and that referral was usually someone else's responsibility. Since then, other research has also found that "therapeutic nihilism" has prevailed and the self-fulfilling and usually pejorative nature of terms such as "alcoholic", "addict", and "drug dependent" remains alive with such patients being stereotyped accordingly and considered "therapeutic failures" from the outset (Anderson & Clement 1987; Goodin 1990; Pols 1990; Albery et al. 2003; Anderson et al. 2004; Pillon et al. 2004).

Despite the magnitude and broad spectrum of alcohol-related problems presenting to nurses it is noted that attitudes towards patients labelled 'alcoholic' tend to become more negative as the length of nurses' exposure in overall practice increases (Romney & Bynner 1985; Gerace, Hughes & Spunt 1995; Selleck & Redding 1998; Ragaisis 2004). It is possible, as Bartek, Lindeman, Newton,

Fitzgerald and Hawks (1989) and more latterly, Zacharias et al.(1998), Castledine (2003), Ragaisis (2004), and McKinley (2005) have argued, the florid and at times disruptive nature of ATOD withdrawal and intoxication syndromes is formative of negative attitudes towards all patients with ATOD-related problems. The resultant threatened loss of control of the nurse or patient, higher acuity of patients, increased demand on overall nursing care, and more frequent and prolonged contact of nurses to patients with withdrawal and intoxication syndromes, produces a predominantly negative clinical experience that generalises to all individuals with ATOD-related problems. Paradoxically, the above is a very powerful argument for screening, early recognition and timely intervention, in the first instance (Zacharias et al. 1998; McKinley 2005).

The review above reveals two points of note. Firstly, the bulk of nursing literature relates to alcohol use and alcohol-related problems alone, and so neglects common problems from use of tobacco, prescribed psychotropic drugs and analgesics, "over the counter" drugs, illicit drugs and other substances such as Secondly, a predominantly negative portrayal of nurses' attitudes solvents. towards patients with ATOD problems may be undergoing some degree of change; recent discussion in the literature of nurses' attitudes towards ATOD affected patients suggests that nurses have shifted from being "hostile" to at least, "ambivalent" (Church 2000; Rassool 2000). These observations highlight the importance of obtaining empirical and qualitative data from a large population of nurses to further investigate the issues. Interestingly, in-service education has been shown to have a positive effect on therapeutic attitudes towards ATODrelated problems among rural nurses in New South Wales (Goodin, Bell & Powell 1993). It is also possible, as no studies have been reported so far on this topic, that, as suggested anecdotally by (Novak & Petch 1994b), Australian nurses have never denied or abrogated their duty to care for patients with ATOD relatedproblems, but rather have been historically constrained by a lack of knowledge, skills, organisational, policy and structural support (de Crespigny 2002).

1.5.1 Measurement of Nurses' Professional Attitudes Towards Alcohol, Tobacco, and Other Drug-Related Problems

In the process of developing this study, possible attitudinal determinants of nurses' willingness, self-perceived capacity to intervene and actual self reported clinical practice in response to the full spectrum of ATOD-related problems presenting to them as nurses, were actively considered and tested through a sequence of pilot studies (Chapter 2: Methods). At the outset of any therapeutic relationship, both the recipient of help and the helper hold a set of assumptions each about the recipient's 'problem', and what might or should be done to correct or ameliorate the problem (Hughes 1989; Church 2000; O'Brien 2001). The importance of this was highlighted by the view that Church (2000) developed over years of commitment to the ATOD nursing field; Church commented:

"Examining personal attitudes is fundamental to the process of understanding the problems and facing challenges inherent to help individuals change. For example, those who hold that the individual is responsible for both the problem and its solution approach the situation from a moralistic posture. That is, addiction is viewed as wilful misconduct as opposed to a disease or dysfunctional debilitating disorder that often requires treatment and rehabilitation." (2000, p. 8)

Church (2000) reiterated the now common understanding that ATOD-related problems are multidimensional and multi-determined (Gorman et al. 2004), and that nurses (and those who educate them) need an understanding of personal and societal attitudes towards ATOD-related problems in order to be effective in their identification and appropriate nursing care. Thus, an important research question of this study was the relationship of moral, social, and professional judgements that nurses make in regard to:

- i. ATOD affected patients, right to nursing care, assessment and intervention,
- ii. the frequency of key clinical activities related to the nursing care of patients with ATOD problems, and
- iii. self-rated perceptions of nurses regarding the importance and usefulness of them providing intervention and care to ATOD affected patients.

Beyond any moral, social and professional judgements nurses may or may not make about their patients' ATOD use and consequent health problems, other attitudinal factors may influence their willingness and ability to intervene. Following the foundation work of Cartwright (1980) and his development of the Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ) for assessing attitudes of helping agents to people with alcohol-related problems, and subsequent work of Lightfoot and Orford (1986), Anderson & Clement (1987) and Gorman, Werner, Jacobs, and Duffy (1990), the AAPPQ has been used to assess attitudes of a range of professional groups, including mental health nurses. The AAPPQ has a well developed and sound theoretical base and is considered a valid and reliable instrument. The AAPPQ as described by Cartwright measures therapeutic attitudes by compiling and adding together five sub-scales:

- 1. The helping agent's (e.g. nurse's) motivation or willingness to work with drinkers (*Motivation*)
- 2. Their expectations of work satisfaction with these patients (Role Support)
- 3. Their feelings about the adequacy of their knowledge and skills in working with these patients (*Role Adequacy*)
- 4. The extent to which they felt they had the right to work with drinkers (*Role Legitimacy*)
- 5. Their self-esteem in this specific task (*Task Specific Self-esteem*).

High scores on these measures indicate a positive therapeutic attitude. The terms "*Role Legitimacy*" and "*Role Adequacy*" - used to label factor scale measures of therapeutic attitudes in this study, were adopted from the work of Cartwright (Chapter 2: Method). Items comprising the Therapeutic Attitude Scale in this study however, while inspired by the work of Cartwright and others, are not directly derived from it. That is, despite the wide use of the AAPPQ and its shortened version SAAPPQ (Anderson & Clement 1987), the guiding principles for the progressive development of the therapeutic attitude measures in this population survey of practising nurses were to:

- i. make the measures specific and relevant to a broad population of practising nurses and,
- ii. to develop valid and reliable measures of nurses' self-rated motivation, intention and ability to respond to patients with ATOD-related problems.

Conclusions from these foundation research studies assessing attitudes of helping agents to people with alcohol-related problems of Cartwright (1980), Lightfoot and Orford (1986), Anderson & Clement (1987), and Gorman et al. (1990), show that these researchers share some common findings. Of principal relevance to this investigation; 'therapeutic commitment' was reported as an amalgam of knowledge (influenced by education) and attitudes, both of which were contingent on organisational support, policy conducive to intervention and the nature of the helping agent's experience with alcohol effected individuals. The more recent publication of Albery and colleagues (2003) described the development and assessment of a theoretical model to measure therapeutic attitudes of nonspecialist health workers (n=189) towards people with ATOD-related problems. The sample of non-specialist health workers included "general nurses" (p. 996), although the number of nurses was not given. These researchers concluded that therapeutic commitment could be validly characterised as a synthesis of attitudinal and situational constraints and that by using predictive analysis; levels of therapeutic commitment could be explained by the direct effects of self-esteem, perceived situational constraints, role support when working with people with ATOD-related problems, and role security (a combination of role adequacy and role legitimacy) (Albery et al. 2003).

The doctoral study of registered nurses reported here not only quantified nurses' ATOD-related knowledge and therapeutic attitudes towards patients with ATOD-related problems but also investigated the relationship between these two dependent variables and, of critical importance, the degree to which they predicted the ATOD-related clinical activity of a large sample (n=1281) of registered nurses in practice. The investigation used dual methodologies: quantitative and qualitative: firstly to systematically investigate factors within the nurse and clinical setting that predict desired clinical behaviour towards ATOD -related problems, and secondly, to analyse and describe self–reported perceptions of what

aided or impeded it. Thematic analysis of open-ended responses (n=1017) demonstrated that nurses reported a complexity of factors that affected their ability to intervene with patients with ATOD-related problems, and in accord with the literature reviewed above, these were both attitudinal and situational. Among these were factors located within the nurse, within their patient(s), within the workplace, within other health professionals and within the broader social/ cultural context.

1.6 Nurses' Clinical Practices for Identification and Intervention for Alcohol, Tobacco, and Other Drug-Related Problems

The limited nursing research published over the last two decades on this topic suggests that, given the dearth of nursing intervention, any increase in nurses' clinical activity related to assessment and nursing care of patients with ATODrelated problems would be an improvement. Bartek and colleagues (1989) investigated 20 nurses from acute medical-surgical settings in mid-western North America and found that although 25% - 64% of all patients admitted to these facilities had underlying ATOD problems, any (ATOD-related) diagnosis at the time of hospitalisation was not entered into patient records by nurses (Bartek et al. 1989). Two studies in the United Kingdom have been notable in regard to nurses' ability and motivation to screen for Alcohol Related Problems (ARPs), and provide simple educative interventions, especially when given institutional support. The first of these was a small-scale study by Rowland and Maynard (1989) who trained nursing staff (n=46) to use a brief Alcohol Screening Questionnaire, and gave them alcohol education material and active encouragement to offer brief education to patients in a general hospital setting identified 'at risk' of problem drinking. Results found that 59% of nurses thought it important to screen for ARPs, but of these, 42% were more likely to screen if a problem was already suspected, and 47% were of the opinion that screening made no difference. Less than half (48%) stated that they always or most often used the ARP questionnaire when admitting a patient. Fifty nine percent of nurses trained in this simple intervention thought it worthwhile. Rowland and Maynard's conclusion is found in the title of their paper, "Alcohol education for patients:

some nurses need persuading" (Rowland & Maynard 1989). Secondly, in a large scale study in York District Hospital, United Kingdom, nurses and doctors were trained to take part in a screening program for patients with alcohol-related problems over a 21-month study period (Rowland, Beveridge & Maynard 1992). Results showed that nurses screened a higher proportion of patients (48.3% of 1505 admissions) than doctors (27% of 8061 admissions). The rate of positive identification of ARPs, however was lower for nurses (7.8%) than for doctors (9.8%) or a specialist alcohol worker (12.5%), and of note, the rates of identification for all 'helping agents' were very low. Poikolainens' (1988) random samples of 225 physicians, 296 nurses and 279 clerical personnel in Helsenki, Finland, revealed that nurses were more likely (48%), than physicians (40%) to agree that face to face health education was the most effective single measure in the reduction of alcohol problems among patients.

In Australia, a more positive nursing history taking has been reported at one major metropolitan acute care hospital in Sydney, New South Wales (Burns & Adams 1997). This cross-sectional study used measures of frequency and adequacy of alcohol histories taken by nurses and doctors. Patient records were audited at the same two points in time in 1992 and 1994, and results showed that nurses and doctors took alcohol histories from patients on approximately three-quarters of possible occasions, and that this level of recording had not changed over time. The adequacy of alcohol history recording, determined by the degree to which it was comprehensive and accurate, was found to have increased over this same period. In 1992, 71% of alcohol histories taken by nurses and 74% of alcohol histories taken by doctors were judged to be adequate. By 1994, 79% of alcohol histories taken by nurses and 77% of histories taken by doctors were judged to be adequate. The increase in adequacy of alcohol history taking by nurses was significant (p < 0.05), while the increase in the adequacy of history taking by doctors was not. It was the contended by the researchers that the significant increase in clinical practice behaviour found among these nurses over time was positively associated with ATOD education and policy activities of "The New South Wales Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs", implemented by NSW Health Department since late1991 (Burns & Adams 1997).

More recently in the state of Victoria, Australia Happell, Carta & Pinikahana (2002) found high levels of ATOD history taking reported by registered nurses working in mental health settings. In a questionnaire survey of nurses' knowledge and belief regarding ATOD use, participants were asked if they routinely assessed clients who presented with ATOD use problems regarding their:

"...use, and or abuse of tobacco, alcohol, benzodiazepines, cannabis, amphetamines, opiates, other illicit drugs and prescribed medication" (Happell, Carta & Pinikahana 2002, p. 197).

One hundred and thirty four (134) of the 302 nurses surveyed completed the questionnaire; of these the researchers reported that:

"The majority of the nurses reported that they always take a history of substance use, except for tobacco" (p. 197).

Whereas 37.4% reported that they take a history of tobacco use, the proportion of nurses who reported always taking a history from clients with identified ATOD-related problems ranged from a low of 56.9% (prescribed medication) to 70% (amphetamine), and 71% (alcohol and cannabis). These high reported frequencies of history taking, which were likely to have been influenced by the practice ambit of these mental health nurses, are at odds with other research and contrast sharply with the findings of this doctoral investigation, which generated data from a large sample of registered nurses working in a wide range of clinical settings. The quantitative and qualitative data collected in this study allowed a systematic investigation of associations between self-reported core clinical ATOD nursing practices, clinical setting and the use of purpose designed ATOD nursing policies, manuals and protocols implemented under the auspices of "*The New South Wales Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs*" (NSW Health Department 1991).

1.6.1 The "Rhetorical Gap" - Between Ideal and Actual Practice

In Watson's 1994 survey of 260 nurses practising in acute care settings in Scotland, 230 nurses who worked in nurse education and 63 nurse managers working in large teaching hospitals. Watson demonstrated a common problem with desired or "core" clinical ATOD-related activities; that is, the gap between the nurses' perception that these activities were worthwhile and/or necessary and their preparedness to undertake them. Watson's survey included measures of nurses' perceived importance for assessing alcohol consumption, whether registered nurses "should" give advice to problem drinkers, and the extent to which they had been prepared (educated/trained) to perform these activities (Watson 1994). Watson found that 75% of the total sample reported their belief that nurses should routinely ask patients about their alcohol consumption (compared with 88% for smoking tobacco). Interestingly, when sub-groups were asked how important they thought it was for nurses to know about their patients' level of alcohol consumption, 69% of nurse managers thought it very important compared to 60% of nurses working in acute care, both of whom were higher than the nurse educator group (51%). Of further interest was the disparity of just over half (55%) of these nurse educators indicating that they thought their students should be taught to routinely ask patients about their alcohol consumption (compared to 76% for smoking).

Two further disparities were identified by Watson (1994), both of which were influential in the development of clinical activity measures used in the survey of this study. Firstly, 88% of nurses surveyed by Watson expressed the view that nurses should give advice to patients identified as drinking excessively; 85% however, indicated that they had never been taught what advice to give. Of nurse educators, 86% believed that nurses should give such advice but only 54% reported that they believed that their students were taught what advice to give. Secondly, a finding that influenced a major focus for item development in this study was the disparity between what has been reported by nurses as *ideal* practice and what occurs as *actual* practice, with Watson (1994) reporting that despite the "should" imperatives of nurses she surveyed, her review of nursing notes in the records of patients known to be drinking excessively, showed only 28% of nurses having quantified patients' levels of alcohol consumption - with the

overall proportion of nurses who had accurately quantified levels of alcohol consumption, being only 16%. Watson's conclusion was pertinent:

"It was shown that many opportunities for the implementation of preventive measures are being lost through the failure of a relatively high proportion of nurses to assess patients' alcohol consumption accurately" (Watson 1994, p. 52).

1.6.2 Development of Measures of Self-Reported Clinical Behaviours

Despite benefits, Watson's survey was somewhat limited by its exclusive focus on alcohol and self-reported measures of nurses' perceptions of what clinical activities "should" occur. Against this background, it was the intention of this study of Australian registered nurses to develop self-report measures of the frequency of their actual clinical behaviours in the areas of assessment, brief intervention (patient education, information-giving) and more complex interventions (patient-centred discussion, clinical care, motivational interviewing and referral). Further, the intention of the clinical activity items developed for the survey was to obtain measures that encompassed the fuller spectrum of ATOD-related problems of patients cared for by nurses, and to allow for comparisons between attitudinal sets (see above) which reflect nurses' self-reported willingness and capacity to assess and intervene in differing ATOD-related problems. Such direct comparisons test for differences between nurses' stated beliefs about what ATOD interventions "should" and "could" occur, and the extent to which they actually undertook such interventions.

In measuring nurses' responses to screening and brief intervention procedures in an emergency department in Auckland, New Zealand, Adams and Stevens (1994) offered further direction in the development of some items used in this study. Albeit somewhat limited by sample size (n=17) Adams and Stevens included assessment items relating to "tranquillisers" and illicit substance use (cannabis). As reported by Rowland and Maynard (1989) and Watson (1994), Adams and Stevens found that New Zealand nurses reported signs among patients of marked dependence; for example, withdrawal and physical sequela, as the strongest motivation for them to take action (assessment/intervention). A very useful aspect of Adams and Stevens study was their development of items that asked the respondents to indicate the frequency with which they might carry out a range of interventions in the circumstance where a patient had been identified with an ATOD-related problem. Five clinical activity items of this nature were further developed for this study (see Method).

1.7 Nurse Education and Alcohol, Tobacco, and Other Drug-Related Problems

Despite the clear need and opportunity for nurses to respond to common ATODrelated problems, it has been frequently reported over a number of years that the bias towards identifying severely ATOD dependent individuals prevails, at the cost of missing the full continuum of ATOD-related harms that are more responsive to intervention (Bartek et al. 1989; Tweed 1989; Tolley & Rowland, 1991; Gerace et al. 1992; Goodin, Bell & Powell 1993; Hassool, 1993; Novak & Burns 1994; Church & Babor 1995; Arthur 1998; Church 2000; de Crespigny 2002; Rassool 2004). To date, professional education has failed to fully remedy this situation. Rather, this deficit has prevailed through insufficient undergraduate and postgraduate education in ATOD issues, with much nurse education being overly focussed on clinical definitions and descriptions of dependence (or 'addiction'). Little emphasis has been given to the multi-factorial aetiology of ATOD-related problems or education and support for nurses in screening, assessment, and intervention skills necessary to identify and address the broad range of ATOD-related problems presenting to them as practising nurses (Church & Babor 1995; Arthur 1997, 1998; Church 2000; de Crespigny 2002; Pillon et al. 2004; Rassool 2004).

Writers in the United Kingdom have noted that changes to the system of preservice and professional continuing education for nurses in the United Kingdom have provided an important opportunity to redress this area of historical curriculum neglect (Rowland & Maynard 1989; Watson 1999a; Rassool 2000, 2004). Concerns of these British authors that such an important opportunity may be lost is also a concern in the Australian context, in that after more than two decades of progressive implementation of tertiary education for Australian nurses, the amount of ATOD education within undergraduate curricula nationally is highly variable, and in most programs, minimal (Harvey & Russell 1997; Arthur 1998; Happell & Taylor 1999; de Crespigny 2002; Kennedy & Roche 2003). A clear objective of this study was to provide an understanding of the relationship of differing educational programs and clinical settings to ATOD-related knowledge, therapeutic attitudes and clinical behaviours in the Australian context, so that this opportunity is not lost. A multi-methods approach allowed for the quantification of ATOD knowledge and multi-variate regression modelling determined the degree to which ATOD knowledge (however obtained), predicted ATOD-related clinical activity. Importantly qualitative analysis allowed a large number of registered nurses to report perceptions of their own levels of ATOD knowledge and skills and the value of this to their nursing practice.

1.8 The New South Wales Strategic Plan for Nurse Education and Nursing Management

The acknowledged lack of ATOD-related education and training, and the primary role and opportunity of nurses to identify and respond to people with ATOD-related problems led to concern being expressed by the New South Wales Department of Health regarding the level of ATOD-related knowledge and skills among nurses. The "*Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs*" was consequently funded and launched in November 1991 as a major ministerial initiative. The Strategic Plan was optimistic in its objectives and stipulated that all nurses should have adequate knowledge and skills for the prevention, identification, assessment and intervention for ATOD-related problems. Core ATOD-related knowledge, skills and attitudes were identified, and the strategic plan set out essential types of best practice nursing policies and protocols which could guide and legitimise nursing interventions in the full range of health care settings in which nurses practice (NSW Health Department 1991).

Key areas of knowledge, skills and nursing management protocols identified in The Strategic Plan (*"Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs"*, NSW Health Department 1991) were:

- Assessment/History Taking, Identification of Risk Factors
- Management of Withdrawal Syndromes
- Management of Intoxication Syndromes
- Early and Brief Intervention

A foundation philosophy of the New South Wales Strategic Plan for Nurse Education and Nursing Management was that a dual approach was necessary to utilise existing generic nursing skills and knowledge, and to develop higher levels of key clinical nursing skills and knowledge related to the nursing care of people with ATOD-related problems (NSW Health Department 1991; Novak & Petch 1994b). In order to achieve the primary aim of the NSW Strategic Plan, that of improving the ability of nurses to intervene in ATOD-related problems and to increase the frequency of these interventions, these dual strategies of both education and structural change were seen as necessary (NSW Health Department 1991; Novak & Hutchinson 1995). Regarding the former, core skills and knowledge for all practising nurses were documented by an expert reference group and actively disseminated to the nursing profession in a series of key documents, in-service and continuing education strategies across the state. Regarding the latter, the inherent limitations of education alone were recognised and guidelines for nursing policies and procedures to support ATOD interventions were therefore also formulated and strategically implemented across the state (Novak & Hutchinson 1995). The clear strategic intention of these actions was to incorporate the assessment, intervention and on-going management of ATODrelated problems into the daily practice of all nurses, regardless of their practice setting (Novak & Hutchinson 1995; Harvey & Russell 1997).

This strategic approach to increase nurses' capacity to recognise and intervene in ATOD-related problems recognised the need for active collaboration between nurses on the "shop floor" and those who educate, prepare, support, supervise, and

administer their practice, was unique, and remains unique to NSW. In this instance, collaboration took place between nurses themselves, educators (both undergraduate and in-service), clinical specialists, generalist practising nurses, and statutory authorities such as The NSW Drug and Alcohol Directorate and the NSW Nurses Registration Board. The aim of this collaboration was to utilise the best of both "Top Down" and "Bottom Up" dynamics for innovation and change.

1.9 Evaluating the State Strategic Plan

Since the 1991 launch of the "Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs", both formal and informal evaluation have suggested that the extent to which the Strategic Plan had been implemented at the NSW Health Area to Health Area or Health District level was immensely variable. More formal evaluations of the implementation of the Strategic Plan confirmed this. Firstly, the NSW Nurse Education Strategy: Challenges and Barriers to the Implementation of The New South Wales Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs (NSW Department of Health, 1995), a state-wide forum convened by the NSW Drug and Alcohol Directorate, in March 1995, and secondly, the report from The NSW Nurse Education Unit on Alcohol and Other Drugs, Implementation of the NSW Strategic Plan for Nurse Education Nursing Management of Alcohol and Other Drugs in Health Areas and Districts (Novak & Hutchinson 1995).

The somewhat more "grass-roots" evaluation of the State-wide Forum, at which nurses representing all health areas and districts and general and specialist areas of nursing practice were invited to participate (in focus groups, and independently, and via facilitated plenary sessions) was revealing. Participants expressed considerable concern about disparities in priority and consequent resource allocation by administrators that had impacted on the implementation of the Strategic Plan on an Area/District basis. That is, some fared better than others. A more general but persistent concern of forum participants was their sense of there being substantial structural constraints that inhibited full implementation of the Strategic plan in that the "top down – bottom up" rhetoric about expansive and supportive plans made at the top, did not seem to "trickle down" to the bottom.

Particularly, employment and deployment of specialist ATOD nursing staff across the regions and development and implementation of ATOD-related nursing policy and procedures were reported as being constrained and/or under-resourced (NSW Department of Health, 1995).

The evaluation of the NSW Nurse Education Unit on Alcohol and Other Drugs was overall considerably more positive. High levels of ATOD specific nurse education, specialist nursing staff, and policy and procedure implementation were reported. However, clear discrepancies by area/district were also found, with metropolitan regions faring better than rural regions (Novak & Hutchinson 1995). These two reviews recommended - in the interests of patients and the community overall - that a systematic and empirically based outcome study be conducted involving both generalist nurses and nurses specialising in ATOD.

1.10 A Mass Population Survey of the Alcohol, Tobacco, and Other Drug-Related Knowledge, Therapeutic Attitudes and Core Clinical Behaviours of Nurses Practising in New South Wales

At the outset of the Strategic Plan, it was considered critical to develop a process of evaluating the fulfilment of its aims by obtaining progressive, state-wide measures of nurses' ATOD-related knowledge, skills, beliefs, work-related attitudes and clinical behaviours. The development and implementation of policies and protocols governing these practices also needed to be monitored. For this reason, it was necessary to obtain clear benchmarks of nurses' current knowledge, attitudes and frequency of key clinical behaviours at that point in time, and whether, in response to heightened educational and policy activities outlined in the Strategic Plan, these changed positively over time. Thus the initial aim of this doctoral study (the first of its kind in Australia) was to obtain these measures through a mass survey of a randomly selected sample of 5,500 registered and enrolled Nurses who were currently practising in New South Wales (and thus targets of the Strategic Plan).

1.10.1 Aims and Objectives of the State-Wide Survey

Aims:

- To measure the baseline ATOD-related knowledge, therapeutic attitudes and core clinical behaviours of registered and enrolled nurses practising in New South Wales
- To measure the relationship between nurses' ATOD-related knowledge, therapeutic attitudes, core clinical behaviours and the usage of policies and protocols
- To obtain nurses' perceptions of factors that influenced their ability to intervene with patients who have ATOD-related problems.

Objectives:

- 1. To establish a baseline for monitoring changes in the knowledge, therapeutic attitudes and core clinical behaviours of nurses in response to their activities associated with implementation of the NSW Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs.
- 2. To determine if the usage of ATOD-related nursing policies and protocols is associated with nurses' knowledge, therapeutic attitudes and core clinical behaviours (Registered and Enrolled nurses currently practicing in New South Wales).
- 3. To provide an understanding of which educational strategies and factors within nurses' clinical settings influence the knowledge, therapeutic attitudes and core clinical behaviours of Registered and Enrolled nurses in New South Wales.
- 4. To provide a guide for future developments in ATOD-related education, policies and protocols for ATOD nursing interventions.

1.11 Purpose of This Thesis

1.11.1 Summary

This thesis reports and discusses the investigation of factors that determine identification, assessment and interventions of patients with alcohol, tobacco and other drug-related problems by a randomly selected sample of Registered Nurses [n=1281] in practice in New South Wales, Australia. Of particular interest was the relationship between nurses' ATOD knowledge, therapeutic attitudes and clinical activity.

Multiple quantitative and qualitative methods were used, firstly to systematically investigate factors within the nurse and their clinical setting that might predict desired clinical behaviour towards addressing ATOD-related problems, and secondly, to analyse and describe nurses' self–reported perceptions, views and experiences of the issue and what aids or impedes it.

The research instrument - a 72 item self-completed questionnaire was developed and refined within a process of three (3) pilot studies and test-retest method.

A multiple regression model was developed to establish the predictors of key clinical behaviours. Thematic coding was used to analyse the perceptions of these nurses as to the factors that affect their ability to intervene with patients who have ATOD-related problems. Convergent and divergent concerns between quantitative and qualitative findings became apparent.

Thematic analysis of open-ended responses demonstrated that nurses report a complex of factors that affect their ability to intervene with patients who have ATOD-related problems. Among these are factors located within nurses themselves, within their patient(s), within the workplace, within other health professionals and within the broader social/cultural context.

The latter part of the thesis systematically considers the relationship between the quantitative and qualitative findings within this large sample of registered nurses. From this comprehensive level of analysis, workforce implications for ATOD education, training and organisational support for nurses, the most numerous group of health care workers, will be more readily identified.

1.11.2 Research Questions

- 1. What explains the enduring and prevailing disparity between the high rate of clinical prevalence of alcohol and other drug problems and the low frequency of recognition and intervention by registered nurses in practice?
- 2. How much do registered nurses actually know; that is, what is the level of alcohol and other drug knowledge among a large cross-section (n=1281), of practising registered nurses?
- 3. What are the attitudes/beliefs of practising registered nurses, towards patients with alcohol and other drug problems?
- 4. Do purpose designed nursing protocols make a difference to levels of alcohol and other drug knowledge, therapeutic attitudes and the frequency of alcohol and other drug assessment and minimal intervention?
- 5. How much do registered nurses actually do; that is, what is the self-reported frequency of the desired clinical behaviours of assessment and brief intervention among a large cross-section (n=1281), of practising registered nurses?
- 6. What are the relationships between knowledge, therapeutic attitude and clinical behaviour?
- 7. What do "they" (registered nurses) tell us in their "own voice", about their ability to intervene with patients who have alcohol or other drug-related problems?

1.11.3 Significance of the Study

The extant nursing literature as reviewed above determined an urgent need for further investigation into why nurses do not respond to patients with ATODrelated problems in the consistent and effective manner that the prevalence of these costly health problems require. The relatively small numbers of published studies in this regard are predominantly not Australian, and have focused on nurses' ATOD knowledge and/or attitudes towards ATOD-related problems (particularly alcohol) and those affected by them, or the measurement of ATOD clinical practices of nurses. What has been seriously overlooked so far is not only what nurses do or do not do about ATOD-related problems (how much and how often) but also: Why? or indeed: Why not? That is, the extent to which knowledge and attitudes, and context, predict clinical practice has been overlooked. A unique contribution that this study makes therefore to these enduring questions is fourfold in nature.

- The dimension and statistical power of the population survey of randomly selected nurses in practice (n=1281) that is well matched to the existing workforce of registered nurses, is unparalleled in ATOD nursing research in Australia.
- 2. The development and refinement of a *Clinical Activity Scale* that has robust psychometric qualities combined with the size of the sample contributes significantly to the statistical strength and understanding of relationships between the educational, clinical, and personal experience of nurses, ATOD knowledge, therapeutic attitudes and ATOD clinical activity.
- 3. A multiple regression model developed to establish the predictors of key ATOD clinical behaviours. The dimension and statistical power of the sample and the robustness of the *Clinical Activity Scale* add to the strength of this predictive model.
- 4. A multi-method research process utilising sequential triangulation of quantitative and qualitative results. The qualitative data were unique in depth and dimension. Self-reports from 1017 nurses were analysed; the qualitative analysis informed and further developed the empirical strength of this study.

1.12 Organisation of This Thesis

Chapter One - Introduction/Background

This chapter briefly described the extent of ATOD-related harm in Australia and the pivotal role nurses have in identifying, assessing and intervening in ATODrelated problems. The literature reviewed consistently identified the influence of ATOD education and training on nurses' level of knowledge, attitudes and clinical skills that contribute to brief and timely interventions for ATOD-related problems. The 15 year history of the development and implementation of a state government (New South Wales) initiated strategic plan responding to acknowledged deficits in education and nursing management of ATOD-related problems was described and discussed as the background to the study. The need for a state-wide survey of registered nurses' levels of ATOD knowledge, therapeutic attitudes and clinical activity was delineated.

Chapter Two - Method

This chapter evaluates the utility of multi-method research in investigating complex phenomena and describes the process of sequential triangulation of quantitative and qualitative results as used in the study. Three (3) pilot studies and the test-retest method used in the development and refinement of the research instrument are described: a 72 item self-completed questionnaire and the knowledge, therapeutic attitude and clinical activity scales within it. The development and application of multi-layered thematic coding and content analysis of qualitative data from a pilot study of rural nurses (n=550) and the state-wide survey is elaborated.

Chapter Three - Quantitative Analysis: Results

The results contained in this chapter are presented in four sections:

Section 1: demographics, work place variables of the sample of registered nurses, type of initial nurse training/education, years of service, current position, exposure

to ATOD specific in-service education and training, and personal alcohol and tobacco use are tabled. Demographic and work place variables of the sample are compared with the frequency distribution of these variables in the registered nurse workforce (NSW).

Sections 2, **3**, and **4**: results of the systematic analysis of the association of categorical and continuous independent variables with the outcome variables ATOD-related knowledge, therapeutic attitudes, and clinical activity are presented. In the latter part of this chapter (Frequency of Key Clinical Behaviours) the development of a regression model to determine predictors of key ATOD clinical behaviours is described and the results of multiple regression analysis are presented.

Chapter Four - Discussion of Major Findings: Alcohol, Tobacco and Other Drug-Related Knowledge and Therapeutic Attitudes

This chapter presents detailed discussion of two of the three dependent variables selected for investigation: ATOD specific knowledge and therapeutic attitudes. The discussion of ATOD knowledge pays close attention to relationships between particular knowledge areas and the nature of clinical practice and clinical settings of nurses, attendance at ATOD in-service education and the utilisation of nursing procedure manuals. Discussion of therapeutic attitudes includes the relationships between demographic, educational, and work place variables and *Total* therapeutic attitude - a particular focus being the relationships of these independent variables to nurses' scores on the sub-scales of the *Therapeutic Attitude Scale*. Difference between nurses' scores on *Role Legitimacy, Non-judgement*, and the significantly lower subscription to *Role Adequacy* is examined as being central to the concern of this investigation; explanations of the differences between nurses' motivation, intention and action to intervene in patients with ATOD-related problems are provided.

Chapter Five - Clinical Activity: Responses of Registered Nurses to Alcohol, Tobacco, and Other Drug-Related Problems

The most important outcome variable of this investigation - ATOD clinical activity - is comprehensively discussed in this chapter. The component clinical behaviours of clinical activity (as measured by the *Clinical Activity Scale*); Assessment Behaviour, Information-giving Behaviour and Intervention Behaviour are discussed individually, collectively (their relative contribution to *Total Clinical Activity*), and in relation to the two other dependent variables and a range of relevant demographic, educational, and work place variables. The gap between *Ideal* and *Actual* nursing practice regarding patients with ATOD-related problems is then further examined. The chapter concludes with a discussion of the hierarchy of predictors of clinical activity as determined by multiple regression analysis.

Chapter Six - The Numbers Add Up... But

This chapter is the first of two chapters that discuss the qualitative analysis of 1017 nurses who responded to the open-ended question: "*Please list the factors that affect your ability to intervene with patients who have alcohol and/or other drug-related problems*". Discussion in both chapters uses the framework of sequential (within-method) triangulation to systematically consider the relationship between the quantitative and qualitative findings. Convergence and divergence between quantitative and qualitative finding are elaborated in both chapters to provide a holistic and comprehensive understanding of the major empirical finding of the investigation; the significant difference between positive attitudinal sets and motivation to perform desired ATOD-related clinical activities, and the reported frequency at which this occurs.

Chapter six is the most lengthy in the thesis and has as an overarching structure, the nurse-patient relationship and thus is concerned with elaboration and examination of self-reports of nurses within the qualitative themes and sub-themes of: 'Factors located within the nurse' and 'Factors located within the patient'.

Chapter Seven - Nurses, Their Workplace, Work Mates, and ATOD Interventions

This chapter continues the discussion of convergence and divergence between quantitative and qualitative findings arising from the systematic data analysis. It also explores what happened naturalistically in the context of the nurses' work environment, and their professional relationships, role responsibilities, structural and organisational constraints and/or supports that affected their ATOD clinical activities. The chapter is concerned with elaboration and examination of self-reports of nurses within the qualitative themes and sub-themes of: 'Factors located within the workplace', 'Factors located within other health care providers', 'Factors located within the social/cultural context', and 'Comments and concerns regarding nursing practice'.

CHAPTER TWO: METHOD

2.1 Introduction

Multi-method or mixed-method research uses a combination of methods so as to better understand the phenomena of interest. In practice, this combination generally involves the collection and analyses of qualitative and quantitative data to examine the same research question(s) (Polit & Beck 2004). Qualitative and quantitative research approaches are both legitimate, and are generally perceived as reflecting different paradigms and beliefs, seeking different aspects of knowledge, and adopting different methods for data collection and analyses. The differences between, and the epistemological and methodological soundness (of combining, these traditions) are the generally the strength of using the multimethod approach (Adamson 2005). This investigator supports the contemporary viewpoint as purported by Morgan (1998) in resolving what he described as the qualitative and quantitative debate, and that is the adoption the pragmatic rather than the paradigmatic approach (Morgan 1998). Adamson (2004) has a singular view of the utility of 'mixed methods research' as stated in her recent and useful chapter 'Combined qualitative and quantitative designs':

> "...mixed methods have come of age and to include only quantitative or qualitative methods [in health research] falls short of the major approaches being used today" (p. 230)

2.2 Combination of Methods

It is the epistemological and methodological differences between qualitative and quantitative approaches that provide the rationale for using multi-methods in this research. Through this approach various methods of qualitative and quantitative enquiry are combined in order to investigate, understand, and explain the phenomena from multiple perspectives. This approach has a number of advantages. By combining different methods, the limitation of using one individual approach may be overcome or diminished. In other words, using qualitative and quantitative methods offers complementary perspectives and increased rigour, whereby one particular approach is enhanced or compensated for by the strength of using other approaches (Holloway & Wheeler 2002; Polit & Beck 2004; Adamson 2005). Additionally, because qualitative and quantitative methods draw on different paradigms, use different data collecting techniques, and reflect different aspects of reality, the multi-method approach provides opportunities for different theoretical insights into complex aspects of the phenomena that would not have been apparent if a single approach was used (Thurmond 2001;Holloway & Wheeler 2002; Polit & Beck 2004; Adamson 2005).

Methodological pluralism and the integration of findings increases rigour and offer the researcher the opportunities to refute, challenge, support, and contribute to the understanding of data and theoretical positions. By addressing different views of reality the researcher is well placed to more thoroughly investigate and understand the complexity of human experiences. It has been argued that external and internal validity can also be enhanced as a multi-method design provides opportunities to identify and test alternative explanations and interpretations based on contextual understanding (Thurmond 2001; Holloway & Wheeler 2002; Polit & Beck 2004; Adamson 2005).

In this study, the qualitative data has provided a deeper and richer context of nurses' practice than would have been understood if the quantitative data had been the sole source of information. The large set of open-ended responses were analysed to; identify the intentions and related characteristics of respondents; describe attitudinal and behavioural responses; reflect cultural patterns, and work patterns and relationships to fellow nurses and other health care professionals. In more specific terms, in - depth explanations as to what factors facilitated or constrained nurses' interventions for Alcohol, Tobacco and Other Drug (ATOD)-related problems were sought. Utilising sequential triangulation of quantitative and qualitative results, the qualitative analysis better informed and further developed the empirical strength of this work (see Chapter Six).

2.3 Quantitative Data

2.3.1 Survey Methodology

2.3.1.1 Developmental Phase 1992-93

Following the launch and implementation of the "*Strategic Plan: Nurse Education and Nursing Management of Alcohol and Other Drugs*" (Drug and Alcohol Directorate, New South Wales Department of Health, 1991), a determination to establish progressive measures of outcome was made. Of particular interest were measures of the use of ATOD-related nursing protocols and procedures, and nurses' ATOD-related knowledge, skills, beliefs and therapeutic attitudes. A priority task was to develop a viable survey instrument and to test it under field conditions. Consequent data analysis would allow for the validity and reliability of the instrument to be established, and further developed for application in larger population surveys. This author was commissioned as chief investigator at that time.

2.3.1.2 Questionnaire Development

An initial questionnaire was developed by a lengthy review process of the relevant literature (see Introduction) and consultation with a Research Project Group, chaired by the investigator, and was convened under the auspices of The Advisory Committee on Drug and Alcohol For Nurse Education, Training, and Practice in NSW (New South Wales Department of Health). This group comprised a mixture of alcohol, tobacco, and other drug researchers, nurse researchers, nurse academics and clinical nurse specialists in alcohol, tobacco, and other drugs. To further the spread of expertise, Project Group members were drawn from a wide range of pertinent professional sources: Faculty of Nursing, University of Sydney; Department of Public Health, University of Sydney; National Drug and Alcohol Research Centre; Drug and Alcohol Directorate, NSW; Faculty of Health Sciences, University of Newcastle; New South Wales Nurse Education Project, Royal Prince Alfred Hospital, and The Orana/Far West Health Region, NSW.

The process of review entailed six draft forms of the questionnaire until a final form of the instrument was deemed suitable for its intended purpose by the Project Group and the research team.

Knowledge items were developed by The Nurse Education Project (Alcohol and other Drugs) NSW, and augmented by a process of professional review to maximise construct validity and ensure they reflected the key areas of desired knowledge and clinical judgement delineated in the State Strategic Plan.

Attitudinal items, as previously noted owed much to the conceptual framework of "Therapeutic Attitudes" put forward by Cartwright (1980), but also to a systematic process of review that aimed at making these items specific and relevant to a population of practising nurses, and reflective of the professional expectations and role responsibilities of nurses, as outlined in the aims and objectives of the Strategic Plan.

A literature review suggested that personal and professional characteristics of the nurse influence both knowledge and therapeutic attitudes toward ATOD-related problems. Therefore, in addition to usual demographic background, e.g. age, gender and location of work, information was sought as to the respondents' type of initial nurse training/education, years of service, current position, exposure to alcohol and other drug specific in-service education and training, and personal alcohol and tobacco use.

2.3.1.3 Pilot Questionnaire

The items described above were placed in a self-completed, structured questionnaire. The questionnaire contained the following domains.

Demographics

Age, gender, location of work, nurse training/ education, years of service, current position, exposure to alcohol and other drug specific in-service education and training, and personal alcohol and tobacco use.
Alcohol and Other Drug Related Knowledge and Skills

An initial set of 22 knowledge items was developed. A total knowledge score was then able to be calculated for each respondent by adding together the number of correct responses to each item. The 22 questions were divided into five areas according to Strategic Plan guidelines:

- Withdrawal management
- Pathology
- Assessment
- General management
- Standard drinks

Therapeutic Attitudes

Twenty-two attitude items were constructed. Respondents were asked to indicate their support for each item on a five point Likert scale. Summed, these items were taken to indicate a total attitude score towards clients with ATOD-related problems. This was termed "*therapeutic attitude*" with a high score indicating a positive attitude towards clients with ATOD-related problems and a low score indicating a negative attitude. The questionnaire was then tested through a series of pilot studies.

2.3.2 Pilot Study 1: Pilot Survey of Attitudes, Beliefs and Knowledge – Orana/Far West Health Region of New South Wales

2.3.2.1 Establishing the Study

The Orana/Far West health region of New South Wales was self-selecting as the pilot region. Orana Drug and Alcohol Services as part of their implementation of the State Strategic Plan had begun organising a baseline survey of nurses in this region as a pre-test measure for a planned educational intervention. This history provided the opportunity to offer the questionnaire as the survey instrument and to further develop the survey method as a prototype. The objectives of this pilot survey therefore were as follow.

2.3.2.2 Objectives of Pilot Survey

- i. To pilot the questionnaire and preferred method of distribution and collection under survey conditions.
- To gather baseline data on the ATOD-related knowledge, beliefs and workrelated attitudes of practising nurses within the hospital and community based systems of the Orana and Far West Health Region of NSW
- iii. To assess the internal consistency, face and construct validity of items relating to the composite variable "Therapeutic Attitude"
- iv. To assess the face validity of items relating to the composite variable "Alcohol, Tobacco, and Other Drug-Related Knowledge"

2.3.2.3 Sample

The pilot survey population comprised registered nurses and enrolled nurses working in the public health sector, within rural communities in New South Wales. The sample was drawn from public hospitals and associated community health centres. The health services which participated in this study were: Dubbo Base Hospital, Broken Hill Base Hospital, Bourke Hospital, and Cobar Hospital. The sampling frame comprised names of employees on the payrolls of each service. The investigator did not have access to the names of employees. Rather, arrangements were made for each service to distribute the questionnaires to each employee with his/ her payslip. There were an estimated 556 registered and enrolled nurses listed on the payrolls of the participating health services. Most respondents were likely to be employed by Dubbo Base Hospital and Broken Hill Base Hospital since they were the largest of the participating health services.

2.3.2.4 Questionnaire Distribution and Collection

As described above, the questionnaires were sent to nursing staff of each hospital attached to their payslips. They were distributed with information sheets and addressed reply paid envelopes to increase the likelihood of a response. Participants were asked to either return completed questionnaires by reply paid

envelopes or to place them in 'Collection Boxes' which were located in areas deemed accessible throughout each hospital and community health services ie. well-trafficked zones.

2.3.2.5 Recruitment

Several strategies were undertaken in order to encourage participation in this pilot study. An effort was made to draw nurses' attention to the study by displaying posters and distributing fliers within participating hospitals and community health centres. The investigator also visited each location and held discussions with the nursing staff on each shift and the respective wards, to develop nurses' understanding of the study and its aims. These discussions included outlining the history and content of the Strategic Plan and Resource Documents, and the need for structured educational programs on ATOD issues amongst nurses. A 'Question and Answer' booklet was produced and distributed to those who completed the questionnaire; it was designed as an incentive for participating in the pilot study.

2.3.2.6 Response Rate

An overall response rate of forty six percent (46%) was achieved. This represented a total of 255 responses from Registered (192) and Enrolled nurses (63). The number of participants from each service as follows: Dubbo Base Hospital, 118 nurses; Broken Hill Base Hospital, 90 nurses; Bourke Hospital, 30 nurses; Cobar Hospital, 17 nurses.

2.3.2.7 Findings

Details and discussion of results have been published under separate cover -Goodin, B, Bell, A & Powell, D 1993, *Strategic Plan: Nurse Education and Nursing Management of Alcohol and Other Drugs - Pilot Survey of Attitudes, Beliefs and Knowledge - Orana/Far West Health Region, New South Wales*, Drug and Alcohol Directorate, NSW Department of Health - and will not be discussed here. Of significance to this brief developmental history is the confirmation of two key outcome variables.

1. *Knowledge Scores* (level of alcohol, tobacco, and other drug knowledge):

A total knowledge score was able to be calculated for each respondent by adding together the number of correct responses out of the 22 multiple choice questions. In analysis and consequent reporting and discussion, this measure has shown to e useful and reliable.

2. Therapeutic Attitudes

Factor analysis of responses to the seventeen (17) attitudinal items in the Pilot instrument generated three Factor Scales with modest, but acceptable internal reliability (see below). The three factor scales used in the analysis were developed on the basis of accepting items that demonstrated item loadings above 0.45. This factor solution included thirteen (13) of the original seventeen (17) items.

Both the *Therapeutic Attitude Scale* and the three *Therapeutic Attitude Factor Scales* were regarded as useful outcomes of the Pilot Survey and provided a sound basis for the Therapeutic Attitude Scale to be further developed.

2.4 Developmental Phase 1993-1994

A key recommendation of the Report of the "*Pilot Survey of Attitudes, Beliefs and Knowledge - Orana/Far West Health Region, New South Wales*" was that a State-Wide Survey of practising nurses should be funded to:

- i. To measure the ATOD-related knowledge, skills and attitudes of Registered and Enrolled nurses currently practising in New South Wales.
- ii. To measure the relationship between nurses' ATOD-related knowledge, skills and attitudes and the usage of policies and protocols.

Thus the task of review and further development of the survey instrument and method and strategies for a mass population survey was begun.

2.4.1 First Revision of Questionnaire

Knowledge Items

Revision of the knowledge items suggested little change, and the direction of the *State Advisory Committee on Nurse Education and Training for Alcohol and Other Drugs* was that knowledge items developed by the corporate authors of the *"Strategic Plan: Nurse Education and Nursing Management of Alcohol and Other Drugs"* (New South Wales Nurse Education Unit) should remain as field tested in the pilot survey. Further scrutiny suggested that two (2) items pertaining to hazardous levels of drinking for males and females respectively should be changed to comply with the 1994 National Health and Medical Research Guidelines. These modifications were consequently made.

Attitude Items

The thirteen (13) attitude items (see below) derived from factor analysis of the Pilot survey data comprised the Therapeutic attitude items. That is to say, those items with item loadings less than 0.45 (four items) were not included in this revised questionnaire.

Nursing Protocol and Procedure Items

To meet the second of the above aims new items were designed to obtain measures of utilisation of Nursing Procedure Manuals and perceptions of the value of using nursing protocols and procedures for the care of ATOD-related problems.

Clinical Activity Items

Guided by the primary aims of the Strategic plan, which are; i) to improve the ability of nurses to intervene in ATOD-related problems and ii) to increase the frequency of these interventions, fifteen (15) clinical activity items were constructed. These were designed to measure the self-reported frequency of core clinical behaviours related to the assessment and interventions for ATOD-related problems (see below).

2.4.2 Pilot 2: Revised Questionnaire #1

A sample of 34 senior Registered Nurses who were completing a Bachelor of Nursing degree conversion course at the Faculty of Nursing, University of Sydney agreed to complete the revised questionnaire in order to test its internal consistency, face and construct validity. All 34 subjects completed the revised questionnaire.

2.4.3 Pilot 3: Revised Questionnaire # 2

Despite previous validation of the attitudinal scale and sub-scales a decision was taken to reconstruct several of the attitudinal items. The aim of this revision was to increase construct validity. In addition some minor changes were made to the grammar and syntax of some of the nursing protocol items and some of the clinical activity items. Following this final revision the questionnaire was tested on an opportunistic sample of 100 Registered Nurses undertaking a Bachelor of Nursing conversion course at the Faculty of Nursing, University of Sydney. Of this sample, 97 respondents completed the revised questionnaire.

2.4.4 Final Version of the Questionnaire

The questionnaire in its final form was comprised of 72 items (Appendix I):

Items

1-8 Socio demographic
9-12 Training /Education
13-19 Nursing Protocols/Procedures
20 Drug and Alcohol In-service
21 Frequency of reading nursing journals
22-25 Personal substance use
26-38 Attitude Measures
39-48 Frequency of assessment and minimal interventions
49-53 Frequency of interventions for alcohol, tobacco, and other drug problems
54-71 Knowledge questions
72 Open ended-factors affecting ability to intervene

The final questionnaire was professionally formatted to be maximally "user friendly" and was reviewed by an expert group of Alcohol and other Drug Clinical Nurse Consultants prior to printing and distribution. This process of review did not suggest any further modification.

2.5 New South Wales State-Wide Survey

2.5.1 Methods

In the pilot survey (see above) a self-completed questionnaire and direct face-toface method of recruitment were used. The overall response rate obtained using this method was 46%. The first intention was to replicate this method for the state-wide survey and achieve a higher response rate. It was also the intention of this more broadly based population survey to extend the sampling frame to include all Registered and Enrolled nurses currently practising in both public and private hospital systems in New South Wales. To achieve this end a number of steps were taken. These included determining the most appropriate method/s, an adequate sample size and a relevant sample frame for the survey, the latter being a complex and difficult task. Two major methodological approaches were systematically evaluated.

2.5.2 Method 1 - Face-to-Face Recruitment at Ward Level

The first consideration was that the sampling frame must be truly representative of the distribution of the large number of Registered Nurses and Enrolled Nurses working in the health care settings across the state of NSW. The distribution of nurses across the state varies according to region and level of service provided by hospitals and community systems. In order to get adequate representation according to this matrix, it was thought necessary to classify hospitals by these regional and service variables and then randomly select nurses from particular cells, relative to their frequency state-wide.

In working out a sample size using this methodology, the following issues were considered:

- Power analysis based on pilot data, determined that a minimum sample of 1200 would need to be recruited (see below for further description of this calculation);
- There were approximately 275 hospitals in NSW classified by level of service to give 7 strata - the number of hospitals by level of service varied from Health Region/ Area.

Therefore it would have been necessary to stratify by type of hospital in the first instance and select hospitals and community services on the basis of their distribution, by type within the population of all public and private hospitals, and community health services in order to access nurse in primary health care settings. However, this type of recruitment was further complicated by the fact that data collectors would have had to cover the whole state, and this would not have been logistically feasible. For this reason, it was decided that it would be more logical to only sample wards/units within hospitals. In making this decision, however, it became obvious that it would have been necessary to take account of the fact that nurses within wards would be more similar than nurses across wards. Therefore, in order to have adequate power to detect a true effect, it would have been necessary to inflate the sample size significantly and having a sample of hospital-based nurses only would have led to unacceptable bias and limit the validity of generalising findings.

Further, in order to pursue this methodology, access was needed to a database which would give information on the number of nurses employed in each hospital across the state, and it would have been even more desirable to have information about the number of nurses employed at a ward level within these hospitals. After extensive investigation no central database of this information was accessible. In summary, due to lack of access to a central database and substantial logistical difficulties associated with this approach, face-to-face recruitment at ward level was abandoned.

2.5.3 Method 2 - Mass Postal Survey

Advice was then taken from various branches within the NSW Department of Health and it became obvious that a mass postal survey would be a far more feasible method of data collection and because of this it was decided to proceed with this option. Meetings held with the Nurses Registration Board of New South Wales and the Workforce Planning Division of NSW Department of Health confirmed the viability of such a survey. Two particular factors were influential in the decision to proceed: firstly, the high level of support and cooperation offered by the Nurses Registration Board (NRB) and secondly, the ability of the NRB and Workforce Planning to data to allow a comparative analysis of key socio-demographic variables of both responders and non-responders (see Results: Demographics).

2.5.3.1 Sample Size

Determination of the sample size was driven by the outcomes of interest, as well as the comparisons to be made. The main outcome of interest at this point was knowledge of ATOD issues. The Orana/Far West pilot survey had demonstrated that 51% of nurses had a satisfactory level of knowledge. For precision it was required that the sample scores would be within 4% of this point estimate, with 95% confidence. Sample size was then calculated as 1,200 and this was then further inflated to compensate for the predicted low response rate inherent in postal surveys and to allow for sufficient power to make comparisons between groups, e.g. Registered Nurse/Enrolled Nurse, Rural/Metropolitan, Hospital/University trained, Large/Small Hospital, etc. The NRB in cooperation with the NSW Department of Health then randomly selected a sample of 5,500 of all currently practising Registered and Enrolled Nurses in New South Wales. The sample was drawn from the population of Registered and Enrolled Nurses who were: i) currently registered, ii) currently "financial", and iii) state that they were currently working as a nurse.

2.5.3.2 Survey Administration

The Nurses Registration Board, in cooperation with the NSW Department of Health generated a mailing list of the randomly selected subjects - to which the investigator was blind. Numeric coding allowed for complete anonymity of subjects and for the questionnaires and envelopes to be sequentially numbered and thus a progressive tally of respondents and non-respondents to be kept.

2.5.4 Strategies Used to Increase Response Rate

In order to ensure best response rate possible the following strategies were used:

- 1. The questionnaire was mailed-out in a NSW Nurses Registration Board [NRB] envelope;
- 2. A letter was included from the NSW NRB confirming anonymity;

- 3. A letter was included from the Drug and Alcohol Directorate, NSW Department of Health, stressing the importance of the survey. This letter was personally signed by the Director.
- 4. A reply-paid envelope was included.
- 5. Cooperation was enlisted from the New South Wales Nurses Association to:
 - a. publish a notice in the October (1994) edition of "The Lamp" informing all members of the survey, its importance and directing members' support; and
 - b. publish the answers to the knowledge questions in a forthcoming edition, after the survey.
- 6. A second round mail-out, with second letter of support from Director, Drug and Alcohol Directorate was posted out.

2.5.5 Response Rate

Overall, the first round of questionnaires yielded a response rate of 31%. The second round yielded a further 13%, to give an overall response rate of 44%.

2.5.6 Coding of Responses

A coding frame was determined and trailed with a small number of questionnaires. This led to some minor adjustments. The coding frame was then re-trailed with a 10% randomly selected sample and found to work well in practice. All completed questionnaires (n=2376) were consequently coded. The large number of questionnaires with responses to the open-ended items generated a wealth of qualitative responses. A 10% randomly selected sample was thematically coded for qualitative analysis (2.9.1).

2.5.7 Data Management

A database was established on SPSS for Windows. 6. "Clean" data provided 2376 cases for analysis. Factor Analysis was performed on therapeutic attitude and clinical activity items utilising the 2376 cases. Results from this final Factor Analysis were compared with the analysis from the pilot tests of the revised questionnaire providing a clear validation of all scale measures.

2.6 Data Preparation and Analysis

2.6.1 Measures of Knowledge

The measure of nurses' ATOD-related knowledge comprised items related to five areas of knowledge determined by the *State Strategic Plan* guidelines: standard drinks, withdrawal management, and assessment, pathology and general management of drug and alcohol problems. There were twenty two items [see Table 1 on next page], each with multiple choice options. Each item had four responses and one response only was correct. Respondents were required to tick the corresponding box to the (one) answer deemed correct for any question.

2.6.1.1 Scoring

The composite variable "total knowledge score" consisted of the summed scores of all correctly answered items within the knowledge measure for any one person; it was a composite score. Each knowledge item scored one point for a correct answer and zero points for an incorrect answer, thus the range of possible scores for an individual is 0 to 22. A total knowledge score and knowledge area scores were calculated. These scores and the frequency of correct responses by item are presented in Results section.

	Item
Standard drinks	How many grams of alcohol are there in a standard drink? What is the approximate alcohol content of a schooner of beer. What is the approximate alcohol content of a glass of champagne? What is the approximate alcohol content of a "nip" of brandy? What is the approximate alcohol content of one bottle of white wine? What is the approximate alcohol content of a glass of port?
Withdrawal management	One of the drugs of choice in the treatment of alcohol withdrawal is?
-	Which of the following withdrawal syndromes is the LEAST life-
	Patients in severe alcohol withdrawal should be nursed in the following manner One of the complications of high doses of Valium (diazepam) and
	Hemineurin (chlormethiazole) is?
Assessment	The drug of choice for treatment of barbiturate withdrawal is? Which of the following is a symptom of amphetamine intoxication? Hazardous drinking for MALES is an alcohol intake of? Hazardous drinking for FEMALES is an alcohol intake of? Which of the following test results is likely to indicate harmful alcohol intake?
	A 46 year old patient presents with pancreatitis, facial telangiectasis, spider naevi and palmar erythema. This is likely to be due to?
Pathology	Which of the vitamin deficiencies is the MOST likely in a heavy drinker?
	Women who take the oral contraceptive pill and also smoke tobacco have? The leading cause of drug-related deaths in Australia is?
General management	When an obviously intoxicated patient presents themself to a casualty department, the correct action is to? A 28 year old businesswoman presents for minor surgery. Preoperative investigations are within normal range but her nursing history shows that she is drinking 5 to 6 glasses of wine per day on most days of the week. What would you advise her?
	be advised to?

Table 1: Alcohol, Tobacco, and Other Drug-Related Knowledge Items

2.6.2 Therapeutic Attitudes - Scale Development

2.6.2.1 Factor Analysis

The 13 therapeutic attitude items were analysed using a principal components with varimax rotation. Factor analysis produced three factors with eigenvalues greater than 1.50, accounting for 49.6% of the variance. Factor I revealed an eigenvalue of 2.67 and accounted for 22.3% of the variance. Factor II had an

eigenvalue of 1.77 and accounted for 14.7% of the variance. Factor III accounted for 12.6% of the variance, with an eigenvalue of 1.51. One attitude item was excluded from scale construction - *Anyone who drinks can become dependent on alcohol* (communality value: 0.434).

2.6.3 Therapeutic Attitude Scale

The twelve (12) individual items of the *Therapeutic Attitude Scale* are important measures in themselves but the factor scales offer a further dimension of self-rated motivation, intention and ability to respond to ATOD-related problems. The Therapeutic Attitude Factor Scales are conceptualised as follows:

- *Role Adequacy* (Factor Scale: I) is representative of beliefs that respondents have adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems.
- *Role Legitimacy* (Factor Scale: II) is representative of beliefs that respondents have both a right and a professional responsibility to identify and intervene in ATOD-related problems.
- *Non-Judgement* (Factor Scale: III) Is a measure that is representative of a nonjudgemental view of the ATOD effected persons' right to intervention and care. A high score represents a high level of acceptance.

A total "Therapeutic Attitude score" was calculated by computing the mean score of all twelve (12) items comprising the scale. A high score was taken to reflect a positive therapeutic attitude toward people with ATOD-related problems. Factor scale scores were calculated by computing the mean score of the items comprising the factor scale.

Correlations between the total scale score and sub-scale scores showed the highest correlation of "Total Therapeutic Attitude" Score to be with "Role Legitimacy" (r=0.70), and "Role Adequacy" (r=0.70), followed by "Non-judgemental" (r=0.60).

2.6.3.1 Reliability Analysis

Cronbach's alpha was calculated for each scale and found to be moderate but sufficient

Role Adequacy	(alpha = 0.75)
Role Legitimacy	(alpha = 0.61)
Non Judgemental	(alpha = 0.58)
Construction of a Therapeutic Attitude Scale	(alpha = 0.67)

Factor	Item	Communality Value
Role Adequacy	I do not have enough clinical skills to care for intoxicated patients.** I do not have enough clinical skills to care for patients	0.81
	withdrawing from alcohol and/ or other drugs.**	0.86
	to care for persons with alcohol and/ or other drug- related problems.	0.76
Role Legitimacy	I have a responsibility to identify patients with alcohol and/ or drug-related problems.	0.65
	A drug and alconol history should be a routine part of all nursing assessments.	0.59
	have alcohol and/ or other drug-related problems.	0.72
	intervene with patients who have alcohol and/or other drug-related problems.	0.51
	If patients smoke eigerettes nurses have the responsibility to advise them to quit.	0.54
Non-judgement	For the vast majority of alcoholics and addicts	0.62
	Counselling is a waste of effort.** Only those patients with a history of frequent	0.63
	intoxication should be asked about their drinking.** Recently detoxified patients are likely to drink and/ or	0.53
	take drugs as soon as they are out of hospital.**	0.72
	Drug addicts have a weak will.**	0.73

Table 2: Therapeutic Attitude Scale Items

**** Reverse coded items:** Items so notated were reverse coded so as to have all items in a positive response direction and thus allow for mean scores to be computed.

2.6.3.2 Scale Administration

Nurses were asked to rate the extent to which they agreed or disagreed with each attitudinal statement (item). To do so, they were given a five-point scale of

agreement: strongly disagree, disagree, not sure, agree, strongly agree. They simply had to tick the appropriate box which best described how they felt about any given statement.

Many items were constructed in such a way that *agreement* with the item contributed to a positive therapeutic attitude; however some items were constructed so that to *disagree* with the statement contributed to a positive therapeutic attitude. The latter was designed to prevent participants from consistently agreeing or disagreeing with the statements simply because he/ she wanted to provide an answer.

2.6.3.3 Scoring

In order to evaluate "therapeutic attitudes", it was necessary to score the ratings given by the respondents to each statement (item). The agreement scale was scored as follows: strongly disagree (1); disagree (2); not sure (3); agree (4); strongly agree (5). Then a composite score, that is, total score across all items, was calculated for each respondent which represented his/ her "therapeutic attitude". Thus, the higher a nurse's composite score, the more positive his/ her therapeutic attitude was taken to be.

The one (1) item excluded from the factor solution - "*Anyone who drinks can become dependent on alcohol*", was analysed separately to determine if responses to this item were significantly related to other variables.

2.6.4 Clinical Activity - Scale Development

The third outcome variable in this mass population survey is comprised of measures of the frequency of clinical behaviours of nurses in the key areas of assessment, patient education, and intervention for ATOD-related problems.

2.6.4.1 Factor Analysis

The 15 items constructed to obtain measures of the frequency of key clinical behaviours related to assessment, information-giving, and intervention were analysed using a principal components analysis with varimax rotation. Factor analysis produced three factors with eigenvalues greater than 1.16, accounting for 63.7% of the variance.

Factor: I revealed an eigenvalue of 6.57 and accounted for 43.8% of the variance. Factor: II had an eigenvalue of 1.82 and accounted for 12.8% of the variance. Factor: III accounted for 7.8% of the variance, with an eigenvalue of 1.16.

2.6.5 Clinical Activity Scale

The measure of nurses' frequency of clinical activity in relation to persons with ATOD-related problems was also a composite scale comprising items relating to assessment, information-giving, and intervention behaviour. This behaviour was self-reported and not obtained through independent observation. There were fifteen (15) items within the measure. Ten items related to the nurse's usual behaviour, and five items were hypothetical, asking respondents about what they *would* do, if they believed that their patients were having problems associated with their ATOD use (see Intervention, in Table 3, below)

The individual items of the *Clinical Activity Scale* are important measures in themselves but the factor scales offer further and useful analysis of the frequency of the clinical behaviour of nurses in the key areas of assessment, patient education and intervention. Clinical Activity Factor Scales are conceptualised as follows:

Assessment Behaviour (Factor Scale: I) represents a sum measure of the selfreported frequency of performing history-taking and assessment behaviours for ATOD use and physical and psycho-social problems related to ATOD use.

- *Information-giving Behaviour* (Factor Scale: II) represents a sum measure of the self-reported frequency of providing information about safe alcohol and/or other drug use, and/or smoking cessation.
- *Intervention Behaviour* (Factor Scale: III) represents a sum measure of the selfreported frequency of initiating interventions for patients believed to have problems associated with their ATOD use.

A total "Clinical Activity score" was calculated by computing the mean scores of all items. A high score was taken to reflect a high level of clinical nursing behaviour for the identification and nursing interventions for ATOD-related problems. Factor scale scores were calculated by computing the mean scores of the items comprising the factor scale.

Correlations between the total scale score and sub-scale scores showed the highest correlation of "Total Clinical Activity" Score to be with "Assessment Behaviour" (r=0.90), followed by "Intervention Behaviour" (r=0.80) and "Information-Giving Behaviour" (r=0.80).

2.6.5.1 Reliability Analysis

Cronbach's alpha was calculated for each scale and found to demonstrate acceptable internal reliability

History taking/assessment	(alpha = 0.88)
Information giving	(alpha = 0.81)
Interventions	(alpha = 0.84)
Construction of a Total Clinical Activity scale	(alpha = 0.91)

Factor	Item	Communality Value
Assessment	I include a comprehensive alcohol and/ or other drug-related	
	history in my nursing assessments	0.66
	I ask my patients about their alcohol intake	0.88
	I ask my patients questions about their tobacco use	0.87
	I ask my patients about their prescribed drug use	0.77
	I ask my patients about their illegal drug use	0.53
	alcohol and/ or other drug use	0.55
	their alcohol and/ or other drug use	0.48
Information- aiving	I provide information about safe levels of alcohol consumption to patients	0.78
siring	I provide information about smoking cessation to patients who smoke tobacco	0.74
	I provide information about safe injecting practices and safe sex to intravenous drug users	0.79
Intervention	Encourage them to discuss their problems with you	0.80
	Engage them in a brief interview aimed at motivating them to change their behaviour	0.79
	Confront them with the consequences of their alcohol and other drug use	0.76
	Provide them with advice about specialist alcohol and other	
	drug specialist services available	0.68
	Discuss these patients alcohol and/ or other drug-related	0.63
	problems with your team	

Table 3: Clinical Activity Scale Items

2.6.5.2 Scale Administration

Nurses were asked to rate the frequency with which they *usually performed* specific clinical behaviours; and similarly the frequency with which they *would carry out* specific clinical activities. A five-point frequency scale was used for these items: never, rarely, sometimes, often, and always. Respondents ticked the applicable (one) box, thereby denoting a rating for any item.

2.6.5.3 Scoring

It was necessary to score the item ratings in order to determine a composite score i.e. sum of scores, across all items, for each respondent. This score represented the composite variable, clinical activity. The frequency scale was scored as follows: never (1); rarely (2); sometimes (3); often (4); always (5). Higher composite scores reflected a greater level of desired clinical activity amongst nurses; lower composite scores reflected a lesser degree of desired clinical activity.

2.7 Data Analysis/Statistical Methods

Data analysis was consistent with the primary aim of this investigation; to measure the ATOD-related knowledge, therapeutic attitudes and core clinical behaviours of Registered Nurses currently practicing in New South Wales. Frequency distribution of all variables was determined. Standard descriptive summaries were used for continuous and categorical variables. Means, standard deviations, medians and quartiles were used with continuous data. A population profile, frequency distributions and percentages were used to describe variables. To measure central tendency both means and medians were used.

Levels of knowledge were calculated as a total score and by specific areas of alcohol and other drug knowledge. Mean Total Therapeutic Attitude score was calculated by computing the mean score of all twelve (12) items comprising the Therapeutic Attitude scale, and mean Therapeutic Attitude factor scale scores were calculated by computing the mean score of the items comprising each factor scale. Mean Total Clinical Activity score was calculated by computing the mean scores of all fifteen (15) items comprising the Clinical Activity Scale, and mean Clinical Activity factor scale scores were calculated by computing the mean score of the items computed to the score of the it

Knowledge scores, The Therapeutic Attitude Scale and factor scales, and The Clinical Activity Scale and factor scales were identified as the Dependent (Outcome) Variables. Construct validity of these variables, required the development of measures which were broad yet well developed in conception and implementation. This was supported by serial measurements (Pilots 1, 2, and 3) which were validated by a process of expert review and examined statistically on each occasion.

Items in the therapeutic attitude and clinical activity measures all adopted a five (5) point Likert scale. The statistical analyses were conducted using descriptive statistics in the first instance, followed by various inferential procedures. The assumption underlying the inferential statistical techniques was that the attitude and clinical activity measures, utilising Likert scales, could adopt parametric statistical procedures.

The most popular uni-dimensional method of attitude measurement involves ordered categories, in which items are placed in a fixed number of categories, usually 2, 3, 4, 5, 7 or 11. Likert scales are technically ordinal scales and after Thurstone and Chave (1929) the assumption is made that the judgements for each item are normally distributed and consequently, parametric statistics are considered appropriate (Thurstone & Chave 1929; Streiner & Norman 2003; Bowling 2005). These ideas have become convention in research such as this and were initially based on that of Thurstone and later Likert, who argued that intervals between categories are generally equal (Streiner & Norman 2003),and that:

"Parametric statistical techniques that are applicable to interval scales are powerful" (Bowling 2005 p.408)

To test the assumption these data reflected a normal distribution, the descriptive data were examined at the item and scale level and comparison of skew to standard error was undertaken. It was established that the sample satisfied the assumption of normality for the parametric statistical tests, moreover the procedures; t-test and analysis of variance used in this analysis are considered sufficiently robust to violations of normality (Tilling, Peters & Sterne 2005).

The internal consistency of the therapeutic attitude and clinical activity scaled items was evaluated from an examination of item mean and standard deviation and Pearson's r correlation of each item with the total score which acted as a discrimination index for each item. Cronbach's alpha reliability coefficient provided a measure of internal consistency (see above; Scale development). Factor analysis offered evidence for the multi-dimensional nature (construct validity) of the scales as used in this study (Streiner & Norman 2003; Bowling 2005). Of the two scale measures developed, the Clinical Activity Scale is clearly the more robust.

Data were analysed using SPSS PC 6.2 version. The responses to the Likert items, once negative items were reversed, enabled a mean score to be calculated for each scale and factor scale. A mean score towards five for items and composite scales was taken to indicate a more favourable therapeutic attitude and greater frequency of clinical activity, respectively. ATOD-related knowledge scores were computed. Mean scores were then obtained for the various groups, enabling inference to be made in terms of the three outcome variables; knowledge, therapeutic attitudes and frequency of key clinical behaviours.

The results section presents a cross-sectional analysis of the outcome variables in a sample of 1281 Registered Nurse respondents, these were examined using, correlation coefficients, t-test, and ANOVA to determine statistically significant relationships between the outcome variables and both continuous variables and categorical variables respectively.

At the final level of analysis, Multiple Regression Analysis was used to identify the strongest predictors of the frequency of key clinical behaviours. The systematic process of building this predictive model using a forward selection variable selection procedure (SPSS Base System User's Guide, Release 6.0. 1993, p.347), is described in detail in the results section (3.13.Predictors of Key Clinical Behaviours).

2.8 Qualitative Data

2.8.1 Background: Pilot Study

The pilot study in Orana/Far West, NSW asked the same open-ended question of respondents as in the state-wide survey: "*Please list factors that affect your ability to intervene with patients who have alcohol or other drug-related problems*". A total of 145 (57%) nurses responded in the pilot study. A far greater proportion (83% [1071]) of nurses responded in the State-wide survey.

2.8.2 Content Analysis: Pilot Study

The pilot survey data gave rise to initial content analysis viz., similar responses were grouped together into categories on the basis of themes emerging from the qualitative data; a reliable qualitative procedure (Miles & Huberman, 1994, pp.55-57). The data were also quantified by counting the frequencies of codes so that an assessment of the magnitude of the categories could be made. This process was further refined, validated and applied in a multistage (layered) methodology for the larger qualitative data set of the state-wide survey (see below). A brief review of responses from the pilot survey is presented below to illustrate initial thematic coding, and to compare and contrast responses of rural nurses to those of the larger state-wide population. Qualitative themes that emerged from initial thematic coding are as follow.

2.8.2.1 Factors Located Within the Nurse

- Lack of knowledge, skills and training were the dominant responses, with the request for more education frequently presented.
- Counselling, assessment and observation skills were identified as areas where further training was seen as necessary.
- Lack of experience and confidence in caring for patients with ATOD-related presentations was reported.
- A total of 15.2% of all respondents made direct requests for alcohol, tobacco, and other drug specific education.
- A small number of respondents (n=5) indicated that their personal experiences of a family member or friend with an ATOD-related problem, formed barriers to their own ability to intervene as nurses.
- Feelings of fear, impatience, intolerance, nervousness and discomfort, were also identified as barriers to nursing intervention.
- Prejudice, personal bias, and judgemental attitudes were also identified.

"Knowing the patient" and lack of knowledge of support services were seen to negatively affect respondents' ability to intervene patients with ATOD-related problems.

2.8.2.2 Factors Located Within the Patient

The following "patient characteristics" (presented in rank order) were identified as self-reported factors affecting the ability of nurses' in the pilot study to intervene with patients with ATOD-related problems

- Unco-operativeness and non compliance
- Recidivism
- Aggression
- Disruptiveness and abusive behaviour
- Less deserving or lower priority of care
- Distrustfulness
- Lack of acceptance of the problem
- Level of intoxication; type of drug use or withdrawal
- Apathy, lack of insight
- Inability to cope
- Social status, age

2.8.2.3 Factors Located Within the Workplace

- Many respondents identified the lack of time as a barrier to intervention with patients with ATOD-related problems.
- Some of the respondents reported that they felt that time was needed to talk with or counsel such patients.
- Some respondents reported the need to prioritise their nursing care, and identified acute care patients as being of higher priority than those with ATOD-related problems alone.
- Open ward environments were seen as not conducive to ATOD intervention.
- Lack of hospital policy on the nursing management of ATOD-related problems was described.
- The inadequacy of nursing care plans for such patients was also identified.

2.8.2.4 Factors Located Within Other Health Care Providers

- Medical officers were seen as needing education, and their perceived negative attitudes were identified as barriers to intervention by nurses.
- The dominance of the medical model was also reported as a concern.
- Lack of co-operation and support from medical officers, their seeming reluctance to intervene, and the lack of importance placed on ATOD assessment were reported.
- Role confusion and role conflict between nurses and doctors were also seen as problems.
- Poor attitudes of other nurses and nurses' own ATOD-related problems were reported as issues.

2.8.2.5 Factors Located Within the Social/Cultural Context

- The wide cultural acceptance and promotion of alcohol, tobacco and some other drug use was seen as a limitation to nursing intervention.
- Community ignorance and social stigma, and the "small community", that is, the close-knit rural community in which the respondent worked, were identified as significant factors affecting nursing intervention.
- The particular problems surrounding intervention with and management of members of Aboriginal communities were also raised.

2.8.2.6 Comments and Concerns Regarding Nursing Practice

A very small number of respondents (n=7) indicated that it was their usual practice to refer patients with ATOD-related problems to 'specialists' and counsellors.

The lack of support services (eg. detoxification units, specialist staff or units) was identified as a concern. This was particularly highlighted as a need in isolated areas. The value of ATOD resource personnel received positive and negative

comment. Respondents raised concerns regarding the rights of patients to privacy, autonomy and confidentiality (especially nurses working in primary health care settings), and sought clarification of the legalities of nursing interventions in ATOD-related problems.

Intervention was described as a waste of time and energy by two respondents. The value of prevention was highlighted by some.

2.8.2.7 Ethical Issues Arising from the Participants Responses

Some respondents (n=7) raised concerns regarding their lack of knowledge which emerged by completing the questionnaire. Participants reported their need to guess answers or refer to the literature to seek information to be able to respond to some questions. One participant requested the correct answers from the researcher. Another respondent wrote that he or she was scared because of their lack of knowledge. Participants (n=2) indicated that they felt that they 'know nothing'.

2.8.2.8 Quantification of Qualitative Responses

Responses from the 145 nurses were coded to assess relationships between other variables. The responses were divided into 9 categories. Listed below are response categories with corresponding percentage of the sample (n=145) who responded to this open-ended question. (NB: percentages do not total 100% as many listed more than one factor)

Content analysis and thematic coding of nurses' responses in the pilot study provided an important beginning point. By identifying sets of responses; themes, concepts, beliefs, and behaviours emerge (Ryan and Bernard, 2000). From this background qualitative analysis of the larger and more diverse sample of the statewide survey was commenced

Lack of Knowledge/Education/Skills	54.4%
Problem Patients	33.8
Too Busy/Low Priority	29.1
Structural/Organisational Constraints	15.9
Specialist Problem – Refer on	13.8
Don't work with ATOD patients	10.3
Confidentiality/Private Information	10.3
Society/Norms	4.8
Nurses' Personal Experiences	3.4
	1

Table 4: Qualitative Responses Ranked by Percentage of ResponsesPilot Survey: Orana/Far West, NSW (n = 145)

2.9 Qualitative Analysis: Method

2.9.1 Content Analysis – Preliminary Thematic Coding

A review of content analysis of open-ended responses from the Pilot Study was followed by a random selection of 10% of the completed questionnaires from registered nurses in the state-wide survey (n=1281). The ten percent (10%) sample was drawn from cases 0001-1281, using the random number generation facility of SPSS. PC. 6.2 version. Questionnaires without open-ended responses were replaced.

Review of the responses from this larger, more geographically spread and professionally diverse population demonstrated that not all themes emerging from this qualitative data were encompassed by the existing thematic coding structure. The coding frame from the pilot study was expanded utilising the same overall headings (see above) but expanded within these sub-groups, (details below). This type of code frame is described by Donovan and Sanders (2005) as the "Framework Approach" (p. 522), a clearly defined procedure involving the processes of "Familiarisation"- identification of issues, immersion in data, identification of recurrent themes, leading to the "Identification of the thematic (coding) framework" – key concepts and themes are indexed as derived from the aims of the research and as emerge from the data, leading to "Indexing" (coding)

– application of the coding framework to the data (Donovan & Sanders, 2005 p.
522).

The thematic coding framework now developed was one in which content was allocated to major thematic categories (category code), within in which there are "sub-themes" (detail codes). The expanded thematic coding frame with illustrative verbatim responses was submitted for review and comment by the Project Officer (Research) New South Wales Nurse Education Project (Alcohol and other Drugs) and the New South Wales Clinical Nurse Consultant Group. The responses from these two sources were confirmatory, with the latter group offering comments about possible overlap and duplication between codes, and in particular (as per pilot), whether an acknowledged deficit in knowledge and skills was an ethical (practice) concern, and thus should be coded as such.

2.9.2 Content Analysis – The Sample as a Whole and The Whole of The Sample

With data of this volume and complexity, even with the benefit of the review of pilot data, the qualitative analysis was exploratory in nature and therefore, all issues that emerged from the data needed to be captured within the coding. This considered and as noted by others (Thurmond 2001; Holloway & Wheeler 2002; Magnusson, Finnerty & Pope 2005), the compression of qualitative data into arbitrary categories (themes) can result in some of the diversity and nuances between similar responses being lost. The counterview is that of Ryan and Bernard (2000) in contending that time spent by the researcher identifying and refining themes to the point that they can be applied to the whole body of text (in this study; self-reports of 1017 nurses) means that:

"...a lot of the interpretive analysis has already been done" (p. 780)

This point is made clearer still by doyens of qualitative research; Miles and Huberman (1994)

"Coding is analysis" (p. 56)

The "richness" of the ten percent sample of open-ended responses firstly captivated the investigator and secondly gave rise to further methodological considerations.

As follows:

- 1. The question itself led to a multiplicity of responses.
- 2. The diversity of responses meant that particular attention had to be given to interpretation.
- 3. A ten-percent sample may not capture the possible variation in response due to diversity of context and work practice.
- 4. Further sampling may well lead to other emerging themes
- 5. One can be satisfied that data saturation has occurred.

The above considered, a decision was made to thematically code the 1071(83.3%) of the 1281 respondents who responded to the open-ended question.

Similar responses emerging from the data were grouped together into categories on the basis of existing category and detail themes. Data were then quantified by counting the frequencies of codes so that an assessment of the magnitude of the categories could be made. Responses were firstly given a numeric code and entered into the SPSS PC data base and frequency distribution determined.

This initial process of numeric coding was in itself formative as it required identification and review of themes and led to the recognition that some common responses needed new codes to encompass concerns that did not emerge in the smaller, more local pilot sample (Table 5, below). For example, within the category code "*Factors located within the nurse*", an additional detail code – "*No authority to act*", was added.

The data having been quantified, all questionnaires with qualitative responses were reviewed again and opened-ended responses of significance within all categories and sub-categories were recorded into a word processing program (WinWord 6.0) as verbatim responses that were considered to be illustrative of thematic categories and sub-categories.

This process completed, the responses were "layered" within codes according to the four compressed "clinical setting" codes used in the regression analysis (3.14), i.e., *Education and Administration*, *Primary Health Care*, *Acute Care*, and *General Nursing*.

2.9.3 Socio-Demographic Identifiers

In order to link quantitative and qualitative data, each qualitative response was prefaced with individual identifiers from the quantitative data; clinical position, length of time in current position, number of years registered, public: private sector, rural: metropolitan, postcode of workplace. On occasions other facts thought pertinent to more emphatic responses were added eg. total knowledge score and therapeutic attitude score. These identifiers are attached to all qualitative responses of registered nurses as they are discussed in the two chapters focused on results of qualitative analysis (Chapters 6 and 7).

Care was taken to give enough detail to provide the added dimension of relevant background and current practice setting of each nurse, which so often reflected their self-reports, while protecting anonymity by not providing data that would identify any individual nurse.

2.9.4 Selection of Qualitative Responses

Due to repetition of some responses, especially in codes with a high frequency of responses, for example – Theme A.01: *Factors within the nurse: - Nurse lacks knowledge/education* (see below) which accounted for 36% of responses (n=463), responses were selected both for the illustrative nature of the response, and on the basis of the status, clinical position, and seniority of the respondent. That is to say a judgement was made as to:

- 1. How adequately the verbatim response expressed the concept of the thematic code
- 2. The degree to which the response added to existing knowledge and depth of the analysis.
- The degree of influence the respondent may have over fellow nurses eg., a senior administrator (Director of Nursing) reporting having no knowledge of ATOD-related problems, and could see no need for it.
- 4. The prevalence of ATOD-related problems in the clinical context of the nurse eg. a Nursing Unit Manager with 20 years of experience in an acute surgical setting stating he/she had no exposure to ATOD effected individuals.
- 5. The philosophy of care represented, eg. A community nursing service coordinator stating that assessment of ATOD use was an intrusion into the patient's privacy.

As previously stated the size and depth of the data, and variability in individual responses (from single word, to single line, to responses two pages or more), led to respondents having a number of codes, some of which did overlap. Where overlap occurred, the dominant element determined the category into which the response was allocated (Miles & Huberman 1994, p55).

2.9.5 Process of Review

Throughout the coding and documenting of responses, periodic assessment of the rationale underpinning each category code and detail code occurred as a reflective process, resulting in this large data set being examined and re-examined. It was reconciled that overlap and duplication of responses, within, and across respondents provided another element for interpretation and discussion, eg. The relationship(s) between knowledge/skills/experience and confidence (see following Chapter Six). Combining details from different categories in this way, themes that cut across categories were included and not lost.

Dealing with 'rogue' responses; those responses that did not fit well into any thematic code, or were seemingly not made in direct response to the question as asked, but added significantly to the analysis, were simply coded "other", and are discussed separately (Chapter Seven).

2.10 Final Thematic Coding Frame

The final thematic code frame used to code the open-ended question "*Please list factors that affect your ability to intervene with patients who have alcohol and/or other drug-related problems*" is tabled below. Concepts underlying these themes are elaborated in the relevant chapters discussing qualitative analysis in detail (Chapters Six and Seven).

Table 5: Qualitative Analysis – Final Thematic Coding Frame

A. Factors located within the nurse

- A.01 Nurse lacks Knowledge/Education
- A.02 Nurse lacks Skills
- A.03 Nurse lacks Confidence
- A.04 Nurse lacks Experience
- A.05 Nurse has Negative Attitudes
- A.06 Nurse Knows Patient
- A.07 Nurse Frightened/Fearful
- A.08 Nurse Not Aware of AOD issues
- A.09 Frustration/Impatience/Hopelessness
- A.10 Don't know Policies/Referrals/Resources
- A.11 Nurse has No Authority to Act *

B. Factors located within the patient

- B.01 Patient is Uncooperative/Non-compliant/Doesn't want to stop
- B.02 Recidivism
- B.03 Disruptiveness/Abusive Behaviour/Aggression
- B.04 Less deserving or Lower Priority of care
- B.05 Untrustworthy
- B.06 Denial/ lack of Acceptance of a Problem
- B.07 Level of Intoxication/ Type of drug use/Withdrawal/ Long Term effects
- B.08 Apathy/Lack of Insight
- B.09 Inability to Cope
- B.10 Social Status /Age
- B.11 Inappropriate*
- B.12 Already in Treatment*
- B.13 "Personality Clash" *

C. Factors located in the workplace

- C.01 Lack of Time/Too Busy
- C.01a Not enough time to Establish Rapport*
- C.02 Understaffed
- C.03 Environment Privacy-Appropriateness
- C.04 Lack of Clear Policy
- C.05 Lack of Backup Support Structures
- C.06 Role Confusion/Role Boundaries (Nurse)*
- C.07 Inadequate ATOD nursing protocols
- C.08 Not Relevant/Not my Business
- C.09 Need for In-service
- C.10 Little or No Exposure to these patients*

D. Factors located within other health care providers

- D.01 Medical Officers Need Education
- D.02 Negative Attitudes of Others
- D.03 Lack of Cooperation and Support
- D.04 Predominance of Medical Model
- D.05 Seen as a Specialist Problem Refer on*
- D.06 Lack of Specialist Referral Options*

E. Factors within the social/cultural context

- E.01 Stigma for Patient
- E.02 Nurse sees ATOD Intervention as Intrusive/Invasion of Privacy*
- E.03 Cultural Acceptance of AOD Use
- E.04 Nurses Personal ATOD Use/Exposure to ATOD Problems*
- E.05 Lack of support from Family
- E.06 Disruption to Family

F. Comments and concerns regarding nursing practice

- F.01 Need for Prevention
- F.02 Legal Constraints*
- F.03 Ethical Constraints*
- F.04 Undertaking Survey led to Realisation of Low/No knowledge*

G. Other responses not otherwise coded

* Codes expanded or modified.

CHAPTER THREE: QUANTITATIVE ANALYSIS - RESULTS

3.1 Demographics

3.1.1 Introduction

The New South Wales state-wide survey of practising nurses was administered to a randomly selected sample of 5,500 of all currently practising Registered and Enrolled Nurses in New South Wales (see method). The sample was drawn from the population of Registered and Enrolled Nurses who were:

- i. currently registered,
- ii. currently "financial", and
- iii. stated that they "currently are working as a nurse".

Registered Nurses

The results in this section refer to the sample of 1281 Registered Nurses who responded to the survey. As such they represent 54% of the total number of the survey respondents and 3.14% of the total population of Registered Nurses working in New South Wales in 1995. It is these 1281 Registered Nurses who are the respondents of this study.

In addition to usual demographic background, e.g. age, gender and location of work, other information was sort as to the respondent's type of initial nurse training/education, years of service, current position, exposure to ATOD specific in-service education, and training, and personal alcohol and tobacco use.

This section of the results presents the frequency distribution of these variables so as to provide background for the findings from the systematic analysis of the association of these variables with the outcome variables ie. ATOD-related knowledge, therapeutic attitudes, and frequency of key clinical behaviours. To provide measures of representativeness of the sample, wherever possible comparison has been made with the frequency distribution of demographic and work place variables, as presented in the Registered Nurses section of the 1995 "*Profile of the Registered and Enrolled Nurse Workforce, NSW*" (The Workforce Planning Unit, Corporate Services Division, NSW Health Department 1995). A critical difference exists between the survey sample of Registered Nurses (RNs) and the New South Wales Registered Nurse Workforce in that the latter is not only concerned with RNs currently working in 1995 (n=40,844) but also **all** RNs currently registered, (n = 62,050). Wherever necessary this distinction has been clearly made when comparisons are made with the survey sample.

3.1.2 Gender and Age

Of the sample in this study, 95% were female (n= 1216), with the mean age being 45.6 years (SD, 6.7). Of the total population of RNs working in NSW in 1995 a slightly lower proportion (92.1%) were female, thus the sample in this study had a slightly lower proportion of males (5%) as compared to 7.9% males in the working population. By comparison, the respondents were older than the working population with higher proportions of respondents in all age categories above 20-24 years, and over half aged between 40 and 49 years (54%) [Table 6].

Category	Frequency	Percent	Percent ¹
20 - 29 years	8	0.6	14.1
30 - 39 years	227	17.9	35.3
40 - 49 years	684	54.0	32.1
50 - 59 years	305	24.1	15.4
60 - 69 years	43	3.4	2.9

 Table 6: Registered Nurses: Age Groups of Respondents (n=1281) Compared toTotal Population of Registered Nurses Working in NSW

Information missing in 14 cases

1. Age group distribution by percent from Total Population of RNs Working

3.1.3 Length of Service

The mean length of time that respondents had worked in their current clinical area was substantial (mean = 8.2 years, SD. 6.2years, Range: 1 month - 43yrs, 3 months). The seniority of these respondents was further demonstrated by the high mean value for number of years worked as a Registered Nurse (mean = 18.9 years, SD. 7.3 years, Range: 5 months - 48 years), and the frequency distribution of year of first registration, compared to the Workforce population (in shaded column) [Table 7].

Percent Category Frequency Percent 2.9 1950 - 1959 68 5.3 1960 - 1969 398 31.1 14.5 1970 - 1979 758 59.2 30.8 1980 - 1989 13 1.0 34.4 $1990 - 1994^2$ 19 1.5 12.8

 Table 7: Registered Nurses: Year of First Registration (n=1281)

Information missing in 25 cases

2. 1995 data is not given in the Workforce Profile (1995)

3.1.4 Current Clinical Area of Work

Table 8 below, presents frequency distributions of current clinical area compared to the working population (shaded column).

Responses to the open-ended question - "*Clinical area in which you currently work?*" elicited a broad range of data which have been coded to best match the Nurses Registration Boards Workforce categories. However due to the expansive number of categories in the Workforce data (62), some categories have been collapsed to match those of the respondents (see footnotes [Table 8]).
Category	Frequency	Percent	Percent
Multi-Role/ "General Nursing"	209	16.3	11.5
Community	183	14.3	8.7 ³
Medical/Surgical	177	12.3	12.2 4
Aged Care	157	12.2	18.3
Obstets/Midwifery Gynaecology	105	8.2	8.7
Medical	100	7.9	7.9 ⁵
Administration	80	6.2	6.2 ⁶
Critical Care	48	3.8	6.1
Operating Theatres	45	3.5	7.1
Universities/Education	44	3.4	2.1
Psychiatry/Mental Health	40	3.1	5.7
Accident & Emerg.	38	3.0	3.7
Occ.Health/Public Health ⁷	15	1.2	0.9
Disability Services	13	1.0	2.4
Other	46	3.6	2.3 ⁸

Table 8: Registered Nurses (n=1281) Current Clinical Area of Work

Note: Information missing in 16 cases

3. Includes NRB Workforce categories - "School Children's health" and Child and Family Health

4. Known as "Mixed Medical/Surgical" in NRB Workforce profile

5. Includes NRB category "Other Medical" and specialist medical nursing categories, eg. Cardiology, Renal, Respiratory

6. From NRB Workforce Profile; Table 1.8 Registered Nurses working in NSW, 1995 Type of Work

7. No "Public Health" category in NRB Workforce Profile

8. Includes Workforce specialist categories, >0.05%.e.g. "Dermatology", "Neurosurgery"

The greatest proportion of respondents is within *Multi-Role* or "*General Nursing*" category. Whereas there was no direct equivalent in the NRB Workforce data, many rural respondents reported working in more than one (multiple) clinical areas, and others described their area of work as general nursing. It is noted that the sample was well matched on high frequency categories; *Medical/surgical, medical, Obstetrics/midwifery and gynaecology*, and *administration*, but over-represented in *Community* and under-represented in *Aged care* and *Critical care*.

3.1.5 Current Clinical Position

Category	Frequency	Percent	Percent
Registered Nurse	749	61.5	65.7
Clinical Nurse Specialist	134	11.0	11.4
Nursing Unit Manager	93	7.3	5.5°
Midwife	56	4.4	6.6
Administration	49	3.8	4.2 ¹⁰
Educator	41	3.2	2.3
Clinical Nurse Consultant	26	2.0	1.9
Deputy Director of Nursing	23	1.8	1.3
Director of Nursing	22	1.7	1.7
Assistant Director of Nursing	17	1.3	1.7 ¹¹

Table 9: Registered Nurses: Frequency of Current Position (n=1281)

Note: Information missing in 18 cases

9. Includes two (2) Workforce categories; Nursing Unit Manager - Clinical (3.7%), and Nursing Unit Manager - Administration (1.8%).

10. Excludes Nursing Unit Manager - Administration (1.8%).

11. Includes Assistant Director of Nursing - Clinical (0.6%) and Assistant Director of Nursing - Administration

Overall, the frequency distribution of current clinical positions amongst respondents was well matched to the working population of Registered Nurses at the time. Over-representation in senior positions such as Nursing Unit Manager and Deputy Director of Nursing reflected the greater age of respondents compared to the Workforce. It is noted that midwives were under-represented and educators somewhat over-represented [Table 9].

3.1.6 Work Status

The majority of Registered Nurses (65%) worked in the public sector, and this compared well with 68.5% of the RN Workforce working in the Public sector. Fifty per cent of respondents stated they worked full time with the remainder working either part-time (39.5%) or casually (10.5%). In comparison there was a slightly higher proportion of full time RNs (54%), lesser part-time (33.6%), with a higher proportion of RNs working casually (12.3%) than reported in the

Workforce of RNs who were currently working. The proportion of respondents reported that they worked in a Rural, postcode area (48.8%) which was higher than that of the Workforce population (43.3%). Forty-two point five percent (42.5%) of respondents reported working in *Metropolitan* postcode areas.

3.1.7 Use of the Nursing Procedure Manual

When the sample was asked whether they had ever consulted a nursing procedure manual, 95% stated they had, and 36% referred specifically to a procedure manual to assist them in dealing with an ATOD-related problem.

Table 10 (below) shows that majority (37%) of respondents who had used a procedure manual (n=1216), had last used one within the last month. Eighty-five per cent of the sample stated they had a procedure manual in their current workplace and the majority (88%) also stated the nursing procedure manual had been of help to them. Of those who stated the manual was **not** of help, (n=78), 81% stated it had not contained what they needed to know, 26% stated they felt it was generally easier to ask someone, and 19% stated it was too difficult to use. Respondents could make multiple responses on this question, hence the total adds to more than 100%.

Category	Frequency	Percent
Ever used Nursing Procedure Manual	1216	95.0
Ever consulted Nursing Procedure Manual to assist with an ATOD-related problem	457	36.0
When the Nursing Procedure was Last Used		
In the Last Month	476	37.2
>1 Month < 6 Months	376	29.4
Greater than 6 Months	371	29.0
Never Referred to a Nursing Procedure Manual	56	4.4

Table 10: Use of Nursing Procedure Manual

Information missing for 2 cases

3.1.8 Seeking Clinical Advice

Category	Frequency	Percent
Never sought advice	297	24.1
Contact Clinical Nurse Consultant or Clinical Nurse Specialist	296	24.0
Contact Local Drug and Alcohol Service	200	16.2
Refer to Nursing Procedure Manual	149	12.2
Contact NSW Drug & Alcohol Specialist Service	33	2.9
Other ¹²	253	20.6

 Table 11: What is Done First When Seeking Advice About the Nursing

 Management of a Patient With an ATOD-Related Problem

12. Information missing in 50 cases.

Respondents were asked the question "When you want clinical advice/information in regard to the nursing management of a patient with an alcohol or other drugrelated problem, what do usually do first?" (see Q. 19, Appendix I). Table 11, above indicates that respondents were twice as likely to contact a Clinical Nurse Consultant or Clinical Nurse Specialist to deal with an ATOD-related problem, than refer to a procedure manual.

3.1.9 Educational Behaviour

Overwhelmingly (98%) respondents stated they had undertaken their initial nurse education/training in a hospital setting. Seven percent (7%) (n=90), reported having a Degree in Nursing. With regards to self education, 14% stated they had undertaken courses or in-service training specific to ATOD in the last two years, and 65% stated they regularly read nursing journals (regularly is defined as at least once per month).

3.1.10 Use of Tobacco and Alcohol

Table 12 indicates smoking behaviour of the sample. The modal response category for tobacco consumption was non-smoker (55%) followed by exsmokers (28%). Sixteen per cent of the sample were current smokers.

Category	Frequency	Percent
1 - 5 per day	42	3.3
6 - 20 per day	118	9.3
More than 20 per day	48	3.8
Non – smoker	690	54.6
Ex – smoker	359	28.4

Table 12: Number of Cigarettes Smoked Daily

Information missing in 18 cases

Alcohol Consumption

With regards to alcohol consumption, 18% never drank alcohol and 9% drank 5 or more times per week (i.e. did not comply with National Health and Medical Research Council [NH&MRC] low risk guidelines to have at least two alcohol free days per week). When analysing the consumption levels by risk (i.e. consumed more than a safe amount for a man or woman in a day) 5% of males usually drank 5 or more glasses (Table 13) and 13% of females drank 3 or more glasses (Table 14). Thirty-nine per cent stated they were close to someone who had an ATOD-related problem.

Fable	13:	Amount	of A	lcohol	Consumed	l by	' Ma	les
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Category	Frequency	Percent	
Do not drink alcohol	8	13.1	
1 -2 glasses	38	62.4	
3 -4 glasses	12	19.7	
5 -6 glasses	3	4.9	

Information missing for 4 cases

Category	Frequency	Percent
Do not drink alcohol	207	17.5
1 -2 glasses	821	69.5
3 -4 glasses	138	11.7
5 - 6 glasses	11	0.9
7 - 10 glasses	2	0.2
> 10 glasses	2	0.2

Table 14: Amount of Alcohol Consumed by Females

Information missing for 35 cases

3.1.11 Personal Experience

Thirty nine percent (39%) responded yes, to the question, "Are you close to anyone (e.g. family or friends) who has an alcohol or other drug-related problem?"

3.2 Alcohol, Tobacco, and Other Drug-Related Knowledge

3.2.1 Measures of Knowledge

The measure of nurses' ATOD-related knowledge comprised items related to five areas of knowledge determined by the New South Wales Department of Health, "*Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs*" (1991) guidelines; these were standard drinks, withdrawal management, and assessment, pathology and general management of drug and alcohol problems. There were twenty two items. Each item had four responses and one response only was correct. Respondents were required to tick the corresponding box to the (one) answer deemed correct for any question.

3.2.2 Alcohol, Tobacco, and Other Drug-Related Knowledge of Registered Nurses

Frequency distribution of the proportion of respondents giving correct answers was calculated for each item. Results are presented in Table 15, below, questions for which the percentage of correct responses was greater than 50% are presented in shaded boxes. It is apparent in Table 15 that respondents overall have low levels of knowledge in respect to *Standard Drinks*, with less than half of the respondents (46.5%) correctly answering that there a 10 grams of alcohol in a standard drink, or correctly identifying the number of grams of alcohol in commonly available measures of alcoholic beverages.

Key knowledge areas in *Withdrawal Management*, were comparatively well answered, exceptions to this were the items related to barbiturate withdrawal and knowledge as to which withdrawal syndrome is the least life-threatening. Of *Assessment* items, responses correctly identifying hazardous drinking alcohol intake for males (29.1%) were markedly lower than those for females (44.6%). The commonly used biochemical indicator of harmful alcohol intake (elevated gamma-glutamyl transferase-GGT) and alcohol-related physical disorder and stigmata were comparatively well answered (58%, and 81.4%, correct responses, respectively).

Alcohol and tobacco-related *Pathology* seem also to be comparative areas of strength. The knowledge that women who take the oral contraceptive pill and also smoke tobacco have a greatly increased risk of stroke had the highest percentage of correct responses in this knowledge area (80.5%). That the leading cause of drug-related deaths in Australia is tobacco had the lowest percentage of correct responses with less than half the respondents (46%), knowing the correct answer.

Knowledge Area	Description of knowledge item with accepted correct answer	Percent Correct
Standard Drinks	There are 10 grams of alcohol in a standard drink	46.5%
	There are approximately 15 grams of alcohol in a schooner of beer	32.6%
	There are approximately 10 grams of alcohol in a <i>glass of champagne</i>	35.8%
	There are approximately 10 grams of alcohol in a "nip" of brandy	34.0%
	There are approximately 60 grams of alcohol in <i>one bottle of white</i> wine	43.0%
	There are approximately 10 grams of alcohol in a glass of port	23.7%
Withdrawal Management	One of the <i>drugs of choice in the treatment of alcohol withdrawal</i> is Valium (diazepam)	57.3%
	Of Benzodiazepine, Alcohol, Heroin, and Barbiturate <i>withdrawal syndromes</i> ; Heroin is the LEAST life-threatening	20.2%
	Patients in <i>severe alcohol withdrawal</i> should be nursed in a low stimulus environment to reduce anxiety and agitation	81.8%
	One of the complications of high doses of Valium (diazepam) and Hemineurin (chlormethiazole) is <i>Respiratory Depression</i>	76.3%
	The <i>drug of choice for treatment of barbiturate withdrawal</i> is Phenobarbitone	14.8%
	Hypertension is a symptom of amphetamine intoxication	48.7%
Assessment	<i>Hazardous drinking for MALES</i> is an alcohol intake of more than 40gms but less than or equal to 60gms per day	29.1%
	<i>Hazardous drinking for FEMALES</i> is an alcohol intake of more than 20gms but less than or equal to 40gms per day	44.6%
	Raised GGT (gamma-glutamyl transferase) is a test result likely to <i>indicate harmful alcohol intake</i>	58.0%
	A 46 year old patient presents with pancreatitis, facial telangiectasis, spider naevi and palmar erythema. This is likely to be due to <i>heavy</i> alcohol intake	81.4%
Pathology	<i>Thiamine</i> is the vitamin deficiencies is the MOST likely in a heavy drinker	74.9%
	Women who take the oral contraceptive pill and also smoke tobacco have a greatly increased risk of stroke	80.5%
	The leading cause of drug-related deaths in Australia is Tobacco	46.0%
General Management	When an <i>obviously intoxicated patient</i> presents themself to a casualty department, the <i>correct action</i> is to assess for other possible causes of altered level of consciousness	85.9%
	A 28 year old businesswoman presents for minor surgery. Preoperative investigations are within normal range but her nursing history shows that she is drinking 5 to 6 glasses of wine per day on most days of the week. <i>Correct advice</i> is that she drinks at harmful levels and needs to reduce her daily inteled	79 69/
	A female who is a regular user of heroin becomes pregnant. Correct	/8.0%
	<i>advice</i> is that she should enter a <i>methadone</i> program	76.7%

Table 15: Proportion of Correct Answers by Knowledge Item: Registered Nurses (n=1281)

The knowledge area of *General Management* was overall a well answered area. The *correct action* for an obviously intoxicated patient demonstrates the highest percentage of correct answers of all knowledge items. It is of interest that the two items relating to *correct advice* both have greater than 75% correct responses.

3.2.3 Mean Knowledge Scores

A total knowledge score was calculated for each respondent by adding together the number of correct responses out of the 22 multiple choice questions. The mean score was 11.70 (S.D. 4.66) with a range from 0 to 22. In percentage terms this average score equates to 53.1% correct.

Calculation of percentiles revealed that 5 percent of the sample scored 3 or less, 50 percent scored 12 or less, whilst the 95th percentile was a score of 19.

3.2.4 Differences in Knowledge Scores According to Area of Knowledge Tested

The proportion of correct answers by knowledge item [Table 15] were calculated as a mean value (in %), for the total score, and each of the key knowledge areas and is presented in Figure 1 below.



Figure 1: Proportion of Correct Answers by Knowledge Area (in Percent)

3.3 Relationship Between (Total) Knowledge Scores and Other Variables

3.3.1 Gender and Age

Correlations between total knowledge scores and continuous variables were computed. A weak negative relationships with the age of the respondent was found (r = -0.14, p<0.001). Years of nursing service in current position was not significant as continuous variable, when re-coded as categorical variable however, length of service categories, 0-2 years (n = 179) and, 20 -25 years (n = 31) had significantly higher mean scores than other length of service in current position categories (F = 3.55, df. 7, p=0.0009).

Investigations for differences between two-group categorical variables on total scores found significant differences for gender (male>female, t=3.02, df.,1279, p<0.01) [Table 16].

3.3.2 Current Clinical Area

One-way analysis of variance found differences in total knowledge scores between the clinical areas of work of respondents, Psychiatric nurses (mean=14.25), occupational health nurses (mean = 14.00), and critical care nurses (13.84) scored higher on average than other groups (F=5.95, df, 2, 1264, p= <0.001). Geriatric nurses were found to have the lowest mean knowledge scores (mean=9.21) with medical/surgical nurses demonstrating mid-range mean knowledge scores (12.03-12.07).

The categorical variable *Current Clinical Area* was re-coded to collapse the seventeen (17) categories into four (4), which were; Acute Care, General Nursing, Primary Health Care, and Administration/Education. ANOVA between these four groups found that RNs working in Acute care settings (n = 237) had significantly higher mean Total Knowledge scores (F = 7.16, df. 3, p=0.0001), and significantly higher mean knowledge area scores for Standard Drinks (F = 4.09, df.3, p=0.006), Withdrawal Management (F = 13.62, df. 3, p<0.00001), and Pathology (F =

3.09, df. 3, p = 0.005). There were no significant differences between the four groups for knowledge areas; Assessment and General management.

3.3.3 Current Clinical Position

No significant differences were found for current nursing position although the Clinical Nurses Consultant (CNC) group had the highest mean knowledge score (12.80).

3.3.4 Work Status

Being employed in the public sector is associated with significantly higher mean scores than being employed in the private sector (t=8.96, df, 1271, p<0.001). Comparison of the proportion of respondents reporting that they had attended ATOD specific in-service however, is significantly higher in those working in the public sector (17.8%) ($\mathbf{x}^2 = 20.20$, df.2, p< 0.0001), than those working in the private sector (8.3%). Comparison by geographical region of workplace found that registered nurses in rural postcode areas had significantly higher Total Knowledge scores (t =3.01, df, 1166, p<0.01) [Table 16].

The proportion of respondents reporting that they had attended ATOD specific inservice was higher in those working in rural settings (16%) than those working in metropolitan settings (12.7%), this difference however, is not statistically significant. Differences were also found between full-time, part-time or casual work status, nurses in full-time positions had higher knowledge scores than other groups (F=14.91, df, 2,1267, p< 0.001).

Variable	Mean Score (S.D.) (Max. Score = 22)	t - test value
<i>Gender</i> male = 65 female = 1216	13. 40 (4. 13) 11. 61 (4. 67)	t =3.02** (df, 1279)
Public/ Private Sector public = 831 private = 442	12. 55 (4. 54) 10. 16 (4.52)	t= 8.96*** (df, 1271)
<i>Country/Metropolitan</i> Country = 572 Metropolitan = 596	12. 13 (4. 59) 11. 31 (4.72)	$t = 3.01^{**} (df, 1166)$
<i>N.P.M Consultation</i> yes = 457 no = 815	12. 96 (4. 46) 11. 00 (4. 64)	t = 7.34*** (df, 1270)
<i>In-service education</i> yes = 177 no = 1050	14. 19 (3. 85) 11. 29 (4. 66)	t = 8.95*** (df, 1225)
<i>Read journals regularly</i> yes = 824 no = 436	12.16 (4.68) 10.89 (4.55)	$t = 4.60^{***} (df, 1258)$
Nursing Degree yes = 90 no = 801	13. 05 (3. 92) 11. 85 (4. 67)	t =2.36* (df, 889)
"Family Problem" yes = 493 no = 765	12. 24 (4. 35) 11. 39 (4. 84)	t = 3. 36** (df, 1128)

Table 16: Relationships between Total Knowledge Score, and Key Variables of Interest (n=1281)

* p < 0.05

** p < 0.01

*** p < 0.001

3.3.5 Use of the Nursing Procedure Manual

Those respondents reporting having ever consulted a Nursing Procedure Manual to assist in dealing with an ATOD-related problem had significantly higher mean total knowledge scores than those who had not (t=7.34, df, 1270, p<0.001) [Table 16].

One-way analysis of variance found differences between groups according to use, and length of time since use of a Nursing Policy Manual (F= 15.23, df,3, 1278, p< 0.0001); those respondents having **never** referred to a Nursing Policy Manual for any reason, had significantly lower knowledge scores than any respondent who had. Respondents who had not used a Nursing Policy Manual for more than six(6) months had lower scores than more recent users although, there was no significant difference between referring to a manual in the last month and between referring to a manual between a month and six months ago.

Registered nurses working in rural postcode areas were found to be proportionately more likely to use a Nursing Policy Manual to assist in dealing with patients with ATOD-related problems than registered nurses working in metropolitan postcode areas (Rural, 63.9%, n = 269, Metropolitan, 36.1%, n = 152). This proportionate difference in Manual consultation is highly significant ($\mathbf{x}^2 = 29.23$, df. 2, p<0.00001).

A significant difference ($x^2 = 60.08$, df.2, p<0.00001) was also found between the proportion of registered nurses working in Public Sector settings who consult a Nursing Policy Manual to assist in dealing with patients with ATOD-related problems (43.9%, n = 356) and those working in private sector settings (21.8%, n = 96).

3.3.6 Seeking Clinical Advice

A similar finding was that respondents who have never sought clinical advice/information for the nursing management of patients with ATOD-related problems had significantly lower mean knowledge scores than those who had (F= 16.02, df, 5, 1227, p<0.0001). However, no significant difference was found due to the reported first action of respondents in seeking clinical advice/information ("*what do you usually do first?*"). Comparison of registered nurses working in rural postcode areas, with registered nurses working in metropolitan postcode areas however, showed that a significantly higher proportion of rural nurses seek clinical advice as a first action when all of the sources nominated are compared ($\mathbf{x}^2 = 46.59$, p<0.00001).

3.3.7 Educational Behaviour

Nurses who had attended ATOD specific in-service education scored significantly higher on average than those who had not (t=8.95, df, 270.6, p<0.001) [Table 15].

Those respondents who indicated that they were regular readers of nursing journals (64.5% of respondents), had significantly higher mean knowledge scores than those who did not (t=4.60, df, 1258, p<0.001). Those respondents who indicated having a Degree in Nursing also had significantly higher mean scores (t=2.42, df, 251, p<0.05). Comparison of the group means of all the two-group categorical variables demonstrates that the greatest effect on knowledge scores is associated with in-service attendance (mean score=14.19).

This latter point considered, it is of further note that the majority of respondents who had ever consulted a Nursing Procedure Manual to assist in dealing with patients with ATOD-related problems had **not** attended in-service (78.8%). Respondents who had attended in-service however, were approximately twice as likely to report such specific NPM consultation (21.2% of in-service = yes, compared to 10.8% of in-service = no, $\mathbf{x}^2 = 24.41$, p<0.00001).

Chapter Three

3.3.8 Use of Tobacco and Alcohol

Measures of Registered Nurses' personal ATOD use also demonstrated effect on mean knowledge scores.

Alcohol Consumption

The number of drinks consumed per week demonstrated a weak positive correlation with total knowledge scores (r=0.095, p=0.001). Never drinking alcohol was associated with lower mean knowledge scores when compared with any other frequency of alcohol use, except, those who were daily drinkers who also had significantly lower mean scores (F=5.07, df, 5, 1267, p=0.0001). Level of alcohol consumption also demonstrated significant effect. Non-drinkers had lower scores than other consumption groups; 1-2, 3-4, 5-6 glasses per occasion (F = 8.94, df, 5, p< 0.00001).

Tobacco Use

Comparison of smokers, non-smokers and ex-smokers found that non-smokers and light smokers (1-5 cigarettes per day) had significantly lower knowledge scores than both groups of current smokers (6-20 per day, and more than 20 per day), and ex-smokers (F=7.77, df, 4, 1258, p<0.0001).

3.3.9 Personal Experience

Significantly higher mean knowledge scores were found for those respondents (39% of sample) reporting the experience of having a close personal or family relationship to a person with and alcohol or other drug-related problem (Family Problem, t=3.26, df, 1128, p<0.01).

3.4 Therapeutic Attitudes

3.4.1 The Therapeutic Attitude Scale

This section presents the results of the measurement of self-rated motivation, intention and ability of nurses to respond to ATOD-related problems, and the relationship of these measures to key independent variables. The composite measure, *Therapeutic Attitude Scale*, comprised of twelve (12) items, was constructed to obtain measures of these attitudes (see Method). A total "Therapeutic Attitude" score was calculated by summing the mean scores of all twelve (12) items comprising the scale. A high score was taken to reflect a positive therapeutic attitude toward ATOD-related problems.

Individual items of the *Therapeutic Attitude Scale* are important measures in themselves, but the factor scales derived from the twelve items offer a further dimension to the analysis.

The Therapeutic Attitude Factor Scales are conceptualised as follows:

- **Role Adequacy** (Factor Scale: I) is representative of beliefs that respondents have adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems.
- **Role Legitimacy** (Factor Scale II) is representative of beliefs that respondents have both a right and a professional responsibility to identify and intervene in patients with ATOD-related problems.
- **Non-Judgement** (Factor Scale: III) is a measure that is representative of a nonjudgemental view of the ATOD effected persons' right to intervention and care. A high score represents a high level of acceptance.

Frequency distribution of agreement responses were calculated for each therapeutic attitude item. Results are presented on the next page [Table 17].

ITEM	Strongly Disagree disagree (%)			Agree (%)	Strongly agree	
	(%)	(70)	(%)	(70)	(%)	
ROLE ADEQUACY						
I do not have enough clinical skills to care for intoxicated patients	3.5	26.5	9.5	46.6	12.3	
I do not have enough clinical skills to care for patients withdrawing from alcohol and/ or other drugs	3.5	23.7	7.6	49.5	14.6	
I have received sufficient nursing education and training to care for persons with alcohol and/or other drug-						
related problems	12.1	55.8	8.2	18.9	3.4	
ROLE LEGITIMACY						
I have a responsibility to <i>identify</i>						
patients with alcohol and/ or drug- related problems	1.2	5.5	4.9	60.9	25.7	
A drug and alcohol history should be a routine part of all nursing assessments	2.0	4.8	4.1	58.9	29.0	
I have a responsibility to <i>intervene</i> with patients who have alcohol and/ or other						
drug-related problems	2.0	20.1	22.8	45.5	6.9	
I receive encouragement within my workplace to intervene with patients						
related problems	6.2	32.7	14.8	36.1	4.4	
If patients smoke cigarettes nurses have the responsibility to advise them to quit	2. 2	27.8	6.5	54. 5	7.3	
NON JUDGEMENT						
For the vast majority of alcoholics and addicts counselling is a waste of effort	14.9	49. 9	19.9	12.6	1.3	
Only those patients with a history of	/					
frequent intoxication should be asked about their drinking	26.4	61.0	3.9	6.2	1.2	
Recently detoxified patients are likely to drink and/ or take drugs as soon as	1.0	26.0	40.0			
they are out of hospital	1.8	30.8	42.8	21.2	1.6	
they are out of hospital Drug addicts have a weak will	1.8 11.6	30. 8 44. 7	42. 8 19. 8	21.2 18.9	1.6	

Table 17: Agreement with Therapeutic Attitude Items by Percent -
Registered Nurses (n=1281)

3.4.2 Attitudinal Responses of Registered Nurses to Patients with ATOD-Related Problems

Attention to percentage distribution of responses to the three *Role Adequacy* items in Table 17, (above), clearly suggests a stated belief by these registered nurses that they lacked sufficient clinical skills to care for patients with intoxication and withdrawal syndromes (shaded columns), and disagreed that they have received sufficient education and training to care for persons with alcohol and /or other drug-related problems. Sixty-seven percent (67.9%) of responses for the education and training item are in either the *Disagree* (55.8%) or *Strongly Disagree* (12.1%), categories (shaded columns).

In contrast it is noted that beliefs that respondents have both a right and a responsibility to identify and intervene in ATOD-related problems (Role Legitimacy) was strongly subscribed to. With the notable exception of the item related to receiving encouragement within the workplace, all Role Legitimacy items had a majority of responses (i.e. <50%), that were in Agree or Strongly Agree categories. The 22% response in the not sure category for the "responsibility to intervene" item, was at odds with the other items measuring perceptions of responsibility for therapeutic action. In particular, it would seem that the sense of responsibility to *identify* patients with ATOD-related problems (86.6% agreement; agree, 60.9%, strongly agree, 25.7%), was markedly stronger than the sense of responsibility of taking action in regard to these problems i.e. intervene with patients who have ATOD-related problems (52.4%; agree, 45.5%, strongly agree, 6.9%). The "encouragement to intervene" item (shaded box), was noted for a comparatively high response frequency in the not sure category (14.8%), and also for only a marginal difference between agreement categories (40.5% agreement; agree, 36.1%, strongly agree, 4.4%), and disagreement categories (disagreement 38.9%; disagree, 32.7%, strongly disagree, 6.2%).

Items in the *Non Judgement Factor* scale were written in the negative, thus high levels of disagreement indicated a high level of non-judgement or acceptance. Respondents indicated that they believed that **not only** patients with a history of frequent intoxication should be asked about their drinking. On the other hand,

they seemed somewhat equivocal about items that related to outcome for patients who have ATOD-related problems. The clearest example of this is the item related to relapse (shaded box); 42.8% of responses were in the *not sure* category.

One attitude item was excluded from the construction of the *Therapeutic Attitude Scale*, because its lower factor loading (communality value: 0.43). The excluded item, "*Anyone who drinks can become dependent on alcohol*", was taken to represent the respondents' subscription to the continuum model of alcohol dependence. The frequency distribution of agreement is presented below.

 Table 18: Agreement with Therapeutic Attitude Item Not Included in Factor Scale, by Percent (n=1281)

ITEM	Strongly disagree (%)	Disagree (%)	Not sure (%)	Agree (%)	Strongly agree (%)
Anyone who drinks can become dependent on alcohol.	6.7%	32.9%	8.2%	43.0%	7.5%

3.4.3 Mean scores of Therapeutic Attitudes

Scores on the twelve (12) component items of the Therapeutic Attitudes Scale represent the self-reported level of agreement with the attitudinal statements as indicated on a Likert scale of 1 to 5 in which; 1 = Strongly disagree, and 5 = Strongly agree.

Self reported scores of positive therapeutic attitudes were computed as a mean value for Total Therapeutic Attitude, and the three factor scale measures of specific attitudinal response. Mean values by scale are presented in Table 19 below.

 Table 19: Mean Scores of Total Attitude Scale and Factor Scales (n=1281)

Variable	Mean	Standard Deviation
Total Attitude	3.31	0.46
Role adequacy	2.53	0.94
Role legitimacy	3.58	0.59
Non-judgement	3.57	0.60

Differences Between Factor Scale Mean Scores

Role Adequacy demonstrated a significantly lower mean score than either Role Legitimacy (t= 37.54, df., 1265 p<0.001) or the Non-judgement factor scale (t=35.80, df.,1267, p<0.001). The mean score for Role Adequacy was only marginally on the positive side of the mid-point of the scale (mean=2.53, max. score = 5).

3.5 Relationship Between Therapeutic Attitude Scores and Other Variables

3.5.1 Gender and Age

Table 20:	Relationships Between Total Therapeutic Attitude Scores,
	and Key Variables of Interest

Variable	riable Mean Score (S.D.)	
Gender		
male=65	3.56 (0.48)	4.55*** (df., 1265)
female=1202	3.30 (0.45)	
Public/Private Sector		
public=822	3.38 (0.46)	7.22*** (df., 975.7)
private=437	3.19 (0.41)	
N.P.M. Consultation		
yes=456	3.46 (0.47)	8.71*** (df., 1256)
no=802	3.23 (0.43)	
In-service education		
yes=176	3.57 (0.50)	7.39*** (df., 223.1)
no=1038	3.27 (0.44)	
Read journals regularly		
yes=813	3.37(0.46)	5.51*** (df., 1245)
no=434	3.21 (0.42)	
Nursing Degree		
yes=89	3.52 (0.54)	3.47**(df., 102)
no=794	3.31 (0.45)	
"Family Problem"		
yes=491	3.36 (0.46)	2.92**(df., 1242)
no=753	3.28 (0.46)	
* p < 0.05		
** p < 0.01		
*** p < 0.001		

Correlations between Total Therapeutic Attitude scores and continuous variables found a weak negative correlation between age and "Non-judgment" score (r=-0.12, p<0.001). Years of nursing service in the respondents' current position demonstrated no significant relationship to total score or any sub-scale score.

Investigations for differences between two-group categorical variables on Total Therapeutic Attitude scores (see Table 20, above), found significant differences for gender, (male>female, t=4.55,p<0.001, df.,1265). Males also scored significantly higher on "Role Adequacy" mean scores than females (t=7.42, p<0.001), there was however no significant difference for gender on either of the two other factor scales (Table 21).

3.5.2 Current Clinical Area

No significant differences were found between current clinical area groups when all seventeen(17) categories were analysed (see Demographics). The categorical variable *Current Clinical Area* was re-coded to collapse the categories into four (4), which were; Acute Care, General Nursing, Primary Health Care, and Administration/Education. Respondents in the Administration/Education group (n=125) had a significantly higher mean score (3.84) on the "Non-judgement" scale, than any other group (F=4.86, df.,3,1251, p<0.01). No significant differences were found between any other of the re-coded groups and Total Therapeutic Attitude or any of the Therapeutic attitude Factor scales.

3.5.3 Current Clinical Position

One-way Analysis of Variance found that those respondents who reported their current position as "educator" (n=41) had a significantly higher mean score (3.72) on the "Non-judgement" factor scale, than any other group (F=3.75, df., 11, 1251, p<0.0001). There were no other significant differences in mean scores between any other groups for Total Therapeutic Attitude, or factor scales.

3.5.4 Work Status

Being employed in the public sector was associated with significantly higher mean scores for Total Therapeutic Attitude than being employed in the private sector (t=7.22,df.,975.7, p<0.001) [Table 19]. As noted in Table 20, below,

significantly higher mean scores were found for public sector respondents on all therapeutic attitude factor scales, with the greatest effect being for "Role Adequacy" (mean difference=0.35). Comparison of the proportion of respondents reporting that they had attended ATOD specific in-service however, is significantly higher in those working in the public sector ($\mathbf{x}^2 = 20.20$, df.2, p< 0.0001), than those working in the private sector, as was the proportion of registered nurses working in public sector settings who consulted a Nursing Policy Manual to assist in dealing with an ATOD-related problem ($\mathbf{x}^2 = 60.08$, p<0.00001).

Variable	Role Adequacy Mean (S.D.)	Role Legitimacy Mean (S.D.)	Non-Judgement Mean (S.D.)
Condor			
male=65	3 45 (0 95)	Not Significant	Not Significant
female=1202	2 48 (0 92)	Noi Significani	Noi Significani
Temate 1202	2.40 (0.92)		
	t=7.42***		
	(df., 1267)		
Public/Private sector			
public=822	2.65 (0.98)	3.63 (0.59)	3.61 (0.62)
private=437	2.30 (0.82)	3.49 (0.57)	3.49 (0.56)
	(72 ***	4 00***	2 20**
	$t = 6./3^{***}$	$t = 4.02^{***}$	t = 3.38 * *
	(df.,1036.3)	(df., 1256)	(df., 9/4./)
N.P.M. consultation			
yes=456	2.84 (0.98)	3.70 (0.58)	3.62 (0.64)
no=802	2.35 (0.87)	3.52 (0.58)	3.54 (0.56)
	t =8.88***	t=5.28***	t = 2.31*
	(df., 852.7)	(df., 1255)	(df.,852.7)
In complex advection			
ves=176	2.08 (1.0)	3 82 (0 64)	3 70 (0 64)
$y_{cs}=1/0$	2.36 (1.0) 2.46 (0.01)	3.62 (0.04)	3.70 (0.04)
10-1058	2.40 (0.91)	3.34 (0.37)	5.55 (0.59)
	t=6.23***	t = 5.90 * * *	t = 3.11 * *
	(df222.3)	(df1211)	(df.,1214)
	(,		()
Read nursing journals regularly			
yes=813	2.57 (0.97)	3.63 (0.59)	3.64 (0.57)
no=434	2.45 (0.87)	3.49 (0.58)	3.44 (0.62)
	t =2.23*	t =3.88**	t =5.60**
	(df.,976.9)	(df.,1244)	(df.,1247)

 Table 21: Relationships Between Therapeutic Attitude Factor-Scales and Key

 Variables of Interest

Variable	Role Adequacy Mean (S.D.)	Role Legitimacy Mean (S.D.)	Non-Judgement Mean (S.D.)
Nursing Degree			
yes=89	2.86 (1.02)	Not Significant	3.76 (0.64)
no=795	2.50 (0.94)		3.55 (0.59)
	t=3.39**		t=3.26**
	(df., 882)		(df., 882)
"Family Problem"			
ves=491	2.61 (0.94)		3.65 (0.56)
no=753	2.48 (0.94)	Not Significant	3.52 (0.62)
	t=2.29*		t=3.82***
	(df.,1244)		(df.,1244)
* p < 0.05			

Table 21 (contd.): Relationships Between Therapeutic Attitude Factor-Scales and **Key Variables of Interest**

** p <0.01

*** p <0.001

No significant difference was found for geographical region of workplace (Rural Vs Metropolitan) on Total Therapeutic Attitude, or factor scale mean scores. Respondents reporting being employed in full-time positions, as opposed to either part-time or casual positions had higher mean scores on Total Therapeutic Attitude (F=7.45, df., 2, 1253, p<0.001) and "Role Adequacy" (F=5.81, df.,2,1255, p<0.01).

3.5.5 Use of the Nursing Procedure Manual

Respondents who reported ever having consulted a Nursing Procedure Manual to assist in dealing with patients with ATOD-related problems had significantly higher mean Total Therapeutic Attitude scores (t =8.71, df., 1256, p<0.001.), than those who had not [Table 19]. Significantly higher mean scores were associated with such consultation for all therapeutic attitude factor-scales [Table 21]. It is of further note that this effect was strongest for mean score on the "Role Adequacy" factor (t =8.88, df., 852.7, p<0.001).

One-way analysis of variance found differences between groups according to use, and length of time since use, of a Nursing Procedure Manual (F= 3.76, df., 3, 1264, p< 0.05). Respondents who had consulted a N.P.M. to assist with patients with ATOD-related problems within a time period of 1-6 months had significantly higher Total Therapeutic Attitude scores (mean=3.35) than either non-users, or less recent users.

3.5.6 Seeking Clinical Advice

As was the finding in respect to mean Total Knowledge scores, respondents who had never sought clinical advice/information for the nursing management of an ATOD-related problem had significantly lower mean Total Therapeutic Attitude scores (mean=3.11) than those who had (mean=3.44, F=22.9,df., 5,1215, p<0.0001). However, no significant difference was found due to the source of that advice.

3.5.7 Educational Behaviour

Reference to Tables 20, and 21, demonstrated highly significant values for the positive effect of ATOD specific in-service education on therapeutic attitudes. Registered nurses who had attended in-service education had significantly higher mean Total Therapeutic Attitude scores than those who had not (t=7.39, df., 223.1, p<0.001). It is further noted that this effect was demonstrated on mean scores of all attitude factor scales and that the effect of this key variable was greater for the "Role Adequacy" measure than for either the "Role Legitimacy" or "Non-Judgement" measures [Table 21].

In contrast regular reading of nursing journals had a stronger effect on "Role Legitimacy" and "Non-Judgement" measures, than "Role Adequacy". As shown in Table 20, regular readers of nursing journals had significantly higher mean Total Therapeutic Attitude scores than non-readers (t=5.61, df., 1245, p<0.001).

Registered nurses who reported that they had a degree in nursing, had higher mean Total Therapeutic Attitude scores than those without (t=3.20, df., 250, p<0. 01). Having a nursing degree had its strongest effect on the "Non Judgement" when differences in mean factor scale scores are compared [Table 21].

Comparison of the group means of all the categorical variables demonstrated that the highest Total Therapeutic Attitude scores were associated with attendance at ATOD specific in-service education (mean score=3.57, of Maximum Score=5). Further, when the effects of both educational and NPM consultation variables on therapeutic attitude factor-scales were considered, it is of note that in-service education demonstrated the highest mean score for "Role Adequacy" (mean=2.98 [Table 21]).

3.5.8 Use of Tobacco and Alcohol

Alcohol Consumption

Frequency of alcohol consumption by nurses demonstrated no significant effect on therapeutic attitude scores, there was however an effect for usual alcohol consumption when drinking. "Heavy drinkers", those reporting more than 10 glasses on a drinking occasion, and those in the 5-6 glasses group, had significantly higher mean Total Therapeutic Attitude mean scores than any other drinking group (7-10, 3-4, and 1-2 glasses/occasion), or those respondents in the "Do not drink alcohol " group (F= 3.42, df., 5, 1227, p<0.01).

Tobacco Use

"Light" to "moderate" smokers (1-5, and 6-20 cigarettes/day) had higher Total Therapeutic Attitude scores than non-smokers (F= 4.28, df., 4, 1243, p<0.01). This effect was not demonstrated for ex-smokers or "heavy smokers" (<20/day).

3.5.9 Personal Experience

Respondents reporting having had the experience of having a close personal or family relationship to a person with an ATOD-related problem had significantly higher mean Total Therapeutic Attitude scores than those without this experience (t=2.92, df., 1242, p<0.01). This personal experience variable was also associated with significantly higher mean values for "Non-Judgement" scores (t=3.82, df., 1244, p<0.001), and "Role Adequacy" scores (t=2.29, df. 1244, p<0.05), but not with "Role Legitimacy" scores [Table 20].

3.6 Therapeutic Attitude Item Not Included in Factor Scale

The attitude item "*Anyone who drinks can become dependent on alcohol*", was found to have a positive association with "Role Legitimacy" factor score (r=0.19, p< 0.0001) and Total Therapeutic Attitude (r=0.13, p<0.0001). No significant relationships with categorical variables of interest were found.

3.7 Relationships Between Therapeutic Attitude Scores and Knowledge Scores

Correlations between Therapeutic Attitude scores and Knowledge scores revealed significant relationships between Total Therapeutic Attitude and Total Knowledge scores and each of the five knowledge areas. The strongest correlation was between with the Total Therapeutic Attitude score and Total Knowledge score (r=0.35, p<0.0001), followed by the correlations between Role Adequacy score and Withdrawal Knowledge score (r=0.31, p<0.0001).

3.8 Frequency of Key Clinical Behaviours

3.8.1 The Clinical Activity Scale

The third outcome variable in this mass population survey comprises measures of the frequency of clinical behaviours of nurses in the key areas of clinical assessment, patient education and intervention for ATOD-related problems. The self-reported frequency these key clinical behaviours represents the variable of greatest interest in this study. The composite measure, *Clinical Activity Scale*, comprised of fifteen (15) items was constructed to obtain measures of the frequency of these behaviours (see Method). A total "Clinical Activity" score is calculated by computing the scores of all items. A high score reflects a high frequency of clinical nursing behaviour for identification and nursing interventions for patients with ATOD-related problems. The individual items of the *Clinical Activity Scale* are important measures of themselves but the three factor scales derived from the fifteen items offer further and useful analysis.

Clinical Activity Factor Scales are conceptualised as follows:

- Assessment Behaviour (Factor Scale: I) represents a sum measure of the selfreported frequency of performing history-taking and assessment behaviours for ATOD use and physical and psycho-social problems related to ATOD use.
- **Information-giving Behaviour** (Factor Scale: II) represents a sum measure of the self-reported frequency of providing information about safe alcohol and/or other drug use, and/or smoking cessation.
- *Intervention Behaviour* (Factor Scale: III) represents a sum measure of the selfreported frequency of initiating interventions for patients believed to have problems associated with their ATOD use.

Results of the analysis aimed at determining predictors of these key clinical behaviours, as represented by total clinical activity scores and factor scale scores, are the focus of this section. Frequency distribution of responses to each of the Clinical Activity items was calculated and is presented in the table below (Table 22).

Item	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Always (%)
ASSESSMENT I include a comprehensive alcohol and/ or other drug-related history in my nursing assessments	24.6	20. 4	20.4	10.3	16.7
I ask my patients about their alcohol intake	12.3	12.6	17.1	16. 2	35.9
I ask my patients questions about their tobacco use	7.3	8.7	17.8	20.1	40. 1
I ask my patients about their prescribed drug use	6.1	4.5	10.3	18. 2	55. 2
I ask my patients about their illegal drug use	30.8	19.0	18.0	9.0	16.4
I assess my patients for physical problems related to their alcohol and/ or other drug use	17.1	13.0	25.2	17.4	20. 5
I assess my patients for psycho-social problems related to their alcohol and/ or other drug use	17.5	14.4	26.0	17.3	17.8
<i>INFORMATION-GIVING</i> I provide information about safe levels of alcohol consumption to patients	28.7	20.8	26.9	9.8	7.2
I provide information about smoking cessation to patients who smoke tobacco	21.4	17.3	29.7	16. 2	9. 2
I provide information about safe injecting practices and safe sex to intravenous drug users	48.4	15.8	11.6	5.5	9.1
<i>INTERVENTION</i> Encourage them to discuss their problems with you	6. 8	10.7	33.5	23.9	19.1
Engage them in a brief interview aimed at motivating them to change their behaviour	21.6	21.4	27.5	14. 8	8.0
Confront them with the consequences of their alcohol and other drug use	21.5	19.9	32.5	12.6	6.8
Provide them with advice about specialist alcohol and other drug specialist services available	9.3	9.5	25.5	22. 7	26.5
Discuss these patients alcohol and/ or other drug-related problems with your team	7.1	6. 2	23.9	23.3	32.8

 Table 22: Frequency of Clinical Activities by Percent - Registered Nurses (n=1281)

It can be readily noted from the distribution of responses by clinical activity item (above) that more frequent behaviours were reported for assessment items than those amongst these items assessment of *prescribed drug use* which has the highest frequency. A total of 73.4% of respondents reported that they *often* (18.2%) or *always* (55.2%) asked their patients about prescribed drug use (shaded column). In marked contrast, the reported frequency of assessment of *illegal drug use* was low; *often* (9.0%) and *always* (16.4%)(shaded column). Higher frequency behaviours of intervention behaviours were reported as those nurses who either provided advice about specialist Alcohol and Other Drug services or discussed ATOD-related problems of patients with their team (shaded columns). As reflected by mean scores of clinical activity factor scales (Table 22), information-giving behaviours are reported as lower frequency behaviours. The greatest proportion of responses for information-giving behaviours falls in the *never-rarely-sometimes* response categories.

3.8.2 Clinical Activity Mean Scores

Scores on the component items of the Clinical Activity Scale represent the selfreported frequency at which key clinical behaviours occurred as indicated on a Likert scale of 1 to 5 in which; 1 = Never, and 5 = Always. Self reported scores of clinical activity were computed as a mean value for Total Clinical Activity and the three factor scale measures of groups of key clinical behaviours. Mean values by scale are presented in Table 22 below.

Variable	Mean	Standard Deviation
Total Clinical Activity	3.07	0.87
Assessment Behaviour	3.29	1.04
Information-giving Behaviour	2.40	1.09
Intervention Behaviour	3.18	0.93

 Table 23: Mean Scores for Clinical Activity Scale and Factor Scales (Frequencies)

Differences Between Mean Factor Scale Scores

It is noted in Table 23 above, that Assessment Behaviour has the highest reported mean frequency and Information-giving Behaviour, the lowest. The mean score of Information-giving Behaviour (Mean=2.40, S.D.=1.09) is below the mid-point of the range 1 to 5 and is significantly lower than both Assessment Behaviour (t=32.95, df., 1205, p<0.0001) and Intervention Behaviour (t=27.92, df., 1186, p<0.0001).

3.9 Relationship Between Clinical Activity Scores and Other Variables

Variable	Mean Scores (S.D.)	t-test value
Public/Drivata Sactor		
nublic=786	3 20 (0 86)	
private=417	2.85 (0.83)	6.71*** (df, 1201)
L		
Country/Metropolitan		
Country=550	3.19 0.82)	4 02*** (df 1101)
Metropolitan=559	2.94 (0.81)	4.92 · · · (dl, 1101)
NPM Consultation		
ves=449	3 44 (0 78)	
$n_{0}=754$	2 85 (0 84)	11.93*** (df, 1201)
10-734	2.03 (0.04)	
In-service education		
yes=174	3.51 (0.83)	7 42*** (df 1156)
no=984	2.99 (0.85)	7.43 ⁺⁺⁺ (dl, 1150)
Read journals regularly		
ves=780	3.21 (0.85)	
no=411	2.83 (0.83)	7.40*** (df, 1189)
	× ,	
Nursing Degree		
yes=87	3.31 (0.84)	2.57* (df. 842)
no=757	3.05 (0.88)	2.37 (ui, 012)
"Family Problem"		
ves=475	3.18 (0.83)	2 50***(16 1106)
no=713	3.01 (0.88)	3.30***(aI, 1186)
* p < 0.05		
** p <0.01		
*** p <0.001		

 Table 24: Relationships Between Total Clinical Activity Scores, and Key Variables (n=1281)

Chapter Three

3.9.1 Gender and Age

Correlations between Total Clinical Activity scores and continuous variables; age, length of time working as a registered Nurse, and length of time working in their current clinical position were computed. A weak positive relationships with the length of time working as a Registered Nurse was found for both Total Clinical Activity score (r = 0.10, p<0.001), and Information-giving Behaviour score (r = 0.124, p<0.001). No significant difference was found for gender on Total Clinical Activity score, but as noted in Table 25., males had significantly higher mean scores for the frequency of Intervention Behaviour (t=2.30, df, 1199, p<0.001).

3.9.2 Current Clinical Area

One-way analysis of variances found differences in mean Total Clinical Activity scores between the clinical areas of work of respondents. Psychiatric nurses (mean = 3.67), occupational health nurses (mean = 3.34), nurses in administrative positions (mean=3.28), and community nurses (mean = 3.27), scored higher on average than other groups (F=.7.12, df, 16, 1197, p= <0.0001). The categorical variable Current Clinical Area was re-coded to collapse the seventeen clinical area categories into four (4), which were; Acute Care, General Nursing, Primary Health Care, and Administration/Education. Nurses working in Primary Health Care (n=294), and Administration/Education (n=125), had significantly higher mean Total Clinical Activity scores (mean for both = 3.24), than either Acute Care (n=237, mean=3.09) or General nursing (n=609, mean=2.95) (F=8.61,df,3,1197,p<0.0001).

Analysis of Clinical activity factor scales adds a further dimension. ANOVA found that nurses working in Primary Health Care and Administration/Education also had significantly higher mean scores for Information-giving behaviour factor (F = 22.69, df. 3, p <0.00001), nurses working Acute Care settings had significantly higher mean scores for Assessment Behaviour factor (F = 4.32, df. 3, p = 0.004), and finally nurses working in Primary Health Care had significantly higher mean scores for Intervention Behaviour factor (F = 10.66, df,3, p <0.00001).

3.9.3 Current Clinical Position

One-way analysis of variance found no significant differences in mean Total Clinical Activity scores between respondents according to their stated clinical position.

3.9.4 Work Status

As was found for both Total Knowledge and Total Therapeutic Attitude scores, being employed in the public sector was associated with significantly higher mean scores for Total Clinical Activity (t=6.71,df, 1201, p<0.001), [Table 24]. As noted in Table 24, below, significantly higher mean scores were found for public sector respondents on all clinical behaviour factor scales, with the greatest effect being for "Information-giving behaviour" (mean difference=0.46).

As in previous sections, it is noted that the proportion of respondents reporting that they had attended ATOD specific in-service however, is significantly higher in those working in the public sector than those working in the private sector ($\mathbf{x}^2 = 20.20$, df.2, p< 0.0001). The comparison of reported clinical activity between nurses practising in rural as opposed to metropolitan settings is of great interest given they would have had fewer resources or options for referring to specialist services than city based peers. Country based nurses demonstrated significantly higher mean Total Clinical Activity scores (t = 4.92, df, 1101, p< 0.001)[Table 23] and significantly higher mean scores for all clinical activity factor scales, with "Assessment behaviour" showing the greatest mean difference (mean difference =0.32, t= 5.08, df, 1102, p<0.001) [Table 24].

Variable	Assessment Behaviour Mean (S.D.)	Information- Giving Behaviour Mean (S.D.)	Intervention Behaviour Mean (S.D.)
Gender			
male=64			3.44 (0.84)
female=1137	Not Significant	Not Significant	3.16 (0.95)
			t =2.30*(df, 1199)
Public/Private Sector			
public=785	3.41 (1.05)	2.56 (1.10)	3.27 (0.86)
private=418	3.05 (0.98)	2.10 (0.99)	3.00 (1.04)
	t = 5.75***	t = 7.45 * * *	t = 4.39***
	(df,1201)	(df, 930.4)	(df, 703.3)
Rural/Metropolitan			
Rural=550	3.44 (0.98)	2.49 (1.07)	3.27 (0.91)
Metropolitan=559	3.12 (1.07)	2.30 (1.12)	3.07 (0.96)
	t = 5.08***	t = 2.82 **	t = 3.58***
	(df, 1102.4)	(df, 1108)	(df, 1097)
N.P.M. Consultation	2 (0 (0 01)	2 70 (1 10)	2 4 ((0, 02)
$y_{es} = 449$	3.69 (0.91) 3.04 (1.04)	2.79 (1.10) 2.16 (1.02)	3.46 (0.82) 3.00 (0.96)
10-754	5.04 (1.04)	2.10 (1.02)	3.00 (0.90)
	t =11.22***	t =9.76***	t=8.94***
	(df, 1039)	(df, 888.9)	(df,1051.4)
In-service education			
yes=174	3.75 (0.98)	2.92 (1.16)	3.51 (0.89)
no=984	3.21 (1.03)	2. 31 (1.05)	3.11 (0.93)
	t=6.45***	t=7.01***	t = 5.22***
	(df,1156)	(df,1157)	(df,1147)
Read Nursing Journals Regularly			
yes=779	3.42 (1.01)	2.58 (1.11)	3.28 (0.91)
no=412	3.04 (1.05)	2.06 (0.98)	2.98 (0.95)
	t = 6.12 * * *	t=8.26***	t=5.39***
	(df,1189)	(df,935.8)	(df,1179)
Nursing Degree			
yes = 86	Not Significant	2.83 (1.07)	3.40 (0.83
10 - 757	Noi Significani	2.38 (1.09)	3.10 (0.95)
		t=3.68***	t=2.26*
		(df,841)	(df, 838)
"Family Problem"			
yes=491	3.41 (1.00)	2.53 (1.11)	3.26 (0.91)
no=753	3.22 (1.06)	2.32 (1.07)	3.12 (0.95)
	t=3.13**	t = 3.28**	t=2.59*
	(df,1186)	(df, 1187)	(df,1177)

Table 25:	Relationships Between	Clinical Activity	Factor-Scales and	Key Variables

* p < 0.05 ** p <0.01 *** p <0.001

The proportion of respondents reporting that they had attended ATOD specific inservice was higher amongst those working in rural settings (16%) than those working in metropolitan settings (12.7%), this difference however, is not statistically significant.

One-way analysis found that nurses reporting that they worked in full-time positions had significantly higher mean Total Clinical Activity scores than nurse reporting either part-time or casual positions (F = 11.14, df, 2, 1198, p<0.0001).

3.9.5 Use of the Nursing Procedure Manual

Reference to Tables 24 and 25 (above) demonstrates the highly significant values for a general and positive effect from Nursing Policy Manual consultation for ATOD-related problems on the mean scores of all clinical activity measures. Respondents reporting ever having consulted a NPM to assist in the care of patients with ATOD-related problems, had significantly higher mean Total Clinical Activity scores [Table 24], than those who had not (t=11.93, df, 1201, p<0.001). Of the Clinical Activity Factor-scales [Table 25], the effect for N.P.M. consultation is greatest for "Assessment Behaviour" (mean difference = 0.65), t = 11.22, df, 1039, p<0.001).

One-way analysis of variance found differences between groups according to use, and length of time since use, of a Nursing Policy Manual (F=4.79, df, 3, 1210, p< 0.01). Respondents who had consulted a NPM to assist with patients with ATODrelated problems within the last month and within the time period of 1- 6 months, had significantly higher mean Total Clinical Activity scores than those who had last consulted a NPM more than 6 months ago, or had never consulted a NPM.

3.9.6 Seeking Clinical Advice

One-way analysis of variance found differences in mean Total Clinical Activity scores when analysed by response groupings that indicated respondents' first response when seeking clinical advice/information in regard to the nursing management of a patient with ATOD-related problems (F= 41.8, df, 5,1163, p<0.00001). Higher mean scores were associated with respondents who first referred to the Nursing Procedure Manual for advice (n=147, mean=3.45, SD. 0.79), or contacted a Clinical Nurse Consultant or Clinical Nurse Specialist in Alcohol and other drugs (n=287, mean=3.33, SD.0.77), or contacted a local alcohol and other drug specialist service (n=195, mean=3.32, SD.0.70), than any other nominated source of advice/information, or not did seek advice at all (n=273, mean=2.62, SD.0.83).

3.9.7 Educational Behaviour

Reference to both Tables 24 and 25 demonstrates that ATOD specific in-service education markedly influenced the frequency of key clinical behaviours related to the assessment and nursing intervention for patients with ATOD-related problems. Registered nurses who had attended in-service education had significantly higher mean Total Clinical Activity scores than those who had not (t = 6.45, df, 1156, p<0.001). This strong effect is demonstrated on mean scores of all clinical activity factor scales, with the greatest effect being on "Information-giving behaviour" (t = 7.01,df, 1157,p<0.001) [Table 25]. Comparison of the group means of all the categorical variables demonstrates that the highest mean frequencies for total clinical activity and clinical behaviour factor scores are associated with attendance at ATOD specific in-service education.

Regular readers of nursing journals (n=780) had significantly higher mean Total Clinical Activity scores (t=7.40, df, 1189, p<0.001) than respondents not reporting regular reading of journals. Further, this effect is demonstrated for all clinical activity factor mean scores and, notably, the strongest effect is shown for the low frequency "Information-giving behaviour" factor [Table 25]. Respondents reporting having a Nursing Degree demonstrated higher mean Total Clinical Activity scores than those without. This was a low order but significant effect (t = 2.57, df, 842, p<0.05) [Table 24]. Of clinical activity Factor scales, having a Nursing Degree had no significant effect on mean scores for "Assessment behaviour" [Table 25] but, as with other educational behaviour variables, the

strongest effect was for "Information-giving behaviour" (mean difference = 0.45, t = 3.28, df, 841 p< 0.001).

3.9.8 Use of Tobacco and Alcohol

Smoking status or pattern of tobacco consumption demonstrated no significant effect on mean scores of clinical activity. Likewise respondents' consumption pattern or frequency of alcohol use demonstrated no significant effect on mean scores of clinical activity.

3.9.9 Personal Experience

Respondents reporting having had the experience of having a close personal or family relationship to a person with and alcohol or other drug-related problem had significantly higher mean Total Clinical Activity scores than those without this experience (t=3.50, df, 1186, p<0.001). This significant difference was found on all clinical activity factor scales, but at a lower order of significance (Table 24).

3.10 Relationships Between Clinical Activity Scores, Therapeutic Attitudes, and Knowledge Scores

Total Therapeutic Attitude and Therapeutic Attitude Factor scores demonstrated stronger correlation with Total Clinical Activity score than Total Knowledge score or Knowledge area scores. Total Clinical Activity has a positive correlation with Total Therapeutic Attitude score (r = 0.55, p<0.001) and one of lesser strength with Total Knowledge score (r = 0.35, p<0.001). Correlations between Total Clinical Activity score and the three Therapeutic Attitude Factor-scale scores demonstrate a significant positive relationship with all factor-scales. The strongest correlation is that between Total Clinical Activity score and "Role Legitimacy" (r = 0.47, p<0.001), followed by "Role Adequacy" (r = 0.40, p<0.001) and the weakest being "Non Judgement"(r = 0.22, p<0.001). The correlations between Total Clinical Activity score and the five knowledge areas
demonstrates a significant positive relationship with all Knowledge Area scores. The strongest correlation is that between Total Clinical Activity score and Withdrawal Knowledge score (r = 0.31, p<0.001) and the weakest with General Management score (r = 0.13, p<0.001).

3.11 Relationships Between Therapeutic Attitudes and the Frequency of Key Clinical Behaviours

A particular concern of this study was the investigation of disparity between what was reported by nurses as *ideal* practice and that which occurred as *actual* practice (see Introduction). This disparity is best demonstrated in the first instance by the highly significant difference between mean *Total Therapeutic Attitude Score* representing respondents' self-rated motivation, intention and ability to respond to patients with ATOD-related problems (mean = 3.31, SD, 0.46), and mean *Total Clinical Activity Score*, the mean frequency of self-reported clinical behaviours for the key areas of assessment, information-giving behaviour, and intervention for patients with ATOD-related problems (mean = 3.07, SD, 0.86, t = 11.62, df, 1208, p<0.001).

Table 26 on the next page develops this analysis further by comparing the differences in mean scores between clinical activity factors and therapeutic attitude factors.

- ¹*Role Adequacy* (**RA**) is representative of beliefs that respondents have adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems.
- ²Role Legitimacy (RL) is representative of beliefs that respondents have both a right and a professional responsibility to identify and intervene in patients with ATOD-related problems
- ³*Non-Judgement* (NJ) is a measure that is representative of a non-judgemental view of the ATOD affected persons' right to intervention and care. A high score represents a high level of acceptance.

Clinical Activity Factor Scales	Role Adequacy ¹ (RA)	Role Legitimacy ² (RL)	Non-Judgement ³ (NJ)	
Assessment Behaviour Factor (AB) Represents a sum measure of the self-reported frequency of performing history-taking and assessment behaviours for ATOD use and physical and psycho-social problems related to ATOD use.	RA = 2.54 (0.94) $AB = 3.29 (1.04)$ $t = -23.08***$ (df, 1209)	RL = 3. 59 (0. 59) AB = 3. 29 (1. 04) t = 10.58 *** (df, 1208)	NJ = 3. 57 (0. 60) AB = 3. 29 (1. 04) t = 8.85*** (df, 1209)	
Information-giving Behaviour (IGB) Represents a sum measure of the self-reported frequency of providing information about safe ATOD use, and/or smoking cessation.	RA = 2.55 (0.95) $IGB = 2.40 (1.09)$ $t = -4.35***$ $(df, 1210)$	RL = 3. 59 (0. 59) IGB = 2. 40 (1. 09) t = 39.98*** (df, 1209)	$NJ = 3.57 (0.60)$ $IGB = 2.40 (1.09)$ $t = 35.19^{***}$ $(df, 1210)$	
<i>Intervention Behaviour (IB)</i> Represents a sum measure of the self-reported frequency of initiating interventions for patients believed to have problems associated with their ATOD use.	RA = 2.55 (0.94) IB = 3.18 (0.93) $t = -19.74^{***}$ (df, 1199)	RL = 3. 59 (0.59) IB = 3.18 (0.93) t = 16.43*** (df, 1198)	NJ = 3. 56 (0. 60) IB = 3.18 (0. 93) t = 13.00** (df, 1199)	

Table 26: Differences in Mean Scores of Clinical Activity Factor Scales and Therapeutic Attitude Factor Scales (n=1281)

** p < 0.01

*** p < 0.001

As noted earlier of the therapeutic attitude factor scales, *Role adequacy* demonstrates significantly lower mean scores than either Role legitimacy or Nonjudgement. This considered, it is noted in Table 26 (above), that nurses' belief that they had adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems is significantly lower on average than the reported mean frequency at which their either assessment or intervention behaviours occurred (shaded boxes).

It is further noted that this disparity is at odds with the general trend in Table 25, that is that the intention and motivation for respondents to carry out therapeutic behaviours (as represented by Therapeutic Attitude factor scores), with the exception of the two noted above, were significantly higher than the reported frequency at which these behaviours occurred (Clinical Activity factor scales). The low mean scores on Clinical Activity factor scale, *Information-giving Behaviour* are again noted.

Further perspective on the disparity between what was reported by nurses as ideal practice and that which occurred as actual practice has been gained by the comparison of scores on individual items within the *Therapeutic Attitude Scale* and *Clinical Activity Scale*, respectively. For example, comparison between the level of agreement that a drug and alcohol history should be a routine part of any nursing assessment, and the reported frequency at which this behaviour occurs (see Table 27, below). In this instance the mean difference between attitude and key clinical behaviour is 1.38 (on a scale of 0 to 5). This difference is highly significant (t = 32.37, df, 1177, p<0.001). Likewise it would appear that the belief of these nurses that they had a responsibility to advise patients who smoke, to quit, is of significantly higher strength than the self-reported frequency at which nurses gave information about smoking cessation (t =16.29, df, 1191, p<0.001).

A notable exception to this general trend regarding the intention and motivation of respondents to carry out therapeutic behaviours are significantly higher than the reported frequency at which these action occurred, is that the highest scoring *Intervention Behaviour* item (see shaded box) has a significantly lower mean score than the related *Role Legitimacy* item (t = -17.64, df, 1154, p<0.001). It would seem that respondents' intentions to intervene with a patient with an identified ATOD-related problem by discussing them with their team, is of significantly lower strength than their belief that they would receive encouragement to do so (Table 27).

Factor Scale Item	Mean (SD)	t-test Value
Role Legitimacy <i>A drug and alcohol history should be a routine part</i> <i>of all nursing assessments.</i>	4.10 (0.83)	
Assessment Behaviour I include a comprehensive alcohol and/ or other drug-related history in my nursing assessments.	2.72 (1.43)	t = 32.37*** (df, 1177)
Role Legitimacy If patients smoke cigarettes nurses have the responsibility to advise them to quit	3.37 (1.04)	
Information - giving Behaviour I provide information about smoking cessation to patients who smoke tobacco.	2.72 (1.26)	t = 16.29*** (df, 1191)
Role Legitimacy I receive encouragement within my workplace to intervene with patients who have alcohol and/or other drug-related problems.	3.00 (1. 09)	
Intervention Behaviour Discuss these patients alcohol and/ or other drug- related problems with your team	3.75 (1.21)	t = - 17.64 (df, 1154)

Table 27: Differences in Mean Scores between Key Therapeutic Attitude items and Key Clinical Activity Items

3.12 The Assessment and Identification of Patients with ATOD-Related Problems

A key *Role Legitimacy* item is that which measures respondents' belief that they have a responsibility to identify patients with alcohol and/or other drug-related problems. Nurses in this survey demonstrated a high level of subscription to this area of therapeutic responsibility (Mean = 4.07, maximum score = 5). Comparison of items pertaining to the necessary prelude to such identification; *Assessment Behaviour* however, demonstrates significantly lower mean scores. The one exception is the self-reported behaviour of a significantly higher frequency of respondents who asked questions about patients' prescribed drug use (see Table 28, shaded box).

Mean scores for Assessment Behaviour items are presented in an ascending hierarchy in Table 28, and it is noted that these respondents were more likely to ask questions about some types of drug use than others. Questions about tobacco use were the most frequently asked and illegal drug use the least. The low frequency of including a comprehensive alcohol and/or other drug-related history in nursing assessment is again noted. It is of interest that respondents reported a higher frequency of assessing for physical problems related to alcohol and/or other drug use than for psycho-social problems.

Factor Scale Item	Mean (SD)	t-test Value	
Role Legitimacy <i>I have a responsibility to identify patients with alcohol</i> <i>and/ or drug-related problems.</i> Assessment Behaviour	4.07 (0. 78)	t = 33.01 ***	
I ask my patients about their illegal drug use	2.58 (1.47)	(df, 1184)	
I include a comprehensive alcohol and/ or other drug- related history in my nursing assessments	2.72 (1.43)	t = 31.24*** (df, 1175)	
I assess my patients for psycho-social problems related to their alcohol and/ or other drug use.	3. 04(1 .40)	t = 25.37*** (df,1181)	
I assess my patients for physical problems related to their alcohol and/ or other drug use	3.13(1.40)	t = 22.58*** (df, 1184)	
I ask my patients questions about their alcohol intake	3.55 (1.43)	t = 12.34*** (df, 1197)	
I ask my patients questions about their tobacco use	3.83 (1 .28)	t=6.33*** (df,1195)	
I ask my patients questions about their prescribed drug	4 10 (0 70)	$t = -3.11^{***}$	
use	4. 19 (0.78)	(ai, 1198)	

 Table 28: Comparison of Stated Responsibility to Identify Alcohol and/or Other

 Drug-Related Problems with Assessment Behaviour Items (Mean Scores)

3.13 Predictors of Key Clinical Behaviours

In order to establish the predictors of the frequency of clinical behaviours of nurses in the key areas of assessment, patient education (information-giving), and intervention for ATOD-related problems (*Total Clinical Activity*), multiple regression analysis was carried out.

"Forward selection" variable selection procedure was used. Variables were chosen for the equations based on hierarchical order of significance of individual correlations with the continuous variables, and significant mean differences on the categorical variables.

Total Therapeutic Attitude Score and Total Knowledge Score were included in the equation as continuous variables. The categorical variable *Clinical Area* (in which the respondent currently works) was re-coded to collapse the seventeen (17) categories into four (4), they were; Acute Care, General Nursing, Primary Health Care, and Administration/Education. The Total score on the Clinical Activity Scale was used as the dependent variable.

3.13.1 Regression Model

The initial step to building a predictive model was a series of planned analyses using three set of predictors, these were conceived of as being;

- **Domain I** (*Readiness*) explanatory variables relating to knowledge, education, therapeutic attitude, reading nursing journals, and preparedness to carry out clinical behaviours.
- **Domain II** (*Exposure*) explanatory variables relating to use of Nursing Policy Manual to assist in dealing with patients with ATOD-related problems, years of service as a Registered Nurse, and family or personal experience of a person with an alcohol or other drug-related problem, and lastly,
- **Domain III** (*Clinical Setting*) explanatory variables relating to clinical setting, work status, and area of work.

3.13.2 Regression Analyses

Each set of predictors was placed into the model alone, forward selection procedure was used (as above).

Included in the equation for Domain I - *Readiness*, were; Total Therapeutic Attitude score, Total Knowledge score, specific ATOD in-service attendance, and first action to seek clinical advice/information for patients with ATOD-related

problems, last use of Nursing Policy Manual to assist with patients with ATODrelated problems, read nursing journals regularly, and Degree in Nursing.

When modelled alone *Readiness* variables explained 34% of the variance in Total Clinical Activity ($R^2 = .34$, F = 19.94, df, 11, 428, p<0.0001).

Included in the equation for Domain II – *Exposure*, were; use of Nursing Policy Manual to assist with patients with ATOD-related problems, years of service as a Registered Nurse, and family or personal experience of a person with an ATOD-related problem. When modelled alone *Exposure* variables explained 12% of the variance in Total Clinical Activity ($R^2 = .12$, F = 22.75, df, 7, 1139, p< 0.0001).

Included in the equation for Domain III - *Clinical Setting*, were; clinical area (Acute Care, General Nursing, Primary Health Care, and Administration/ Education), work status (full-time, part-time, casual), area of work (Public, Private), area of work (Rural, Metropolitan).

When modelled alone Clinical Setting variables explained 8% of the variance in Total Clinical Activity ($R^2 = .08$, F = 19.55, df, 5, 1091, p< 0.0001).

3.13.3 Combined Regression Model

All three variable sets (*Readiness*, *Clinical Setting*, and *Exposure*) were combined in a regression model for Total Clinical Activity. Only those variables that were statistically significant in the initial analyses were used as predictors. Since regression analysis maximises the relationship between the dependent variable and its predictors (Kleinbaum, Kupper and Muller 1988) an adjustment for the large set of explanatory variables entered into the equation was made (alpha<0.01).

Variables entered into the last equation were; Total Therapeutic Attitude score, Total Knowledge score, in-service attendance, use of Nursing Policy Manual for ATOD-related problems, clinical area (Primary Health Care, and Administration/Education), years of service as a Registered Nurse, read nursing journals regularly, area of work (Public), and area of work (Rural). The combined regression model explained 41% of the variance in Total Clinical Activity ($R^2 = .41$, F = 78.57, df, 9, 1014, p<0.00001).

To check the order of predictor variables, given the hierarchical ordering of variables and the investigator's choice of "forward selection" procedure, the Combined Regression Model was analysed a second time, using the more commonly used "stepwise selection" procedure (SPSS Base System User's Guide, Release 6.0.,1993, p. 350.), and a third time using a simple regression. That is to say all of the independent variables were entered in combination with no hierarchical ordering of variables.

This procedure resulted in the same equation ($R^2 = .41$), on all occasions, with the same descending order of significance (Table 28).

The strength of probability was greater for the stepwise selection procedure ($R^2 = .41$, F = 88.45, df, 8, 1015, p<0.00001) and lesser for the simple regression ($R^2 = .41$, F = 70.74, df, 10, 1013, p<0.00001).

From this final regression analysis the only predictors significantly related to Total Clinical Activity (alpha=0.01) are presented in descending order of significance, (Table 29 below).

Variable	Beta	T-value	Sig. of T.
Mean Score on Total Therapeutic Attitude Scale	0. 441	16.35	0.00001
Refers to <i>Nursing Policy Manual</i> for Advice on Care of Alcohol and Other Drug-Related Problems	0. 155	5. 99	0.00001
Mean Score on Total Knowledge Scale	0. 116	4.32	0.00001
Works in a Rural postcode area	0. 113	4. 58	0.00001
Reads nursing journals regularly	0. 104	4.13	0.00001
Works in a Primary Health Care setting	0.083	3.43	0.0006
Years of Service as a Registered Nurse	0.075	3.05	0.0023
Has attended alcohol and Other Drug specific in- service education	0. 060	2.38	0.01

Table 29: Predictors of the Alcohol and Other Drug-Related Clinical Behaviours of
Practising Registered Nurses by Order of Strength of Association (n = 1281)

Chapter Three

3.14 Summary

This chapter has reported the results of univariate analysis of a broad range of independent variables and their strength of association with three dependent variables within a large random sample of practising registered nurses. The statistical strength and power inherent in this sample was of nurses who also closely matched the New South Wales workforce of registered nurses, adding strength to the findings so far reported. The results are from analysis of relationships between independent variables selected to be representative of the diverse personal and professional backgrounds of the nurses, and their ATOD-related knowledge, therapeutic attitudes, and a third and critical outcome variable; the self-reported frequency of clinical activities considered essential for nurses, in regards to clinical assessment, recognition and intervention for ATOD-related problems.

The critical research question is; what do nurses do about ATOD-related problems and what determines the frequency of desired behaviours. In the latter part of this chapter (Predictors of Key Clinical Behaviours) the development of a regression model to determine predictors of key ATOD clinical behaviours is described and the results of multiple regression analysis presented. The conceptual development and statistical application of this regression model, and the importance of the predictors of key clinical behaviours to this investigation, are further explained in Chapter Five.

Chapter Four to follow, presents detailed examination and discussion of the analysis of the two dependent variables; ATOD-related knowledge and therapeutic attitudes including the relative contribution of the composite measures to *Total Therapeutic Attitude*; *Role Adequacy, Role Legitimacy, and Non Judgement.* Comprehensive discussion of ATOD clinical activity; the responses of registered nurses to ATOD-related problems are found in Chapter Five.

CHAPTER FOUR: DISCUSSION OF MAJOR FINDINGS - ALCOHOL, TOBACCO AND OTHER DRUG-RELATED KNOWLEDGE AND THERAPEUTIC ATTITUDES

4.1 Introduction

In reflection of the research questions which have guided both the pilot study and the mass population survey in this investigation, this chapter is the first of two chapters that provide careful and considered review and discussion of the major findings of the quantitative data generated from 1281 randomly selected Registered nurses in practice in New South Wales, Australia. As noted in the introduction and in the literature reviewed, the question is asked: why is there such an enduring and prevailing disparity between the clinical prevalence of alcohol, tobacco and other drug-related (ATOD) problems, as they present to nurses, and the frequency with which nurses assess, recognise, and intervene in these common and damaging problems? Review of quantitative analyses will allow the parameters of this disparity to be quantified and discussed.

4.1.1 Quantitative Analysis

This chapter presents discussion of the major findings from the quantitative analyses of two of the three dependent variables selected for investigation, as follows:

1) Specific knowledge

How much do registered nurses in practice actually know about the nature, aetiology, and clinical presentation of ATOD-related problems?

Chapter Four

2) Therapeutic Attitudes

What are the prevailing attitudes and beliefs towards patients with ATODrelated problems amongst registered nurses in practice?

4.1.2 Qualitative Analysis

Before proceeding with the discussion of quantitative results, further reflection is required. It can be readily argued that the dimension and statistical power of this population survey makes a unique contribution to the understanding of the clinical behaviour of practicing nurses in respect to ATOD-related problems. In reflection of the quantitative results however, it is acknowledged by this investigator, albeit somewhat reluctantly that a point on a scale, such as a Likert scale, provides an informative objective measure, but this may not directly equate with the "point of view" of the respondents. That is to say, what these nurses told about their responses to ATOD-related problems in their own voice. The qualitative data generated in this investigation offers greater understanding and thus in later chapters an elaborate analysis of qualitative responses derived from the openended question in the survey asking respondents to - "Please list factors that affect your ability to intervene with patients who have alcohol and/or other drugrelated problems" (Question 72, see Appendix I). The multi-layered thematic coding used to analyse the 1017 respondents who responded with varying degrees of elaboration to this open-ended question was used to further explore the quantitative results in this chapter. In this manner, convergent and divergent responses are examined by comparing and contrasting the quantitative analysis, with the verbatim qualitative responses of these nurses.

The major category themes that emerged from in the qualitative analyses, and those that are referred to in this chapter, are as follows:

- Factors located within the nurse
- Factors located within the patient
- Factors located within the work place

- Factors located within the other health care providers
- Factors within the socio-cultural context

4.2 Knowledge

The measure of nurses' ATOD knowledge comprised items related to five areas of knowledge determined by the New South Wales Department of Health, "*Strategic Plan for Nurse Education and Nursing Management of Alcohol and other Drugs*" (1991) guidelines and these were; standard drinks, withdrawal management, assessment, pathology and general management of ATOD-related problems. There were twenty-two items. Each item had four responses and only one response was correct. The overall response to the 22 knowledge items was less than reassuring. This representative population of registered nurses in practice across New South Wales (n=1281), on average, answered just over half of the knowledge items correctly; in percentage terms the mean total score was 53.1% correct. As has been previously argued Registered nurses in practice are commonly exposed to ATOD-related problems requiring their active understanding and theoretical basis of nursing care.

4.2.1 Categories of Knowledge and the Imperative of Salience

Of more interest however, are responses by category of knowledge. It can be noted (from Table 15) that Registered nurses' responses to items pertaining to measures of standard drink, the primary assessment item for alcohol "the countable drug", ranged from 23.7% to 40.5% correct. Nurses demonstrate their level of knowledge is not significantly different from that of the general Australian population (2004 National Drug Strategy Household Survey, AIHW, 2005). Watson (1994) found that nurses surveyed in the United Kingdom acknowledged that they obtained most information about alcohol from general public health campaigns, and media campaigns such as have been run in Australia, rather than pre-service or in service education. In sharp contrast, knowledge items pertaining to the management of alcohol withdrawal and

intoxication elicited a very high proportion of correct responses from nurses, greater than 80% correct. The notable difference between items of general knowledge, as opposed to those that impact on nursing practice due to clinical relevance, is striking. It is likely that the difficult to manage sequelae of the alcohol withdrawal syndrome and respiratory depression in intoxication syndromes respectively (Haack 1998; D'Onofrio & Degutis 2002; McKinley 2005) give rise to issues of salience. That is, the contention that knowledge that is of use to the nurse, that reduces the risk for her/his patients or makes their job, and produces better clinical outcomes, is more likely to be highly valued and is thus reflected in higher scores. It is noticed that within the Assessment and Pathology items (see Table 15) that pertained to physical signs such as physical sequelae of excessive alcohol intake also score very highly, in this case 81.4% correct.

The high percentage of correct responses for the item under *pathology* subsection "Women who take oral contraceptive pill and also smoke tobacco have greatly increased risk of stroke" (Table 15) is of further interest. The resultant 80.5% correct response rate to this item must be considered in relation to the high proportion of female respondents within this survey and within the nursing workforce in general. It may be that the issue of salience or pertinence of knowledge arises here out of gender specific health concerns and knowledge that many women in general have about their relative risk of smoking and taking oral contraceptive pill, rather than knowledge female nurses might have gained through their clinical practice. This argument is given strength by the low percentage of correct responses (46%) to the more general *Pathology* item "The leading cause of drug-related death in Australia is Tobacco" (Table 15). A further consideration is that the three items in *General Management* pertaining to the safe care of intoxication, hazardous drinking amongst women and heroin use amongst pregnant women all demonstrate high correct response rates; 85.9%, 78.6% and 76.7% respectively (Table 15). The interpretation of this response pattern is that it affirms that knowledge which is clinically pertinent, being valued as significant to the nurse generates a higher level of interest and therefore a higher percentage of correct responses. How and why certain areas of ATODrelated knowledge are more valued and utilised than others are further investigated in the qualitative responses to follow (Chapter 6).

4.2.2 Analysis of Knowledge Scores According to Thematic Codes

To further discuss the distribution of the dependent variable; ATOD-related knowledge, the thematic codes category codes described in the qualitative analysis in following chapters, will now be utilised to group independent variables. At this juncture however thematic subcategory codes or "detail codes" that emerged from the qualitative analysis are not included.

4.3 ATOD-Related Knowledge: 'Factors Located Within the Nurse'

4.3.1 Gender and Age

There is gender differentiation in regard to overall knowledge although it is of low significance. Males had higher mean total knowledge scores than did females. It needs to be noted that the proportion of males respondents in this survey is higher than that found in the general workforce at the date of the survey and that males that did respond are more likely to be heavier alcohol and tobacco users than female respondents (see Tables 13&14) and this may have influenced their knowledge levels. It is noted in chapter 3 that there is a weak but significant negative relationship with age of the respondent. That is to say, older nurses had lower levels of knowledge.

4.3.2 Years of Service and Years in Current Clinical Position

Years of service in current clinical position were not significant when analysed as a continuous variable. It is of interest however, that when re-coded into length of service groups and analysed as a categorical variable, a different picture emerged (Chapter 3.3.1.) Nurses new to their current clinical experience in a particular setting, for example, within the group of 0-2 years in current clinical position and those who had significantly longer experience of between 20-25 years in their reported clinical position, had higher mean knowledge scores than in any other length of service subgroup (F = 3.55, df. 7, p=0.0009). The meaning of this is not

immediately clear, but is further elucidated in the qualitative analysis. It was noted that a particular group of respondents, registered nurses who reported having a nursing degree, had significantly higher knowledge scores than those who did not have a nursing degree. Nurses who reported having a nursing degree were proportionally more likely to be newly graduated, than not, and thus more likely to fall in the subgroup of 0-2 years of working in their current clinical position. It is possible that a more recent exposure to undergraduate nursing education was of influence to current knowledge in practice.

A further consideration is that years practising as a Registered Nurse, independent of years in current clinical position, bore no relationship to knowledge scores. This is an important consideration in the analyses of the key outcome variable of clinical activity, that is, what registered nurses reported they actually do about ATOD-related problems, as opposed to what they may know about ATOD-related problems. Multi-variate analysis of key predictors of clinical behaviour demonstrated that length of service of Registered nurses is a predictor of clinical activity (Chapter 3, Table 29). That is to say, those who have been nursing longer are more likely to perform ATOD-related desired clinical behaviours in terms of assessment and intervention. Of note here however, length of service, years working as a registered nurse had no significant relationship to knowledge scores.

4.3.3 Personal Experience

As a factor within the nurse that influences knowledge scores, it seems clear that having personal experience of someone, in other than clinical environment, who has an ATOD-related problem, has strong relationship with increased knowledge scores. Respondents were asked the following question "*Are you close to anyone (e.g. family or friends) who has an alcohol or other drug related problem?*" (Question 25, Appendix I). Thirty nine percent of the sample (n=493) responded positively that is, "yes" to this particular question. This seemingly extraordinary high figure is consistent with other literature that reports nurses are highly likely, in fact more so than the general population to have a significant other friend or family who has had, or has an ATOD-related problem (Trinkoff et al. 2000; Sloan

& Vernarec 2001). In this study it is noted that there is a significant difference for ATOD-related knowledge (t=3.26, df., 1128, p<0.01); those who report this personal experience have higher knowledge scores than those who do not.

4.3.4 Education

The most influential variable associated with high mean knowledge scores is that of the self–report of attending ATOD specific in-service education. This is a very favourable outcome for current strategies delineated within the nurse education and nursing management strategic plan in New South Wales, and elsewhere. Amongst this group of respondents, when the group means of all two group categorical variables are compared, the highest total mean knowledge score is that associated with in-service education (mean score = 14.19, of a possible maximum of 22 (see Table 16). Further, nurses who take an active interest in their professional development as reflected by reading nursing journals also scored higher on the mean knowledge scores. That is to say, those respondents who reported reading journals regularly had higher knowledge scores than those who did not (t=4.60, d.f., 1270, p<0.001) As previously noted, having a degree in nursing is also associated with significantly increased knowledge scores, but of a lower order than other education variables (t=2.36, d.f., 889, p< 0.05).

4.3.5 Personal Alcohol and Tobacco Use

The final area of interest in factors located within the nurse that influence ATOD knowledge levels is that of self-reported personal use of alcohol and tobacco of these registered nurses. It needs to be considered that the distribution of the questionnaires to the target population via the Nurses Registration Board might have influenced the accuracy of self-report of personal alcohol and tobacco use. It was for this reason, in part, that the personal consumption of other substances, in particular, illicit ones, was not sought in this survey. In regard to alcohol consumption, 18% never drank alcohol and 9% reported drinking 5 or more times per week. That is to say the latter group did not comply with the National and

Medical Research Councils' "Guidelines for Non-Hazardous Drinking", (see Tables 13 and 14). The results however, demonstrate that being a drinker in fact increases nurses' level of ATOD-related knowledge. It is possible that by using alcohol as a drug of choice, the registered nurse who drinks is more likely to know more about the effects of alcohol. Results demonstrated a weak positive relationship between the number of drinks consumed per week and total knowledge scores. Conversely, never drinking alcohol was associated with lower mean knowledge scores.

A similar phenomenon was found with tobacco use. There may well have been some response bias implicit in the low level of self-reported smoking, only 16% reported as being current smokers. It is notable however, that a high percentage (28.4%) reported being ex-smokers. Interestingly, it is noted that comparisons of smokers, non-smokers and ex-smokers found that non-smokers and light smokers (1-5 cigarettes per day), had significantly lower knowledge scores than smoker groups, 6-20 per day and, more than 20 per day (Table 12). Contention may be made that nurses seemed to retain and possibly seek to gain in the first instance, knowledge which is clinically relevant, or salient to their practice. It may also be the case that for registered nurses, the use of alcohol and/ or tobacco respectively is associated with having more factual and clinical knowledge about the nature of these drugs as a function of their personal use and their own health concerns.

4.4 ATOD-Related Knowledge: 'Factors Located in the Workplace'

Factors located in the workplace discussed below are factors arising out of the relationships between independent variables and the dependable variable of interest; ATOD knowledge. To be noted here, the factors located in the workplace that arose from the multi-layered thematic coding within the qualitative section to follow, are much more multi-dimensional and contextual than found here. Beyond the empirical relationships examined here, are the emerging ideas, that where the nurse is working, the nature of that work, and of course, the type of patient and patient care to be given may well influence their existing level of ATOD knowledge as measured at the time of survey. The suggestion is thus

made that certain groups of nurses, that is nurses with particular backgrounds may have differing levels of knowledge consequent to this background. The following section discusses the possibility that particular specialist clinical backgrounds may influence ATOD knowledge. These variables include the following:

4.4.1 Current Clinical Area

One-Way Analysis of Variance (ANOVA), as reported in chapter 3 (3.4.2. Current Clinical Area), demonstrates a significant difference between nurses working in different clinical areas (F=5.95, df., 2, 1264, p=<0.001). Psychiatric Nurses, Occupational Heath Nurses and Critical Care Nurses had higher mean scores than other groups. Nurses working in aged care settings were found to have the lowest mean knowledge scores, with medical/surgical nurses demonstrating mid-range knowledge scores (mean = 12.03-12.07, of a maximum total score of 22), that is, scores only slightly above the overall mean score for the total group of respondents. It may well have been anticipated that psychiatric nurses would have the highest mean score (14.25), for a number of reasons. Amongst these, the likelihood that psychiatric nurses are more likely to encounter, the patients with ATOD problem. The relatively high score of Occupational Health Nurses may be suggestive of their more holistic approach, the promulgation of occupational health, ATOD-related policies, and prevalence of Employee Assistance Programs (E.A.P.S) within their workplace.

Of particular interest to this investigation are those nurses who are exposed to ATOD-related problems, incidentally, by the nature of the patient groups in their clinical practice. Primary amongst these are nurses working in general/medical/ surgical care settings (n=609), the major group of respondents, or those working in acute care (n=237). These nurses are exposed to ATOD-related problems because patients in their care have problems due to, or secondary to their ATOD use. These are predominately medical/surgical problems or those due to traumatic injury (Watson 2000; Ragaisis 2004; Walsh et al. 2004). As noted previously a particular and powerful area is the contention that in order for these patients to be identified the nurse must assess for ATOD use, and be prepared to explore the

relationship between this ATOD use, and the presenting problem/s. It is further noted that this commonly does not happen. Thus it is the particular nature of nurses' knowledge and its utility that is of interest when reflecting upon the strength of relationship between current clinical area of work and knowledge scores.

Given the argument that knowledge and skills are an essential prerequisite to assessment and identification the finding that this large group of medical/surgical nurses demonstrated mid-range knowledge scores, but that nurses working in acute care areas scored higher on average than other groups was of particular interest. Again the issue of salience arises. The possibility is that nurses seek, obtain and retain knowledge that they need, that is, knowledge that they believe has utility to their clinical practice and is particular to their workplace. To consider this further, (and as noted in chapter 3; 3.3.2 Current Clinical Area), the categorical variable current clinical area, was recoded to collapse the seventeen categories of clinical area into four which were; 'acute care', 'general nursing', 'primary health care', and 'administration/education'. It is in accord with the contention outlined above that registered nurses working in acute care settings (n=237) had significantly higher mean total knowledge scores (F = 7.16, df., 3, p=0.0001) than any other group. It is of particular note that, the higher total knowledge scores were influenced by registered nurses in acute care settings having significant higher mean knowledge scores by area for Standard Drinks ((F = 4.09, df.3 p=0.006), Withdrawal Management (F = 13.62, df. 3, p<0.00001), and *Pathology* (F = 3.09, df. 3, p = 0.005). There are no significant differences between the four collapsed groups for the knowledge areas; Assessment and General Management.

These data suggest that nurses working in acute care settings, thus dealing with acute presentations, knew more about standard drinks and pathological indicators of ATOD morbidity, as a function of their practice. This specific knowledge aided acute care nurses to assess patients at risk, particularly for troublesome withdrawal syndromes. The highly significant difference for withdrawal management scores of acute care nurses when compared with other groups; 'general nursing', 'primary health care', and 'administration and education', strengthens this contention. Thus it a realistic proposition that clinical area in

which the nurse works reflects the type of patients that present, and the type of clinical problems that emerge, thus influencing the type of knowledge valued and sought after by the nurses.

4.4.2 Current Clinical Position and Seniority

No significant differences were found for current nursing position. This considered, it must be acknowledged that seniority, status, and authority within the nursing care system bear no relationship to current ATOD specific knowledge. That is to say, there is no evidence that senior nurses who report themselves as being a Director of Nursing or Clinical Nurse Consultant or Nurse Unit Manager, in hospitals, or a senior Team Leader in a community health care setting, know anymore than any other registered nurse. Given the overall response bias towards senior and higher positioned nurses in this survey (see, 3.1.5. Current Clinical Position), and assumptions that senior nurses within the nursing structure provide clinical leadership and the devolution of knowledge, particularly clinical knowledge, this low level of ATOD-related knowledge amongst senior nurses, is a perplexing finding.

4.4.3 Work Context/Status

Respondents were asked whether they worked in the public sector or the private sector, if they worked full-time, part-time or casual, and also to identify the postcode of the area in which they worked. From the variable 'postcode' the proportion of respondents reporting that they worked in a rural postcode area as opposed to an urban postcode area was able to be determined. The majority of Registered nurses (65%) worked in the public sector, 50% of respondents worked full-time, with the remainder working either part-time (39.5%) or casually (10.5%). The proportion of respondents who worked in a rural postcode area (48.8%) was higher than that of the workforce population (43.3%) and higher also than the 42.5% of respondents working in the metropolitan postcode areas (see 3.1.6.). Nevertheless, the finding was that nurses working in a rural region had

significantly higher mean total knowledge scores than those working in metropolitan postcode areas (t =3.01, df., 1166, p<0.01). Registered nurses employed in the public sector demonstrate significantly higher mean total knowledge scores compared to those employed in the private sector (t=8.96, df., 1271, p<0.001). As noted in chapter 3 however, the proportion of respondents reporting that they had attended ATOD specific in-service is significantly greater amongst those working in the public sector than in those working in the private sector ($\mathbf{x}^2 = 20.20$, df.2, p< 0.0001).

In reflection the following points need to be considered. Firstly, and as noted above, attending ATOD specific in-service education has the strongest association with higher mean total knowledge scores. Secondly, the progressive implementation of the "Strategic Plan for Nurse Education and Nursing Management of Alcohol and other Drugs", a New South Wales State Government initiative directed at the public health care sector has most likely provided an environment in which nurses in the public sector are supported in the expectation that they provide care for ATOD-related problems (Novak & Hutchinson 1995; Harvey & Russell 1997). Thirdly, and in reflection on these two points, registered nurses clearly identified their overall need for more ATOD specific knowledge and skills in their qualitative responses, and that this was a particular concern for nurses working in the private sector. Further, the time the nurse spends working in her/his clinical position impacts on ATOD specific knowledge. Registered nurses working in a full-time position had significantly higher knowledge scores than those working part-time or casually respectively (F=14.91, df., 2, 1267, p< 0.001).

4.4.4 Use of the Nursing Procedure Manual

A primary concern of this investigation was whether or not nurses' deliberate use of nursing protocols, purpose-designed to support the practicing nurse in the identification and intervention of ATOD-problems, had any relationship to the key dependent variables, i.e. nurses' ATOD-related knowledge, therapeutic attitudes and clinical activity. The assumption was made, based on the evidence that the likely most accessible place for an ATOD-related protocol would be in the Nursing Procedure Manual (NPM). Thus a range of questions were asked of the respondents about their use of Nursing Procedure Manuals in general, and those specific to ATOD-problems (see 3.1.7 and 3.3.5). Amongst specific questions of interest was the proportion of nurses who had access to a NPM, and whether such a NPM contained ATOD-related procedures and protocols. A corollary to this would be that the practising nurse recognised the need, or wanted to use such a protocol and, and very importantly, that such protocols existed.

Eighty-five percent of these respondents stated that they had a NPM in their current workplace, and the majority (88%) also stated the NPM had been of help to them in general. When asked whether they had ever consulted a Nursing Procedure Manual, 95% of the respondents stated that they had. Of particular interest to this investigation, 36% of respondents had referred to the Nursing Procedure Manual to assist them in dealing with an ATOD-related problem. All the above considered, it is of particular note that those respondents reporting having ever consulted a NPM to assist in dealing with ATOD-related problems had significantly higher mean total knowledge scores than those who had not (t=7.34, df., 1270, p<0.001). Importantly recency of consultation was a further influence. Respondents who had not used a NPM for more than six months had significantly lower scores than those reporting more recent use, that is, with the last six months. In conclusion, nurses who firstly, use a procedure manual and secondly, use it specifically to give them support and guidance in the management of ATOD-related problems and have done this in recent times, are significantly more likely to have higher knowledge scores than those who have not.

The Nursing Procedure Manual is deeply imbedded in the culture of nursing as an aid to professional practice and is regarded as an important resource not only of information but also guidance in the management of clinical concerns (Clarke 2001; Fraser & McAbee 2004; Tilley &.Watson 2004; Pascoe et al. 2005). It would seem from these data, that deliberate attempts to disseminate ATOD-related clinical knowledge and guidelines through such existing structures have utility. Such a strategy of course is primary to the New South Wales Strategic Plan, and other such ventures. If it is a goal of health care to address the imbalance between the clinical prevalence of ATOD-related problems and the

frequency with which nurses assess for, recognise, and intervene in these common problems, specific knowledge is an essential prerequisite. Logic prevailing, it would seem necessary therefore that for the nurse to be motivated to increase her/his specific clinical knowledge, particularly in response to an identified problem within their workplace, having access to immediate and good quality guidelines or protocols for ATOD-related problem is an essential adjunct to knowledge.

4.4.5 Seeking Clinical Advice

Nurses in this survey were asked the following question, "When you want clinical advice/information in regard to the nursing management of a patient with an alcohol or drug-related problem, what do you usually do first? The options were; "contact a Clinical Nurse Consultant or Clinical Nurse Specialist in drug and alcohol", "contact the New South Wales Drug and Alcohol Specialist Advisory Services", "refer to the Nursing Procedure Manual", "contact your local Drug and Alcohol Service", and lastly: "I have never sought advice on drug and alcohol problems" (Question 19, Appendix I).

The responses to this question had considerable resonance with those pertaining to the use of the Nursing Procedure Manual. Respondents, who had never sought clinical advice or information for the nursing management of an ATOD-related problem, had significantly lower mean total knowledge scores than those who had (F= 16.02, df., 5,1227, p<0.0001). It is of interest to note however, that there was no significant difference due to the reported first action or respondents (*"what do you usually do first?"*). A rather sobering thought perhaps for the Clinical Nurse Consultant or Clinical Nurse Specialist in ATODs. It would seem amongst this group of respondents, at least, that it is the action of seeking clinical advice which is critical to knowledge scores rather, than the source of that advice. The direction of the relationship between seeking clinical advice, be it from a Nursing Procedure Manual, or other source, and increased knowledge scores needs to be considered. One possibility is; that having identified an ATOD-related problem and consequently seeking clinical advice in regard to it, increases nurses' knowledge about the nature of these problems and what to do about them. Provocatively, it is possible that nurses who have higher levels of ATODknowledge in the first instance, are more likely to identify ATOD-related problems and thus seek to further their knowledge about the management of these common problems. In other word there is a dynamic relationship within which, knowledgeable nurses continue to increase both knowledge and intervention.

The rapid development and devolution of ATOD services across the State of New South Wales over the past 10-15 years must be considered as a contextual influence on nurses' knowledge and practice. There has been a bourgeoning of ATOD services across the state albeit the distribution and quality of these services is variable. This notwithstanding, it is common place in major hospital settings, particularly in tertiary care services, for an incumbent ATOD service to exist within the hospital setting (Novak & Hutchinson 1995; Day et al. 2002; McNeese-Smith 2003). An important rationale for such services is to increase the likelihood of timely intervention and good quality management for ATOD-related problems. The utilisation of liaison-consultation processes offered by Clinical Nurse Consultant and Clinical Nurse Specialists in ATOD would give rise to them being accessible as a primary source of support and clinical guidance in ATOD-related problems for practising registered nurses. It is noted above however that at the point of this survey there was no evidence to suggest that the Clinical Nurse Consultant or the Clinical Nurse Specialist in ATOD was more likely to be referred to as a source of advice and information than any other source.

When all sources of clinical advice are considered, it is intriguing to note that there is a highly significant difference in the proportion of nurses working in the rural sector who sought clinical advice, from any source, when compared to registered nurses working in metropolitan settings ($x^2 = 46.59$, p<0.00001). As noted elsewhere, and certainly reaffirmed in the qualitative responses discussed in later chapters, having an alcohol or other drug service local to the nurses' area of clinical practice is a much more likely for those who work in metropolitan settings as opposed to those in rural settings. It is possible therefore that nurses working in a rural settings are more likely to seek clinical advice (from a NPM or any other accessible source), as a matter of necessity, both real and perceived, due to their extended role and limited access to an active multi-disciplinary ATOD team and

other specialist services. That is, for the rural nurse the assumption that there is a local ATOD service that can either support the nurses' management of the problem or take a more direct responsibility for the specialised care of the patient with the ATOD-related problem is simply not as possible as would be in a well resourced metropolitan hospital.

4.5 Therapeutic Attitudes

At the outset of any helping relationship, both the recipient of help and the helper hold a set of assumptions about the recipient's problem as well as what can and should be done to correct or ameliorate the problem. As noted, there is an extensive and growing body of literature that has investigated in-depth, initially the attitudinal responses of medical staff towards people with ATOD-related problems and more lately, those of nurses. It is in review of this literature that this investigation has developed a focus on the relationship of moral, social, and professional judgements of nurses in regard to patients with ATOD-related problems and that individuals' right to quality nursing care, assessment and intervention. In addition nurses self-rated perception of the importance and usefulness of providing intervention and care to ATOD-affected individuals has been investigated. A major concern has been nurses' self-rated belief as to the degree to which they have the ability to do apply this adequately. Measures of what the investigator has called "Therapeutic Attitudes" however do not standalone, and therefore the relationship of Therapeutic Attitudes to the knowledge and skill base of respondents has been considered. In the final analysis the critical question has to be, how does the willingness, motivation, and self-perception of nurses' ability of to assess and intervene in ATOD-related problems, influence their clinical behaviour, that is to say, their actual practice? It is contended that a unique contribution that this research can make is the systematic exploration of not only what nurses know about ATOD-related problems, and their attitude towards them, but also how this determines what they actually do about ATODrelated problems within their professional practice (Clinical Activity).

Published reports in respect to nurses' attitudes towards both ATOD-related problems and those individuals affected by them, have on balance, been somewhat less than favourable (Norman 2001; Pillon et al. 2004). More recently however some writers have offered a more hopeful possibility that nurses' attitudes towards ATOD-affected patients have shifted from being hostile to at least ambivalent (Church 2000; Rassool 2000). Despite this, the belief that ATOD dependent people in particular, are intractably 'non-compliant', 'difficult to nurse', 'hedonistic', 'hostile', 'combative', and so forth, remain long standing and the constructs of 'therapeutic nihilism' and 'therapeutic pessimism' prevail (de Crespigny et al. 2002; Anderson et al. 2004). The situation continues to exist in contemporary practice that the motivation of nurses to actively intervene in the ATOD-related problems of individual patients might well be mitigated by the attitude that anything they do is likely not to work (see Chapter Six). Negative clinical stereotypes of the "alcoholic" and the "addict" which influence nurses' attitudes are antithetical to the early and brief interventions, which are a focus of this investigation.

A major concern of this investigation was to thus design, systematically refine, and apply a valid and reliable measure of nurses' self-rated motivation, intention, and ability to respond to ATOD-related problems. As discussed in the method section, the *Therapeutic Attitude Scale* used in this survey in was derived from the foundation work of Cartwright (1980), and those who followed after him. The result of the development of the *Therapeutic Attitude Scale* in this investigation is the application of a new instrument. The *Therapeutic Attitude Scale* has modest robustness, a common criticism of all Therapeutic Attitude scales, in this case however, it is an attitudinal measure that has been specifically designed and refined to be applicable to nurses in practice (see 2.6.3.) At the simplest level of analysis the scale seeks three measures. Firstly, do nurses believe they know enough and have sufficient skill to assess and intervene in ATOD-related problems? Secondly, do they think this is "a proper or legitimate" action for them to take? Thirdly, and perhaps the area that has attracted the most attention in previous work, do nurses believe that individuals with ATOD-related problems have the right to their treatment and care?

The *Therapeutic Attitude Scale* is comprised of three factor scales or sub-scales; Role Adequacy, Role Legitimacy and Non-judgement. The scale is conceptualised as follows:

- **Role Adequacy** (Factor Scale: I) is representative of beliefs that respondents have adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD problems.
- **Role Legitimacy** (Factor Scale II) is representative of beliefs that respondents have both a right and a professional responsibility to identify and intervene in ATOD problems.
- **Non-judgement** (Factor Scale: III) is a measure that is representative of a Nonjudgemental view of the ATOD effected persons' right to intervention and care. A high score represents a high level of acceptance.

4.5.1 Discussion of Major Findings: Therapeutic Attitudes

The following section aims at three outcomes. Firstly, to review the critical findings as reported in the Results section (3.4 Therapeutic Attitudes). Secondly, to further elaborate on these findings in the broader context, and thirdly, to reflect on key findings to preview major themes emergent in the qualitative data. The percentage of agreement for individual items comprising the Therapeutic Attitude scale is of interest and some have been further discussed here. It is however; the "snap shot" provided by the total mean scores for the Total Therapeutic Attitude scale and factor scales respectively, that provides a most telling picture. This snapshot is provided graphically below:

The mean Total Therapeutic Attitude score, of a maximum score of 5.0, for this large cohort of Registered nurses is of 3.30. Role Legitimacy and Non-judgement present in equal and generous measures of a mean score of 3.60. This is in striking contrast to the low measure of just over the halfway point of 2.5 (mean = 2.53) of a maximum mean score of 5.0, for Role Adequacy.





Registered nurses in practice, as represented in this survey, have a relatively high strength of belief that they do have a professional responsibility to assess and intervene in ATOD-related problems and that this is a legitimate part of their role. Further, they strongly believe that the ATOD-affected person has a right to their intervention and nursing care. However despite believing that it should be done, and that it is right to do it, registered nurses have a highly significantly lower level of belief in their adequacy to carry-out such desired clinical behaviours (t= 37.54, df., 1265 p<0.001). The likelihood that this is not only statistically significant but has "real life" significance is strongly born-out by what these nurses reported in the qualitative data. This powerful numerical disparity merits further investigation. Much can be explained; it is contended, by re-examining the variability in percentage agreement loading of individual items comprising *Role Adequacy, Role Legitimacy* and *Non-judgement*, sub-scales respectively.

4.5.2 Role Adequacy

Attention to percentage distribution of responses to the three Role Adequacy items (see Table 17) demonstrated an unequivocal stated belief by these registered nurses that they lack sufficient clinical skills and knowledge to care for patients with ATOD-related problems. For example, 58.9% of respondents either agree (46.6%) or strongly agree (12.3%), with the item, "*I do not have enough clinical skills to care for intoxicated patients*". Of the item "*I do not have enough clinical*

skills to care for patients withdrawing from alcohol and/or other drugs" a total of 69.1% either agree (49.5%) or strongly agree (14.6%). Of the reverse coded item *"I have received sufficient nursing education and training to care for persons with alcohol and/or other drug-related-problems*", a total of 67.9% of respondents disagree; either strongly disagree (12.1%) or disagree (55.8%), that they have received sufficient nurse education and training. These three items in the Role Adequacy factor scale reflect two different dimensions. The first two items reflect the respondent's stated belief about their current clinical skills to manage intoxication and withdrawal syndromes respectively. The third item is a question that asks respondents to reflect retrospectively as to whether they believed that they received sufficient nurse education and training for them to provide care for patients with ATOD-related problems. The conclusion is that the majority of this large cohort of practicing nurses believed that they neither had enough current skills nor ever received sufficient education and training in the in order to obtain these skills.

4.5.3 Role Legitimacy

Of the Role Legitimacy items, the very high percentage agreement with the item "*A drug and alcohol history should be a routine part of all nursing assessment*" is noteworthy. A clear majority (87.9%) of respondents were in agreement with this premise, 58.9%, agree and 29% strongly agree. This is directly compatible with the item "*I have a responsibility to identify patients with ATOD-problems*." The item, "responsibility to identify" has 86.6% agreement. The question that still remains seems perennial. That is, "do attitudes in any way predict behaviour? In this case does a strong subscription to the attitudinal set that it is a responsible and indeed legitimate nursing practice to identify ATOD-related problems, inclusive of the prerequisite of carrying out an ATOD assessment, bear any direct relationship to the frequency with which this practice occurs in the nursing context? This important relationship merits further discussion. It can be noted that a further Role Legitimacy item was similar in kind to the one discussed above, namely that of "*I have a responsibility to intervene with patients who have alcohol and/or other drug-related-problems*." A little over half (52.4%) of these

respondents subscribed to an attitudinal set that they have a responsibility to *intervene* in ATOD-related problems compared with the 86.6% of those who subscribe to an attitudinal set that as nurses have they a responsibility to *identify* patients with ATOD-related problems. This difference was statistically highly significant, however this may well pertain to nurses clearly differentiating their areas of responsibility and may not mean that their practice actually reflects their belief.

Issues of role boundaries have been described in various models of nurse's views of their roles and responsibilities (Ryrie & Ford 2001; Fernandez & Greening 2005). It would seem fair to say that nurses regard assessment as primary to their role in a variety of contexts. Common and highly legitimised nursing behaviours such as making clinical observations, vital signs, and assessing the health status of patients are viewed as normal practice, with an extended role of actually taking direct action in response to abnormality also occurring as necessary. (Tilley & Watson 2004; Fernandez & Greening 2005). The disparity between legitimacy and having a sense of responsibility to identify ATOD-related problems as opposed to intervening with these problems is discussed later with reference to the multivariate prediction of self-reported clinical activity, and also with careful consideration of what nurses have described in their own voice.

4.5.3.1 Role Legitimacy and Workplace Encouragement

Of the items comprising the Role Legitimacy factor scale (see Table 17), there is one that merits particular attention. This item is "*I received encouragement within my workplace to intervene with patients who have alcohol and/or other drug-related-problems.*" Reference to Table 17 clearly demonstrated a different pattern in distribution of percentage of agreement for this item. Respondents' belief that they receive encouragement to intervene in ATOD-related problems demonstrated significantly lower percentages of agreement than for any other item, in particular with the item that represents the belief that they have a responsibility to intervene. In other words within the disparity of these percentages are a large proportion of nurses who reported the belief that they should intervene in ATOD-related problems of patients in their work place, but believed with greater strength, that they receive no encouragement to do so. Specific to the item related to respondents receiving encouragement within their workplace, a bipolar distribution of agreement is noted. A total of 38.9% of respondents disagree or strongly disagree that they receive encouragement to intervene, as opposed to 40.5% who do agree that they receive encouragement. Further it is noted that 14.8% respond that are 'not sure'.

A number of issues arise out of the attitudinal set of; encouragement to intervene with patients who have ATOD-related problems and thus to act against what might be seen as the existing order of behaviour. The pattern of response brings into relief the early works of Cartwright (1980) and subsequent work of Lightfoot and Orford (1986), (Anderson & Clement 1987) and Gorman, Werner, Jacobs, and Duffy (1990) all of whom noted the importance of the attitudinal construct they called "Role Support". Particular to this investigation, receiving workplace support (or not), was a strong emergent theme within the qualitative data. The strength of the issue of workplace support was of such order in the thematic analysis of qualitative data that it led, via a process of multi-layered thematic coding to major category codes and a number of detailed sub-codes assumed within. As noted, these are discussed in greater detail later, suffice to say at this point these codes are illustrative and worthy of mention at this juncture, as they offer some explanation of the disparity between; a sense of responsibility to do something, and the perception that nurses are not receiving adequate support in their workplace to do it. Subsumed under category code, 'Factors located in the workplace', (see Chapter 7) are the detail sub-codes 'Lack of back-up support structures', 'Role Confusion (who owns the patient?)', and 'Role Boundaries (nurse)'. Further, subsumed under the category code, 'Factors located within other healthcare providers'; "Lack of cooperation and support," is a telling and detailed code.

4.5.3.2 Role Legitimacy: Tobacco a Special Case

Before leaving the area of Role Legitimacy, attention is given to the final item. That is, "*If patients smoke cigarettes nurses have the responsibility to advise them to quit*". Reference to Table 17 demonstrates that close to two thirds of respondents (61.8%) agreed with this attitudinal premise and approximately one third disagreed (30%). Of this particular item the following observations can be made. Firstly, the level of agreement was of higher order than the item "having a responsibility to intervene with ATOD-problems", in general, and the pattern of response is less equivocal. Whereas 22.8% of respondents were 'not sure' whether they had a responsibility to intervene in general, only 6.5% were 'not sure', that they had a responsibility to advise smoking patients to quit or not to quit (see Table 17). As noted in the method section, and further discussed in the frequency of clinical activities, asking patients about their tobacco use is an assessment item within the *Clinical Activity Scale*. It is also an item of brief intervention in terms of providing information about smoking cessation.

As a prelude to further discussion and elaboration it is argued here that nurses' attitudes towards smoking and smoking cessation is of great importance in the role that they may take as an agent of change in this most common cause of drug related morbidity and mortality. To reflect further, nurses have been reported, and are currently reported, as heavy users of tobacco themselves. (Hope, Kelleher & O'Connor 1998; McKenna et al. 2001; Bialous et al. 2004) Within the literature and emergent in qualitative data to follow, nurses reported their ambivalence about enquiring, after or intervening into behaviours which they saw as being within the domain of 'private and personal' behaviour of their patients. The apparent paradox that nurses will quite willingly enquire after the bowel habits of their patients, but are reticent to enquire about their smoking behaviour, is noted here as elsewhere.

4.5.4 Non-Judgement (Moralism)

As noted within this chapter and earlier in this thesis overall, the evaluation of nurses attitudes towards the ATOD-affected patients, whether anecdotal or research based, have been less than favourable. These were, and perhaps still are, a group of patients that nurses like less than some other groups. As is noted the ideas of 'therapeutic pessimism' and 'therapeutic nihilism' seem to prevail and these patients are commonly seen as difficult to nurse, and offer little reward for

the effort given. It is worth reflecting that this particular investigation has in part evaluated the outcome of a state-wide strategic plan to increase both the frequency of assessment and intervention by nurses for ATOD-related problems, and improve the quality of desired clinical behaviours. This considered, the measure of *Non-judgement*, that is to say, the degree to which these respondents do not hold negative moral, social, and professional views towards the ATOD-affected individuals is important.

4.5.4.1 Non-Judgement and Role Adequacy

As noted with reference to the above histogram (Figure 2: Mean Scores: Total Therapeutic Attitudes and Therapeutic Attitude Factor Scales Scores), both *Non-judgement* and *Role Legitimacy* scores were significantly higher than *Role Adequacy* scores. In other words, the possibility has arisen that nurses do not withhold care and treatment towards ATOD-affected patients because they think they are not worthy of it, but simply because nurses do not feel adequate to give it. These quantitative results substantiate anecdotal comments made by Novak and Petch (1994) who defend a common postulate that nurses had bad "attitudes" towards ATOD-affected patients, and thus treated them badly. Novak and Patch made the point that perhaps nurses have never abrogated or denied their responsibility to care for such individuals, but have not known how to do this adequately. The findings of this investigation quite clearly support this, but add the further important dimension that nurses' actions may well be further constrained not only by lack of knowledge and skill, but also by lack of structural support within the workplace.

In considering Therapeutic Attitudes overall, and when in more detail component items comprising the sub-scales Role Legitimacy and Role Adequacy respectively, further insight was gained by briefly reviewing the distribution of the percentage of agreement to individual items within the Non-Judgment sub-scale. As noted in the results section (3.4.2 Attitudinal responses of Registered Nurses), responses to items in the Non-judgement factor scale are written in the negative, thus high levels of disagreement indicated a high level of Non-judgement or acceptance.

4.5.4.2 Non-Judgement: Addiction as a Matter of Will Power or Moral Fortitude?

Of the four items that comprise the Non-judgement sub-scale the last is perhaps the most obvious in terms of provoking a strong judgemental response. The item "*Drug addicts have a weak will*" is derived directly from Cartwright's (1980) original Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ). Such a measure would reflect a fairly commonly reported view that nurses, at least in the past, believe people with problems of addiction or substance dependence; have a problem of will power or moral strength, rather than a health problem per se. Whereas the majority of these respondents disagreed that "drug addicts have a weak will" it was a modest majority (56.3%), 21.6% agreed, and 19.8% were "not sure".

4.5.4.3 Non-Judgement: "Alcoholics" and "Addicts" Are Worth the Effort

A more positive response set was the distribution in the percentage responses to the item "For the vast majority of alcoholics and addicts counselling is a waste of effort". A more generous proportion of the respondents (64.8%) disagreed with this proposition. Again, however it is noted that one in five, (19.9%) were "not sure". This item was also derived from Cartwright original AAPPQ scale (1980), the wide use of which has demonstrated good reliability and validity. This investigator used this item deliberately because the words "alcoholic" and "addict" are of themselves attitudinally loaded, and frequently pejorative. This considered, if in round terms two thirds of registered nurses in practice evaluate the more end-stage presentations as representing the clinical stereotypes of the "alcoholic" and "addict" respectively, merits their attention and are not a waste of their time, then this should auger well for minimal interventions by registered nurses for the patients who present with problems earlier in the continuum of ATOD-related harm.

4.5.4.4 Non-Judgement and Drinking: A Particular Case

A possible attitudinal constraint on nurses carrying out even the minimal activity required of early and brief intervention is implicit in the following item. "Only those patients with a history of frequent intoxication should be asked about their drinking". The response to this particular item was overwhelmingly in disagreement, with 87.4% respondents who disagree, of whom 26.4% strongly disagree. It is noted that less than 4% of respondents (3.9%) were not sure as to how they should respond to this particular item. Registered nurses in this survey did believe that it is not only the patient with a clearly defined history of excessive drinking who should be asked about the nature of their drinking. In other words, the majority view was that an alcohol history should be sought from This pattern of response is clearly in accord with the higher all patients. percentage of agreement to the two Role Legitimacy items relating to having responsibility to identify patients and that an alcohol and other drug and history should be a routine part of all nursing assessment. Once again the point needs to be made that of these three component attitudinal constructs within Therapeutic Attitude scale overall, Role Adequacy, Role Legitimacy and Non-judgement, it is Role Adequacy that stands out as the strongest antagonist towards assessment and intervention in ATOD problems in the clinical environment in which nurses work. In other words, nurses would do more if they felt more able (adequate) to do so.

4.5.4.5 Non-Judgement and the Value of Intervention: Nurses Are Not Sure

The pattern of response suggested that nurses do not subscribe strongly to clinical stereotypes of "alcoholics" and "addicts" or those patients who have "frequent intoxication". The final item in the Non-judgement scale tested their beliefs about the outcome if patients were actively, or evenly incidentally treated for their ATOD-related problems, in particular those patients with established dependence. The item within the Non-judgement scale "*Recently detoxified patients are likely to drink and/or take drugs as soon as they are out of hospital*", demonstrated response suggesting that nurses in practice are very unsure as to the outcome of ATOD interventions. Whereas 32.6% of respondents disagreed with the

proposition that recently detoxified patients are likely to drink and/or take drugs as soon as they are out of hospital, this is of greater strength than the 22.8% who agreed with this premise. So the postulate of 'therapeutic pessimism' being considered, the possibility of a positive outcome for detoxification was stronger than that of a negative one. The most striking pattern of response however, is that 42.8%, (the majority of responses), demonstrated that most were simply not sure of the likely outcome (Table 17). The beliefs that nurses may, or may not, hold about the value of intervening with ATOD-problems is a critical one. That is beyond the belief that such interventions should be carried-out is yet another question as to whether the nurse believes there will be any value in them doing so. Again, not all the answers can be seen in terms of the numerical relationships presented here. Emergent themes arising from qualitative analysis offer more in depth understanding of this issue and will be discussed in a later section.

4.6 Discussion of the Relationships Between Therapeutic Attitude Scores and Other Variables

As noted earlier, due to the multi-methods approach of this investigation and the processes of sequential triangulation, numerical relationships identified and discussed in this chapter have also been reflected on in accord with themes that emerged in the qualitative analysis. Firstly, to discuss Therapeutic Attitudes scores in relationship to:

4.6.1 Factors Located Within the Nurse

Since the early work of Tweed (1989), the contention has been made, sometimes with good evidence, that the greater period of time the nurse has been nursing, the more hardened, "punitive", and "custodial" their attitudes will become, particularly towards patients labelled "alcoholics" or "addict" (Tweed 1989; Goodin 1990; Sullivan 1995; Bendtsen & Akerlind 1999; Pillon et al. 2004). In this investigation, a weak negative correlation was demonstrated between age and Non-judgement score, in other words older nurses were more likely to be more judgemental. Years of nursing service or the respondent's current clinical
position however, demonstrated no significant relationship to Total Therapeutic Attitude scores or any sub-scale score.

4.6.1.1 Personal Experience

As noted previously, having personal experience of someone with an ATODrelated problem is associated with higher mean knowledge scores. The variable of personal experience is also labelled "family problem" (see Table 20), and is associated with significantly higher mean Total Therapeutic Attitude score (t = 2.92, df., 1242). This is a difference of modest order of significance (p < 0.01), nonetheless being close to someone (anyone) family or friend who has ATOD problems is associated with a more positive generalised set of Therapeutic Attitudes towards ATOD problems. In consideration of Therapeutic Attitudes subscale scores, it is noted that this difference is not significant for Role Legitimacy score (see Table 20), but is for Role Adequacy, being is of similar order as for Total Therapeutic Attitude score (t=2.29, df. 1244, p<0.05) and of the higher significance for Non-judgement scores (t=3.82, df.,1244, p<0.001). These numerical relationships suggest that having had close personal experience of someone with ATOD problems is associated with being less judgemental to others so affected. The "real-life" significance of this is firstly, as noted above, that nurses are inordinately likely to have had a personal association with someone with ATOD problems and secondly, the nature of these judgements (or Nonjudgements), as illustrated in responses discussed in the qualitative section, are complex and variable.

4.6.1.2 Education

Attending ATOD specific in-service education is strongly associated with higher mean Total Therapeutic Attitudes score (t=7.39, df., 223.1, p<0.001). A further illustration of the value of this key strategy is that the effect for the variable inservice education is greatest for Role Adequacy amongst the sub-scale measures, greater therefore than either Role Legitimacy or Non-judgement (see Table 21). There remains a significant gap between the mean value for Role Adequacy score

of those attending in-service education (mean = 2.98) and that of the Role Legitimacy score for those attending in-service education (mean=3.82). The positive interpretation for this finding is that there is a group of respondents (n=176) that attended in-service education who not only believed that ATOD interventions are a legitimate clinical activity, to a greater degree than those who did not attend such education. The group attending also believed that they were significantly more able or (more adequate) to deliver such interventions. The marked effect of in-service education on ATOD specific knowledge is noted above. When coupled with the significant difference in mean scores for Role Adequacy and Role Legitimacy it can be contended that in-service education is a key strategy to support the nurse in achieving the desired clinical behaviours of assessment and minimal intervention for ATOD problems.

Registered nurses who contribute to their professional development by regularly reading nursing journals also demonstrated higher mean Total Therapeutic Attitude scores than those who did not. In contrast, with the more active process of in-service education, the regular reading of nursing journals had stronger effect on Role Legitimacy and Non-judgement scores than for Role Adequacy. A reflection of this is that being informed by the nursing journals may well increase the nurses' motivation to perform the desired clinical behaviours of ATOD minimal interventions, but does not increase their perception of their ability to do so to the same order as in-service education. The above considered, it is of interest to note the strength of pre-service education on Therapeutic Attitudes. It is noted that respondents who reported having a nursing degree had significantly higher mean Total Therapeutic Attitudes scores than those who did not. The mean Non-judgment scores for nurses with a degree in nursing (mean=3.76) was not only higher than those who do not have nursing degrees but represented the highest mean Non-judgement score of any of the independent categorical variables. Nurses with a degree were significantly more likely to be nonjudgemental towards this particular population group than any other group of nurses in this survey. When the value of pre-service as opposed to in-service education is considered, it is noted having a nursing degree was associated with higher mean Role Adequacy scores than not having a nursing degree (t=3.26,df., 882, p<0.01) but not of the same dimension as the mean Role Adequacy scores

demonstrated by the group of respondents who reported having attended inservice education (t=6.23,df.,222.3, p<0.001). It is therefore contended that the immediacy of ATOD education when given in the clinical context in large part explains this differential in Role Adequacy.

4.6.1.3 **Personal Alcohol and Tobacco Use**

As noted above, nurses who drank alcohol and/or smoked tobacco had higher mean knowledge scores than those who did not. As previously argued it would seem that the personal use of alcohol and/or tobacco increases the amount of clinical knowledge nurses have about these particular substances. The effect of personal alcohol and/or tobacco use was not as direct on therapeutic attitudes as measured. Nonetheless, those reporting as being heavy drinkers, that is drinking more than 10 glasses of alcohol on any one drinking occasion, and a lesser consumption group, reporting 5-6 glasses of alcohol on any one occasion, had significantly higher mean Total Therapeutic Attitude mean scores than any other group. Of note, they had higher scores than respondents who "did not drink alcohol" (F=3.42, df.,1227, p>0.01). Other than this latter group, it is noted that there was no effect on mean Total Therapeutic Attitude scores or sub-scale scores for the frequency of drinking. The effect of drinking on Therapeutic Attitudes was confined only to the amount drunk on any one occasion.

Consideration of the relationship between tobacco use and Therapeutic Attitudes however, suggested that it was not simply a case that the more the drug is used the greater the effect on Therapeutic Attitudes, that is, positive attitudes. Amongst these nurses those reporting their own tobacco use to be light to moderate that is, 1-5 and 6-20 cigarettes a day respectively, had higher mean Total Therapeutic Attitudes scores than non-smokers. This effect was not demonstrated for heavy smokers, who were smoking more than 20 cigarettes a day, or for those who reported being ex-smokers. It may that those nurses who used tobacco moderately or lightly felt more kindly towards those who presented to their care due to the effects of ATODs in general, and possibly tobacco use in particular.

4.7 Factors Located Within the Workplace

4.7.1 Current Clinical Area

As discussed above, the clinical area in which nurses were currently working demonstrated a complex but direct relationship with total knowledge scores and scores for particular areas of knowledge. It was argued that this was because the knowledge was salient, or had particular utility to the area in which the nurse practised. The affect of current clinical area on Therapeutic Attitudes however, was not as direct, wide spread, or complex. At the first level of analysis (see 3.5.2 Current Clinical Area) no significant differences were found when all 17 categories of current clinical area were analysed. When the variable *current clinical area* was re-coded to collapse the 17 categories into four (4), a difference was found. The four re-coded current clinical areas were; Acute Care, General Nursing, Primary Health Care and Administration/Education. A significantly higher mean score (3.84) was found for the Administration/Education group on the Non-judgement scale. No significant differences were found between any recoded groups on Total Therapeutic Attitude scores or any other of the sub-scale scores.

4.7.2 Current Clinical Position

As noted above, there was no significant difference between the current position held by the respondent within the nursing workforce and levels of knowledge as represented by mean knowledge scores. Of the effect of current clinical position on therapeutic attitudes, the only significant difference found was between those respondents who reported their current position as "educator" (n=41). These respondents had a mean score (3.72) on the Non-judgement factor scale and this was significantly higher than any other group. These two findings of higher mean Non-judgement scores for current clinical area, and current clinical position in combination, are very positive when it is considered that those describing themselves as "educators" were found to be less judgemental of the ATOD affected individuals than any other particular clinical group. It has already been

noted above that the effect on Therapeutic Attitudes, of both in-service and preservice education, is very powerful.

4.7.3 Work Status

Relationships between work status and Therapeutic Attitude scores reflected the strong correlation between Therapeutic Attitude scores and knowledge scores (r=0.35, p<0.0001 [see 3.7]). Thus it is that the relationship between work status and knowledge scores was demonstrated in the relationships between work status and Therapeutic Attitude scores. For example, nurses employed in the public sector were significantly more "knowledgeable" than those in the private sector. Likewise being employed in the public sector was associated with significantly higher mean scores for Total Therapeutic Attitude and of particular note, significantly higher mean scores for Role Adequacy. The important consideration, as noted earlier, is that those working in the public sector were significantly more likely to have attended in-service education than those working in the private sector. The encouraging outcome suggested by these results therefore is that in-service education increases knowledge and this knowledge has the utility of increasing sense of Role Adequacy, as reported by these respondents. It was also found (see Table 21) that mean scores were significantly higher for Role Legitimacy and Non-judgement factor sub-scales for those respondents working for the public sector compared to those working in the private sector.

The differential effect for knowledge scores due to postcode location of work, that is urban verses rural workplace, was not found in Therapeutic Attitude scores. No significant difference was found for geographic region of work (country versus metropolitan), on Total Therapeutic Attitude or factor sub-scale mean scores. Therapeutic Attitude scores as a function of the length of time spent working in one's nursing position however, was of influence. Respondents reporting being employed in full-time positions as opposed to either part-time, or casual positions, demonstrated both higher mean Total Therapeutic Attitude scores and Role Adequacy scores (see 3.5.4 Work Status).

4.7.4 The Use of the Nursing Procedure Manual

The importance of nurses referring to a Nursing Procedure Manual to guide them in dealing with patients with ATOD-related problems is clearly reaffirmed by the effect this behaviour has on therapeutic attitude scores. As noted in the knowledge section, referring to the NPM, or not, was second only to attending inservice or not, in the strength of association with total mean knowledge scores (see Table 16). Respondents reporting having ever having consulted the NPM to assist in dealing with patients with ATOD-related problems had significantly higher mean Total Therapeutic Attitude scores (t=8.71, df., 1256, p<0.001). There were demonstrated significant differences associated with referring to NPM for all of the therapeutic attitude factor sub-scales, the strongest effect being for that of Role Adequacy (t=8.88, df., 852.7, p<0.001). In fact the mean score for Role Adequacy associated with NPM consultation (2.84) was second only to the significant effect associated with attendance in-service education (2.98). The strong effect on ATOD specific knowledge associated with NPM consultation in combination with the strong effects found on Total Therapeutic Attitude and in particular Role Adequacy, is clearly of practical clinical significance, as well as statistical significance.

This was also true of the finding for the recency of NPM consultation and knowledge scores. Recency of consultation was associated with higher Total Therapeutic Attitude scores. Respondents who had consulted a NPM to assist with patients with ATOD-related problems within one, two or six months, had significantly higher Total Therapeutic Attitude scores of either non-users or less recent users (F= 3.76, df.,3, 1264, p< 0.05). The Nursing Procedure Manual is important within the work place of nurses in terms of its practical utility and also its cultural value, it being deeply embedded within the professional culture of nursing. The practical outcomes of increasing ATOD specific knowledge and the set of therapeutic attitudes towards those so affected by them, is of particular importance. As noted above however, the vexed question remains as to the direction of this association? That is to say, are those nurses who consult the NPM to assist them in dealing with patients with ATOD-related problems, more sensitised to these problems at the outset in terms of their existing Therapeutic Attitude and knowledge? A more optimistic interpretation, but one which must be

dealt with cautiously, is that the action of the NPM consultations specific to patients with ATOD-related problems, of itself, has a direct affect in increasing knowledge and changing Therapeutic Attitude towards patients presenting with ATOD-problems.

4.7.5 Seeking Clinical Advice and Encouragement to Do So

In like manner to the findings for mean total knowledge scores, respondents who had never sought clinical advice/information for the nursing management of ATOD-related problems had significantly lower mean Total Therapeutic Attitude scores (mean=3.11) than those who had (mean=3.44, F=22.9,df., 5,1215, p<0.0001) (see 3.6.6 Seeking Clinical Advice). As with knowledge scores, there was no significant difference for therapeutic attitude scores due to the source of where the respondents may have sought advice.

The above considered, a further consideration is that it may be that nurses' motivation to seek clinical advice in the first instance pertains to their perception of the degree of support or encouragement they will receive in their work environment in order to do this. Patterns of response to attitudinal items suggesting desired clinical behaviours, such as the responsibility to identify and intervene with patients with ATOD-related problems is likely to be influenced by the nurses' belief (perception) as to the amount of support and encouragement received. The item within the *Role Legitimacy* sub-scale, an item conceptualised by Cartwright and others as "Role Support" was of particular interest. This item *"I receive encouragement within my workplace to intervene with patients who have alcohol and other drug-related problems*" was an indicator of nurses' perception of role support, in particular structural role support within the workplace. It is noted with interest, that the relationships between this particular single item and Total Therapeutic Attitude scores and sub-scale scores respectively, are statistically powerful and are thus important relationships.

There is a strong relationship between the item "*I receive encouragement within my workplace to intervene with patients who have alcohol and other drug-related problems*" with Total Therapeutic Attitude scores (r=0.518, p<0.0001). This

"encouragement item" had a strong correlation with Role Legitimacy, in fact greater than Total Therapeutic Attitude itself (r=0.633, p<0.0001). To a lesser degree, but still at an order of significance greater than p=0.0001, the relationship between this encouragement item and Role Adequacy scores was also strong (r = 0.312). It is noted that the relationship between this encouragement item and the Non-judgement score was not significant. Thus there was a very strong relationship between these respondents perception of receiving encouragement within the workplace to intervene with patients who have ATOD problems, and therapeutic attitudes. Of particular note, encouragement was most strongly associated with the overall attitude set comprising Role Legitimacy and that which collectively represented the nurse's perception of her/his ability to perform these desired clinical behaviours, that being Role Adequacy. The idea that nurses may well be influenced by contextual and/or structural variables in their workplace is a central theme explored in the qualitative analysis (Chapter 7).

4.8 Summary

This chapter has provided detailed examination and discussion of the analysis of relationships between independent variables selected to be representative of the diverse personal, educational, and professional backgrounds of a large random sample of registered nurses (n=1281) and the two dependent variables; ATODrelated knowledge and therapeutic attitudes. On average the ATOD knowledge of the total sample was found to be low but responsive to ATOD specific in-service education and the utilisation of Nursing Procedure Manual to assist in the care of patients with ATOD-related problems. Particular categories of ATOD knowledge, for example; assessment, pathology, and withdrawal management, were found in nurses working in particular clinical settings, for example, acute care. Knowledge which is clinically pertinent and useful is valued as significant to the nurse generates a higher level of interest (salience), and is demonstrated as a higher level of ATOD knowledge. Nurses working in rural postcode areas of NSW demonstrated higher levels of ATOD knowledge, than their counterparts working in metropolitan postcode areas. Nurses working in the public health sector had higher levels of ATOD knowledge than nurses working in the private

sector. The strength of the influence of ATOD specific in-service education was reinforced by the finding that nurses who worked in the public sector, were significantly more likely to have attended ATOD specific in-service education.

Nurses attending ATOD specific in-service education also had higher total Therapeutic Attitudes scores, but in particular, higher scores on *Role Adequacy*. It is contended therefore that the immediacy of ATOD education when given in the clinical context in large part explained this differential in Role Adequacy.

The importance of this finding is discussed in reflection of the finding that, when the relative contribution of the composite measures of *Total Therapeutic Attitude; Role Legitimacy, and Non Judgement* was considered, *Role Adequacy* was the lowest scoring of all Therapeutic Attitude factors. Furthermore, mean scores for *Non-Judgement* were significantly higher than those of *Role Adequacy* or *Role Legitimacy*.

An important conclusion therefore is that the major contribution to the therapeutic attitudes of these nurses was their perception that they were unable, or inadequately trained, to give the sort of care required (*Role Adequacy*), more so than believing these patients were not worthy of their care (*Non-Judgement*), or that it was not a proper thing to do (*Role Legitimacy*). There was a strong relationship between these nurses' perception of receiving encouragement within the workplace to intervene with patients who have ATOD problems, and therapeutic attitudes in general, and *Role Legitimacy* in particular

In respect of the research questions set for this investigation (1.11.2); the level ATOD knowledge among this cross section of registered nurses has been quantified and discussed, and attitudes/beliefs of practising nurses towards patients with ATOD-related problems, critically reviewed. It was clearly determined that purpose designed nursing protocols do make a significant difference to levels of ATOD knowledge and therapeutic attitudes. Critical questions as to the extent to which knowledge and attitudes (intention and motivation), predict clinical practice is left for closer examination in Chapter Five to follow.

CHAPTER FIVE: CLINICAL ACTIVITY - RESPONSES OF REGISTERED NURSES TO ALCOHOL, TOBACCO, AND OTHER DRUG-RELATED PROBLEMS

5.1 Frequency of Key Clinical Behaviours

Prior research has sought to quantify the level of nurses' knowledge specific to ATOD problems and/or their attitudinal sets towards such problems and those affected by them. However, missing in this prior research has been the dynamic relationship between Knowledge, Therapeutic Attitudes and what nurses actually do about ATOD problems within their practice. This investigation has devoted considerable attention to the development and refinement of self-reported measures of the frequency of the clinical behaviours of nurses in the key areas of assessment, patient education and intervention in ATOD problems. These three components are represented in the Clinical Activity Scale and the factor-derived, sub-scales of Assessment Behaviour, Information-giving Behaviour, and Intervention Behaviour as represented below. These behaviours are synonymous with the terms used elsewhere in this thesis as desired clinical behaviours, or key clinical behaviours. As such, Assessment Behaviour, Information-giving Behaviour and Intervention Behaviour comprise the component sub-scales of the overall Clinical Activity Scale, and also represent the behaviours necessary for nurses or any other health care givers to provide interventions for ATOD problems.

- *Assessment Behaviour* (Factor Scale: I) represents a sum measure of the selfreported frequency of performing history-taking and Assessment Behaviours for alcohol and/or other drug use and physical and psycho-social problems related to alcohol and/or other drug use.
- *Information-giving Behaviour* (Factor Scale: II) represents a sum measure of the self-reported frequency of providing information about safe alcohol and/or other drug use, and/or smoking cessation.
- *Intervention Behaviour* (Factor Scale: III) represents a sum measure of the selfreported frequency of initiating interventions for patients believed to have problems associated with their alcohol and/or other drug use.

It is noted here, as it is in the Method section (2.6.4 Clinical Activity-Scale Development), that the Total Clinical Activity Scale has robust psychometric properties (Cronbach's α =0.91). The robust nature of the psychometric qualities gives increased utility to the Clinical Activity Scale and justifies the determination of Clinical Activity as the major outcome variable among the three dependent variables analysed. These dependent variables were: ATOD-related Knowledge, Therapeutic Attitudes, and Clinical Activity. As in previous discussion of the other two dependent variables, this section discusses individual items comprising the overall Clinical Activity Scale and sub-scales within, the relationship between Clinical Activity and independent variables, and the other two dependent variables. Finally, factors that predict the frequency of desired Clinical Activity are further discussed, with reference to the multivariate regression model developed and refined within the quantitative analysis (3.13. Predictors of Key Clinical Behaviours).

5.2 Rhetorical Gap

It is pertinent to again ask: "Do Registered nurses who have more knowledge and 'better attitudes' as represented by the Therapeutic Attitude Score, report higher frequencies of clinical behaviour?". A related concern is "The Rhetorical Gap" as discussed earlier in this thesis; that is, the gap between "*Ideal*" and "*Actual*" practice. It has already been demonstrated that there is a relationship of strength between knowledge specific to ATODs and Therapeutic Attitude, at least among

the 1281 registered nurses in this study. At first glance however, a comparison between Clinical Activity and Therapeutic Attitude scores demonstrated clearly, that there is indeed a gap between "*Ideal*" and "*Actual*". This gap is manifested between the nurses' perception that the clinical activities of assessment and intervention for ATOD-related problems are legitimate and worthwhile, and that patients are deserving of receiving them, and the frequency registered nurses report doing them. The figures below represent this rhetorical gap. The mean score for Total Therapeutic Attitude for this large group of registered nurses in practice was significantly higher than the mean score for Total Clinical Activity, (t=11.62, df., 1208, p<0.001). In real terms, this gap reflects the difference between what nurses believe should be done, are prepared to do, and what they actually do.

Figure 3: Comparison of Mean Scores - Total Therapeutic Attitude to Total Clinical Activity (n=1281)



The gap between nurses' belief and behaviour as demonstrated by the frequency of self-reported Clinical Activity, is more dramatically illustrated in Figure 4 (Mean scores: Belief that ATOD History should be routine Vs Frequency of History Taking) below.



Figure 4: Mean Scores: Belief That ATOD History Should be Routine Versus Frequency of History Taking

In this instance, the difference between the stated belief that a comprehensive ATOD history should be a routine part of all nursing assessment, and the self-reported frequency with which this clinical activity occurs, is of a dimension better described as an abyss, rather than a gap. The mean difference between this key attitude item from the Role Legitimacy subscale and the key clinical activity of taking a routine drug and alcohol history is 1.38 (on a scale 0-5). This difference is highly significant statistically (t=32.37 df., 1177, p<0.0001).

A major research question underpinning this thesis, is why there is such a prevailing and enduring disparity between the prevalence with which patients with ATOD-related problems present to the clinical context in which the nurse works, and the frequency with which these problems are identified. Part of the answer to this primary question, may well lie in this perplexing difference between intention, motivation and action as represented by significant differences between Therapeutic Attitudes and Clinical Activity. Simply put, registered nurses subscribe strongly to the belief that their patients should be routinely assessed for ATOD-related problems. Despite this desired behaviour, it occurs at a significantly lower frequency than the strength their belief suggests (as above).

Reference to the individual assessment item, "*I include a comprehensive alcohol and all other drug-related history in my nursing assessment*", (Table 22: Frequency of Clinical Activities by Percent), shows 16.7% of respondents reported *always* taking such a history, 10.3% *often* taking a history, and 20.4% *sometimes* taking a history. Of concern, one quarter of these respondents (24.6%) stated they *never* included a comprehensive history in their nursing assessment. The overall picture from the frequency of this key Clinical Activity in percentage terms can be summarised as follows. Close to half (45%) never or rarely included a comprehensive alcohol or other drug-related history, as opposed to slightly over a quarter (27%) who often or always included a comprehensive ATOD history in their nursing assessments.

5.3 Differences in the Frequencies of Clinical Activity

The gap between belief and the frequency with which key clinical activities occur is useful to consider in relation to the overall distribution of the self-reported Clinical Activity of respondents. Mean scores for Clinical Activity factor scales are shown in Figure 5 (Clinical Activity Scales: Mean Scores) below; it is seen that Assessment Behaviour, as represented by the assessment factor scale (ASSESFAC), has the highest mean value. The mean score is significantly higher than any of the other sub-scales or the overall Total Clinical Activity score (TOTACTIV). That the mean value for Assessment Behaviour is significantly higher (t=4.13, df., 1185, p<0.0001) than Intervention Behaviour (INTEFAC) is in accord with the findings in Therapeutic Attitude measures that demonstrated a higher sense of Role Legitimacy towards behaviours to *identify* patients with ATOD- related problems, rather than towards behaviours that indicated a responsibility to *intervene* with patients identified as having ATOD-related problems. Figure 5: Clinical Activity Scales: Mean Scores (n=1281)



Clinical Activity Scores

It is of particular note that the mean score for Information-giving Behaviour (INFOFAC) is the lowest (Mean = 2.4). As such, this mean value is less than half of the possible maximum of 5 and thus it can safely be said that this is a self-reported behaviour of notably low frequency. The giving of information about safe ATOD use and/or smoking cessation would seem a relatively simple behaviour that comprises a critical brief intervention. That this behaviour occurs at such low frequency warrants further explanation.

5.4 Ideal and Actual Practice

To gain further insight into "the rhetorical gap", it is useful to compare the differences in the mean scores between Therapeutic Attitude scales and Clinical Activity scales, presented graphically below in Figure 6 (Difference between IDEAL and ACTUAL Practice). The difference between "believing" and "doing" becomes immediately apparent.





Closer examination allows the following observations:

- 1. These registered nurses collectively had a high strength of belief that assessment and intervention for ATOD-related problems are a legitimate part of their practice (Role Legitimacy, mean = 3.58), and that patients affected with such problems are deserving of their care (Non-judgement, mean = 3.57).
- 2. This strength of belief was significantly higher than the reported frequency for any of these key behaviours; that is: Assessment ("ASSESFAC" assessment factor mean score), Intervention ("INTEVFAC" intervention factor mean score), or Information-giving ("INFOFAC" information-giving factor mean score).
- 3. As noted previously, Assessment Behaviours are reported at significantly greater frequency than Intervention Behaviours.

4. Albeit the mean score for Role Adequacy is significantly lower than the other two subscales comprising the Therapeutic Attitude scale, mean scores for Intervention Behaviours and Assessment Behaviour are nonetheless significantly higher than Role Adequacy.

The difference between "believing" and "doing", and thus the difference between ideal and actual practice having been considered, the highly significant difference between nurses' perception of Role Adequacy and the frequency of Intervention and Assessment Behaviours respectively, suggest that nurses actually do more than they believe they have been educated to do. In numerical terms, nurses have a strength of belief that they have adequate knowledge and skills to perform Assessment and Intervention Behaviours that is significantly lower than the self-reported frequency with which these key behaviours occur. The notable exception is the frequency of Information-giving Behaviours ("INFOFAC"- Information-giving factor mean score), which is significantly lower than Role Adequacy or any other scale measure represented in this figure. These nurses have therefore demonstrated being less able (adequate) to give ATOD-related information, than for any other component behaviour comprising brief intervention.

5.5 Assessment Behaviour

Given the evidence reviewed thus far, that identification of ATOD-related problems is a significantly more frequent behaviour than intervention for them, individual items comprising the Assessment Behaviour factor scale will now be discussed, firstly with reference to the two figures below. In figure 7 on the next page (ATOD Assessment Behaviours I), a hierarchical affect for items in the Assessment Behaviour factor scale is demonstrated.





This hierarchical affect for factor scale items is likely to be a reflection of the degree to which these Assessment Behaviours are embedded in the cultural context of nursing, and thus supported in practice. A further possibility is that the differences in frequency are due to the drug type itself. That is to say, ATOD-related problems that occur more frequently are perceived as being so by the Registered nurse and are thus more likely to be assessed for.

The item with the highest self-reported frequency and thus the highest mean value is, "*I ask my patients about their prescribed drug use*". A mean value of 4.18 is significantly higher than any other assessment items and is reflected in the frequency of Clinical Activity by percent (Table 22). More than half the respondents (55.2%) reported that they always ask about prescribed drug use and a further percentage (18.2%) reported that they often do so. That 6.1% reported they never ask about prescribed drug use may be surprising. Asking patients about prescribed drug use is something that nurses commonly do - as shown by these data and as reported in clinical practice as something that nurses are expected to do. Furthermore, questions asked about prescribed drug use (medications) are questions that patients expect to be asked (Ondus et al. 1999; Negrete 2004) It is noted by those who have fought hard for a comprehensive ATOD history to be incorporated into nursing assessment that many existing

nursing assessments now routinely include documentation of the patient's prescribed drug use (Harvey & Russell 1997; de Crespigny et al. 2002). Of issue however is that this does not necessarily include the use of non-prescribed drugs (Burns & Adams 1997; Rassool & Luis 2004).

The second most frequent Assessment Behaviour is related to the item, "*I ask my patients questions about their tobacco use*". The significantly high frequency of this particular Assessment Behaviour seems to be reflective of a number of issues pertaining to tobacco use, as already discussed. As noted in the knowledge section, nurses have high knowledge scores in regard to tobacco-related pathologies. As noted by other writers (Watson 1994; Harvey & Russell 1997; Rassool 2000; Naegle 2002) nurses have been sensitised, predominantly by public health campaigns, to the importance of tobacco smoking as the most preventable cause of ill health, and the leading cause of ATOD-related morbidity and mortality (Berridge & Mars 2004; AIHW 2005a). It is thus reasonable and encouraging to find that nurses frequently ask their patients about their tobacco use. Reference to Table 22 (Frequency of Clinical Activity by Percent) shows that in round terms, 60% of nurses in this survey either always (40.1%), or often (20.1%) asked patients questions about their tobacco use.

The third most frequently occurring Assessment Behaviour is asking the patient about their alcohol intake as reflected by the item, "*I ask my patients about their alcohol intake*". Table 22 (Frequency of Clinical Activity by Percentage) demonstrates that more than one third of these nurses reported that they always ask their patients about their alcohol intake (35.9%), a further 16.2% reported that they often ask patients about their alcohol intake, meaning that in total more than half of these nurses often/or always ask patients about their alcohol-related morbidity among patients presenting for healthcare from nurses. A further influence on the frequency of this Clinical Activity may be that, as discussed in the Therapeutic Attitude section, nurses perceive alcohol intake as being important clinical information because of the high prevalence of the troublesome and difficult to manage sequelae of alcohol withdrawal and intoxication in a broad range of clinical settings.

5.5.1 Differences in Assessment for Specific Substance Use Compared to the Comprehensive ATOD History

The high frequency with which these nurses assessed for prescribed drug use, tobacco use, and alcohol intake respectively, is in stark contrast to the low frequency they reported, including comprehensive ATOD histories in routine nursing assessments. This difference is immediately noticeable in Figure 7 (Assessment Behaviours I) above, and is of high significance statistically. For example, difference in means between the frequencies of the assessment of prescribed drug use, compared to the taking of a comprehensive history (COMP.Hx) is -1.48, of a maximum score of 5 (t = 34.76, df., 1178, p<0.0001). The difference in means between the overall assessment score (ASSESFAC.) and the inclusion of a comprehensive history is -0.57 (t = 21.55, df., 1182, p<0001). The magnitude of these differences warrants explanation. As noted on other occasions, the verbatim responses of this large group of nurses have been closely examined in this investigation, adding further insights into structural and contextual variables. In this numerical analysis however, it is apparent that the high frequency of asking questions about patients' use of particular substances is a very different behaviour, or a set of behaviours, than asking patients about their substance use in an inclusive and/or comprehensive manner.

A final observation of the above figure (Assessment Behaviours I) is the very large numeric difference between assessing for legal drug substances prescribed, or non-prescribed (such as alcohol and/or tobacco), and illegal drug use. The assessment of legal and prescribed drug use occurs at a very much higher frequency than does the assessment of illegal drug use. It may be that assessing for illegal drug use is not deemed relevant by nurses in their clinical context. Whether or not this perception is real or perceived however, needs further examination. Qualitative analysis sheds light on this. It is noted, as by others (McLaughlin & Long 1996; Norman 2001; Albery et al. 2003), that nurses often perceive questioning their patients about illicit substances or those that are not prescribed, as intrusive, not within their role description, and/or this clinical activity presents a legal conundrum about which the nurse may be confused. That is to say, if the patient reveals a history of committing an illegal act, how should

the nurse respond? This notwithstanding, one quarter of these respondents (25.4%) either always (16.4%), or often (9%), asked their patients about their illegal drug use with a further 18% reporting that they do sometimes. As this hierarchical gradation by drug type would suggest, 38% stated they never ask their patients about their illegal drug use. This frequency however, must be compared with the far more marked result that 24.6% of respondents who stated that they never include a comprehensive alcohol and drug history in their routine nursing assessment.

5.5.2 Biomedical Versus Psychosocial Assessment

Reference to Figure 8 below (ATOD Assessment Behaviours II), demonstrates that the self-reported frequency of psychosocial assessment and physical assessment fall below the mean score for Total Assessment (ASSESFAC). Further, it is noted with reference to the previously discussed figure, ATOD Assessment Behaviours I (above) that the mean score for the frequency of psychosocial and physical assessment respectively, falls below the mean scores for assessment of prescribed drugs, tobacco, and alcohol use. Considering the two items, psychosocial assessment and physical assessment, independent of the other items comprising the assessment subscale of the Clinical Activity scale, the following observations can be made.

The mean difference between the frequency of psychosocial assessment and physical assessment is small but statistically significant (t= 3.34, df., 1184, p<0.001). It is demonstrated with reference to Table 22 (Frequency of Clinical Activity by Percent), that this significant difference can largely be explained by the proportion of registered nurses who report that they *always* assess their patients for physical problems or *always* assess their patients for psychosocial problems related to ATOD use. Of these 1281 registered nurses, 20.5% reported that they always assess their patients for physical problems. That this difference between the physical and psychosocial assessment is so relatively small is encouraging (Table 28). There is little contention that harmful

psychosocial consequences of ATOD use significant enough to bring people into the health care arena, is of high dimension, common, and costly in human and economic terms (Single & Rohl 1997; Collins & Lapsley 2002; AIHW 2003; Hamilton & Rumbold 2004). It is contended here however, that nurses in practice are better trained, and work within a work place culture in which the rigorous assessment and documentation of physical signs and symptoms is much more highly valued and systematically rewarded than is psychosocial assessment (Fernandez & Greening 2005; Kulig 2005).

Figure 8: ATOD Assessment Behaviours II (n=1281)



The results of this investigation support this contention. Reference to the discussion of knowledge scores demonstrates that the percentage of correct responses for pathological indicators in the assessment sub-section are much higher than those which pertain to general life style factors (4.2.1.). Specifically, 81.4% of nurses were able to identify alcohol-related stigmata, and that a raised GGT (gamma-glutamyl transferase) was an indicator of harmful alcohol intake. This is in stark contrast to the knowledge as demonstrated by the low level of correct responses these registered nurses had as to what constitutes hazardous drinking for females and males respectively. For example, 81.4% of respondents were able to identify alcohol-related stigmata associated with heavy alcohol intake, as opposed to 20.1% who were able correctly identify hazardous drinking for males. The latter is information that is available in the general community.

The bias towards biomedical consequences of ATOD use, at the expense of lifestyle consequences, has implications for brief intervention, especially when the increasingly popular and effective adjunct of motivational interviewing is considered.

5.5.3 Assessment Behaviour: Differences between Education and Training, and Actual Practice

The differences between ideal and actual practice have been discussed earlier within the construct of the "rhetorical gap". Further to this, the variance between nurses believing what should be done in respect to assessment, intervention, and information-giving behaviours for ATOD-related problems, and the actual doing of any of these key clinical activities has been detailed above. As was noted in the discussion of Figure 6 (Difference between Ideal and Actual Practice), these respondents' sense of adequacy or preparedness, as represented by the dimension of Role Adequacy, was notably and significantly lower than the self-reported frequency with which they carried out assessment and interventions respectively. It is apparent therefore that these registered nurses actually did more in terms of key ATOD-related clinical activities than they felt they were educated for.

To elaborate on this, Figure 9 (Difference between Training and Actual Practice), below will be further discussed. The key item in the Role Adequacy subscale "*I have received sufficient nursing education and training to care for persons with alcohol and/or other drug-related problems*" [ENOUGH TRAINING] has a mean score of 2.6 of a maximum of 5.0.





Difference Between TRAINING and ACTUAL practice

Reference to Table 17 (Agreement with Therapeutic Attitude Items by Percent) shows that 67.9% either disagreed (55.8%) or strongly disagreed (12.1%) that they had received sufficient nursing education and training. Despite this, the self-reported frequency that nurses assess for alcohol intake [ALCOHOL INTAKE], and the physical problems associated with alcohol use [PHYSICAL], is significantly higher than the perception of having been adequately trained to do so (Alcohol intake: t = -23.04,df.,1199,p<0.0001, Physical problems: t=-15.08,df.,1188,p<0.0001). It is noted however, that the difference between the mean score for enough training, and the frequency with which the respondents reported taking a comprehensive ATOD-related history [HISTORY], while more marginal, was still highly significant (t= -5.99,df.,1177,p<0.0001). It is likely that nurses would do much more in the area of assessment if they were in fact more adequately trained and educated to do so.

It has been previously noted in this thesis that nurses are actively concerned about the problematic behaviour and clinical risks associated with both substance withdrawal and intoxication syndromes, particularly those relating to alcohol. Thus, it is of importance that the low scores for the Role Adequacy items, "*I do* not have enough clinical skills to care for intoxicated patients" [INTOX], and the further item "I do not have enough clinical skills to care for patients withdrawing from alcohol and/or other drugs" [W/DRAWAL], both have mean scores highly significantly lower than the mean scores for reported frequency of assessing alcohol intake and physical signs (Figure 9, above), both of which are important indicators of risk for withdrawal and intoxication syndromes. This difference between registered nurses' perceptions of the extent to which they have been trained to care effectively for persons with ATOD-related problems, as opposed to the frequency with which it is necessary to do so, is a critical one. The later qualitative analysis clearly suggests that nurses speak of both these things. Registered nurses categorically expressed their belief that they are under prepared, under educated/trained in this area of clinical practice and, expressed a clear desire for more knowledge and training.

5.6 Information-Giving Behaviour

Patient education, the clinical behaviour within which the nurse takes an active responsibility to educate patients about the nature of their condition, and its antecedents and consequences, is much valued and one that nurses are encouraged to perform (Watson 1999; Paul, Hendry & Cabrelli 2004). Generally, the behaviour of giving information about the nature of any particular disorder in consumer friendly terms is aimed at not just simply informing patients about the nature of their condition, but also equipping them with the ability to prevent its further occurrence, or at least ameliorate its consequences (Burke, Arkowitz & Menchola 2003; Lopez-Bushnell & Fassler 2004; Rollnick & Allison 2004). All of the above is particularly relevant to brief and minimal interventions for ATODrelated problems. For more than two decades, and particularly from the landmark studies of Babor, Ritson & Hodgson (1986), brief and minimal interventions for ATOD-related-problems have been demonstrated to have established efficacy in reducing the continuum of ATOD-related harm for many people (Babor & Grant 1992; Kendall & Kessler 2002; Heather 2004; Yang & Skinner 2004; Room, Babor & Rehm 2005). Brief and minimal interventions therefore are key strategies for harm reduction underpinning current approaches to ATOD-related interventions

(Carless & Hall 1990; Babor & Grant 1992; Wutzke et al. 2002; Hamilton & Rumbold 2004).

A critical element of brief and minimal interventions, beyond taking a comprehensive history of substance use, is providing the patient with simple factual information about substance-related harm, indicators of harm, strategies for harm-reduction as they relate to their situation, and importantly, current information about non-hazardous substance use. More intensive brief intervention requires the nurse to enable the patient to understand their pattern of substance use and its relationship to their ill-health and other problems. It is apparent therefore, that the nurse must both firstly, have this knowledge themselves and secondly, be willing and able to impart this to their patients.

As already noted, measures of the frequency with which registered nurses give simple information about ATODs is contained within the Information-giving subscale of the Clinical Activity Scale. The subscale contains three items; firstly *"I provide information about the safe levels of alcohol consumption to patients"*; secondly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information about smoking cessation to patients who smoke tobacco"*; and thirdly, *"I provide information"*. As noted earlier in Assessment Behaviours: Mean Scores) is presented below. Noting that the mean scores for all of the Information-giving Behaviour sare comparatively very low (range: 2





Thus, providing information about smoking cessation [SMOKING] is more frequently reported than providing information about safe levels of alcohol consumption [ALCOHOL], and providing information about safe injecting practices and safe sex to intravenous drug users [I.V.D.U.], is a very uncommon behaviour indeed. On reflection, it is contended here that the numerical relationships between the subscales of the Clinical Activity Scale reflect the "real world" of clinical practice. As noted above, (Assessment Behaviour) the very low reported frequency of assessment for illicit drug use is reflected here in a lower reported frequency of Information-giving Behaviour pertaining to safe injecting behaviours and safe sex for persons who are intravenous drug users.

Numerically, there is a correlation of high significance (r=0.60, p<0.0001) between Information-giving factor scale (INFOFAC), and the Assessment Behaviour factor scale (ASSESFAC). The relevance of the strength of this correlation, as logic would suggest, is that the substance using behaviours that are more frequently assessed for, are those behaviours about which nurses are more likely to supply information. The limitation of this appealing logic is that nurses must firstly assess for the presence of harmful substance using behaviours in order to give relevant information about them. Again, it must be considered that the overall mean frequency for Information-giving Behaviour is significantly lower

than Assessment Behaviour. It can be safely said, in this sample at least, that some substances and patterns of substance use behaviours are more likely to be assessed for than others, but when this is the case, this does not necessarily predict that information about the substance or the substance use behaviour will be given to the patient so identified. Thus, the likelihood of change in patients' ATODrelated behaviours is constrained by the low frequency of this key clinical activity.

5.6.1 Smoking Cessation: Difference between Ideal and Actual Practice

As noted of Assessment Behaviours, asking patients about tobacco use is second only to the well-entrenched behaviour of asking about the use of prescribed drugs. It is noted also, that of the low frequency Information-giving Behaviours, the most frequently reported is that of providing information about smoking cessation. Reference to Figure 11 below (Difference between IDEAL and ACTUAL practice: Smoking Cessation) demonstrates the dramatic difference between the *ideal* (that patients should be advised to cease smoking) and *actual* practice (the frequency with which patients are so advised). The item derived from the Role Legitimacy subscale of the Therapeutic Attitudes scale, "If patients smoke cigarettes nurses have the responsibility to advise them to quit" [SHOULD advise], has a mean value of 3.4 of a maximum score of 5. Relatively high scores are reflected in the percentage agreement for this item; 61.8% of respondents were in agreement on this item (54.5% agree, 7.3% strongly agree). The mean score however, for the actual practice item, "I provide information about smoking cessation to patients who smoke tobacco" [Provide Information] has a mean value of 2.7. Comparison of these two mean values demonstrates a highly significant statistical difference (t = 16.29, df., 1191, p<0.0001).



Figure 11: Difference Between IDEAL and ACTUAL Practice: Smoking Cessation (n=1281)

The "real-life" implications of this difference are that registered nurses believe that smoking behaviours (a) should be assessed for, and (b) information should be given about smoking cessation, and (c) that giving such information is a legitimate thing to do. What is missing however is the last aspect of this equation: (d) this Information-giving Behaviour does not occur at the frequency that nurses themselves believe it should. In this sample of 1281 registered nurses in practice, 16% reported that they often give such information and 9.2% that they always give such information. Again, it is apparent that the potential for change in patient behaviour is constrained by the low frequency of this critical element of brief intervention by nurses.

5.7 Intervention Behaviours

This section addresses the last of the Factor Scales comprising the Clinical Activity Scale: Intervention Behaviour, the critical measure. Results that determine whether or not some types of interventions are more frequently offered than others are examined (reiterating that the investigation was primarily

concerned with what registered nurses actually do about ATOD-related problems that confront them, and how frequently they offer interventions to patients affected by harmful ATOD use). Results of the scale measures thus far show that knowledge, attitudes, and behaviours that are supported by the nurse's workplace and/or are seen as being important and useful by the nurse, are more likely to occur. Hence, when the knowledge scores were discussed, ATOD specific knowledge that was more useful and clinically relevant was more likely to be sought and retained by the nurse and thus demonstrated as a higher knowledge score. For example, knowledge about physical signs and symptoms, management principles of withdrawal and intoxication had higher scores than general lifestyle factors.

Of Assessment Behaviours, it was noted that as a Clinical Activity, these occurred at an overall higher frequency than did Intervention Behaviours, and more frequently again than Information-giving behaviours. It was noted, firstly that the frequency of assessment for physical problems was significantly higher than the assessment for psychosocial problems related to ATOD use. Secondly, and of importance, these nurses reported doing more in terms of assessing for ATODrelated problems than they perceived themselves as being trained, educated or prepared for. It was noted also that there was a hierarchy of actions for both Assessment Behaviours and Information-giving Behaviours. As reviewed, this hierarchy seemed to be determined by a number of factors, including the type of substance used and the related behaviour of the patient, the importance of the information obtained in supporting nurses doing their work, and the care and safety of their patients.

The five items comprising the Intervention Behaviour Factor Subscale (INTEVFAC) are questions constructed to be hypothetical rather than questions eliciting an actual self-reported behaviour. Respondents were directed to the Intervention Behaviour items with the instruction, "*If you believe that your patients are having problems associated with their alcohol and/or other drug use, would you* ...?" (Qs 49-53, Appendix. I). The five items comprising the Intervention Behaviour Subscale are presented below.

Intervention Behaviour Items:

- "Encourage them to discuss their problems with you".
- "Engage them in a brief interview aimed at motivating them to change their behaviour".
- "Confront them with the consequences of their alcohol and/or other drug use".
- "Provide them with advice about specialist alcohol and other drug specialist services available".
- "Discuss these patients' alcohol and/or other drug-related problems with your team".

The mean values for the self reported frequency by item and for Total Intervention Behaviour score are presented in Figure 12 (below).





5.7.1 Alcohol, Tobacco and Other Drug-Related Problems and the Team Approach

It is noted that the relatively high Total mean value of 3.2 of a maximum score of 5 is influenced by the high scores in three particular variables to the right of the figure. The highest scoring among items reported as the most likely intervention was, "*Discuss these patients' alcohol and/or other drug related problems with your team*" [TEAM PROBLEM]. It is noted elsewhere (Ryrie & Ford 2001) that the degree to which nurses report working collaboratively within a multidiscipline team is variable. One variable that determines the degree of teamwork is the clinical area within which the nurse works. It may have been speculated that nurses working in primary healthcare areas would be more likely to discuss ATOD-related problems with their team. One-way analysis of variance (ANOVA) demonstrated that there was no significant difference for the reported frequency of this Intervention Behaviour between nurses working in acute care, general nursing, primary healthcare or administration, and or education.

What is of real-life significance however is that there were strong numerical relationships between this Intervention Behaviour and the two other most highly scoring behaviours.

There was a highly significant correlation between discussing ATOD-related problems with your team [TEAM PROBLEM], and providing the patient with advice about specialist services [Rx.ADVICE] (r = 0.52, p<0.0001). Second only to this relationship was the correlation between discussing the problems with the team and encouraging the patient to discuss the problems with the nurse [DISCUSS with PT.] (r = 0.47, p<0.0001). That these nurses were significantly more likely to discuss the ATOD-related problems of their patients with the team that cares for them, rather than the patient themselves, is not greatly surprising. This notwithstanding the relatively high level of preparedness of nurses to discuss ATOD-related problems directly with their patients is encouraging. The very large difference in means between discussing a problem with a patient (mean = 3.4), and the Intervention Behaviour of engaging the patient in a brief interview aimed at motivating them to change their behaviour, that is motivational interviewing

[MOT. Iv], is large and highly significantly (mean=2.6, t = -26.68, df, 1182, p<0.0001). This low mean value is equal to that of the fifth Intervention Behaviour item, "*Confront them with the consequences of their alcohol and or other drug use*" [CONFRONT].

5.7.2 A Hierarchy of Intervention Behaviours

Some reflections on this hierarchy of Intervention Behaviours are as follows. Firstly, the nurses reported a higher level of preparedness and perhaps, comfort in discussing the ATOD-related problems of their patients, away from the patient. Secondly, they seemed more prepared to give advice about what specialist service may be available to the patient than to discuss the problem with the patient themselves. Thirdly, the possibility of either trying to motivate the patient towards changing their ATOD use and/or confronting them about the consequences of their substance use was an Intervention Behaviour of much lower frequency. When the mean values for these five items comprising the Intervention Behaviour sub-scale were compared with the mean value of Role Legitimacy, this hierarchy of possible Intervention Behaviour is confirmed. Thus, discussing the patient's ATOD-related problem with the team was seen as significantly more legitimate (t = 4.36, df, 1193, p< 0.0001) than the Intervention Behaviour of engaging the patient in a motivational interview (t = -28.14, df., 1192, p< 0.0001). Motivational interviewing has demonstrated efficacy in reducing ATOD-related harm, particularly early in the continuum of ATOD related harm. Motivational interviewing is considered an essential component of early and brief interventions (Rollnick & Allison 2004). That these nurses reported such a low probability of using motivational interviewing within their range of intervention behaviours needs to be noted.

5.7.3 The "Rhetorical Gap" and the Difference between Intent and Support

To return to the Intervention Behaviour that these registered nurses reported most likely to perform; that is, "*Discuss these patients' alcohol and/or other drug related problems with your team*", the dynamics of the "rhetorical gap" again emerges. As demonstrated in Figure 13 below (Difference Between Intent and Support), the mean value for the highest scoring of these Intervention Behaviours [Discuss with TEAM] was markedly higher than the item within the Role Legitimacy subscale, "*I receive encouragement within my workplace to intervene with patients who have alcohol and/or other drug-related problems*" (Table 27), that would support this behaviour [ENCOURAGEMENT to Ix]. In other words, it seems that for these nurses, the intention to intervene with a patient with an identified alcohol and/or other drug-related problem by discussing this with their team is of significantly higher strength than their belief that they would receive encouragement to do so.

This offers a serious impediment to the most likely of the Intervention Behaviours being used. The nurse would be required to have enough conviction to carry out this Intervention Behaviour while believing that they are not encouraged to do so.

Thus, a closer examination occurs in the latter part of this thesis of "Factors Located in the Workplace" and "Factors Located within Other Healthcare Providers" - two of the major category codes within the thematic analysis of the large number of verbatim responses. At this level of numerical analysis however, the importance of nurses feeling unsupported by their workplace is clearly of issue, as demonstrated by the highly significant difference between "Intent" and "Support" (t =17.64, p<0.0001).



Figure 13: Difference Between Intent and Support (n=1281)

This finding is of itself not new, and resonates with the landmark work of Cartwright (1980) in his construct measure of "Role Support". Cartwright's conceptualisation of role support was the degree to which health professionals experience work satisfaction when working with alcohol affected individuals. It was noted earlier in the exploration of Therapeutic Attitudes that nurses hold attitudes towards ATOD - affected individuals that range from ambivalent to at worst, hostile. Thus, arguably, the active support of the multidisciplinary team is necessary to overcome any prevailing therapeutic pessimism, and support the nurse to intervene in ATOD-related problems, within the framework of early and brief intervention. To consider the least frequently reported Intervention Behaviour, that of engaging the patient in a motivational interview, it is of note that one-way analysis of variance of mean value of this Intervention Behaviour by clinical group demonstrated that this behaviour was more likely to be considered by nurses who work in a primary healthcare setting (F = 10.22, df, 4, 1182, p<0.0001. It is in the context of a primary health care setting in which "role support" and thus encouragement, is more likely to prevail (Ryrie & Ford 2001).

5.8 Relationships Between the Frequency of Clinical Activity and Other Variables

Of the three dependent variables analysed (ATOD-specific knowledge; Therapeutic Attitudes; and Clinical Activity)the most important is the major outcome variable Clinical Activity (that is, what registered nurses actually do about ATOD-related problems that present to them, and how frequently they perform key behaviours). Having discussed the three components of the Clinical Activity Scale and the factor-derived subscales of Assessment Behaviour, Information-giving Behaviour and Intervention Behaviour on an item-by-item basis, the relationship between Total Clinical Activity scores and sub-scores as influenced by key independent variables is now addressed.

5.8.1 Factors Within the Nurse

5.8.1.1 Gender and Age

There is no significant difference for the frequency of Clinical Activity by gender as represented by Total Clinical Activity score. However, male nurses had significantly higher mean scores for the frequency of Intervention Behaviour (t=2.30, df., 1199, p < 0.001). This gender differentiation was of low significance but is in accord with the finding for knowledge scores in which males had higher total mean knowledge scores than females. There was no gender difference for Therapeutic Attitude scores. Gender differences aside, the question arises that if the dynamics of judgement, motivation and intent are removed, as is implicit in Therapeutic Attitudes, does the nurse who knows more, do more, as measured by Clinical Activity? The age of the nurse at point of survey had no influence on the level of Clinical Activity. This finding affords a challenge to the relationship between knowledge and Clinical Activity, in that a weak but significant negative relationship with age was demonstrated with knowledge scores. That is to say, it was found that older nurses had lower levels of knowledge (4.3.1). Of Therapeutic Attitudes as noted, a weak negative correlation was demonstrated between age and Non-judgement score (4.6.1); in other words, older nurses were more likely to be critical and judgemental.
It is noted state-wide, nationally and globally that there is universal concern in respect to the increasing age of the nursing workforce (Cowin & Jacobsson 2003b). The mean age of the registered nurses surveyed (n = 1281) was 45.6 years (3.1.2) The importance of role support (and team support) and role modelling must also be considered. The hierarchical nature of nursing and thus a hierarchical devolution of power and authority are well noted (Gershon et al. 2004; Fernandez & Greening 2005). Numerical analysis as discussed suggests that older nurses in fact know less, are more likely to be hostile and negative to their patients who are affected with ATOD-related problems, than are younger nurses. Beyond this, there is no evidence in this survey that older nurses are any more likely to offer the key clinical behaviours desired for early and minimal intervention. The above considered, hope arises when the variable, 'Length of time working as a Registered Nurse', was analysed. There was a weak but significant relationship between the length of time worked as a registered nurse and total Clinical Activity score. Whereas this variable had no influence on Assessment Behaviour or Intervention Behaviour, there was a weak but significant relationship demonstrated for Information-giving Behaviour. This latter relationship would logically influence the Total Clinical Activity score. Nonetheless it is concluded that nurses who had been longer in practice were more likely to provide information to their patients about ATOD-related use and consequent problems. This finding is tempered by the other finding that older nurses have lower levels of ATOD knowledge.

5.8.1.2 Personal Experience

Respondents reporting the experience of having a close personal or family relationship to a person with an alcohol or other drug-related problem had a significantly higher total Clinical Activity score than those without this experience (t = 3.50, df, 1186, p<0.001). As has already been discussed, the likelihood of having personal experience of someone outside of the clinical environment with an alcohol or other drug related problem is inordinately high among nurses, and is commonly reported (Trinkoff et al. 2000; Sloan & Vernarec 2001). In this survey, 39% of respondents reported a "family problem". The association with Clinical Activity and personal experience of a "family problem" was consistent with the other two dependent variables, Therapeutic Attitudes and Knowledge Scores.

Respondents having experience of a "family problem" had significantly higher scores in ATOD- related knowledge than those who did not (t = 3.6, df, 1128,p<0.01), and the effect of a personal experience is of low order, but significantly associated with higher Total Therapeutic Attitude score.

The variance among Therapeutic Attitude factor sub-scores and the independent variables is of particular interest due to the nature of these relationships to Clinical Activity. There was no significant difference due to personal experience on Role Legitimacy; in other words, having the experience of somebody close to the nurse with an alcohol or other drug-related problem seemingly does not make the nurse any more likely to believe that the recognition and intervention of ATOD-related problems is any more a proper or legitimate thing to do, than the nurses who have not had this experience. Those respondents having had this personal experience however, reported themselves as being more Role Adequate; that is, more able to do something about these problems, than those who did not have experience outside their clinical context. Lastly and importantly, it is noted that respondents with personal experience had higher scores on Non-judgement; in other words a personal experience was associated with these respondents being less critical or judgemental towards individuals with ATOD-related problems. As previously noted, the nature of these judgements (or non judgements) were illustrated in verbatim responses as being complex and variable.

Specific to the effect of "family problem" on Clinical Activity it is noted (Table 24), that those reporting such personal experience (n = 475) had higher mean scores for total Clinical Activity and this was significant (t =3.50, df., 1186, p<0.001). Whereas it was noted above that there is no numerical association with the belief that recognition and intervention for ATOD-related problems are a part of the nurse's role (Role Legitimacy). The experience of having had a close personal or family relationship to a person with ATOD-related problems was associated with a higher reported frequency of all the clinical activities (Table 25). In order of strength of significance respondents exposed to "family problem" were more likely to give information (t = 3.28, df., 1187, p<0.01), more likely to assess for ATOD- related problems (t = 3.13, df., 1186, p<0.01) and finally of lower order but still significant, more likely to intervene (t = 2.59, df., 1177, p<0.05). These results however demonstrate that the effect of "family problem" on Clinical

Activity was less powerful than the effect resulting from attending in-service education.

5.8.1.3 Education

In accord with the strong influence of attending in-service education on knowledge scores and on Therapeutic Attitudes, ATOD in-service education was strongly associated with Clinical Activity. Reference to Table 24 (Relationships between Total Clinical Activity scores and Key Variables) demonstrates that of all the variables tabled, in-service education showed the highest total mean Clinical Activity score (3.51 of a maximum of 5.0). The highest significant difference between the means however, was associated with consultation with the nursing policy manual (t = 11.93, df., 1201, p<0.001). Of issue, as noted in Table 24, the number of those attending in-service education (yes = 174) was much lower than those who referred to a nursing policy manual when wanting "clinical advice/information in regard to the nursing management of a patient with an alcohol or drug-related problem" (yes = 449). Two considerations are:1. As logic would suggest, those nurses who attended ATOD specific in-service education knew more, had more positive sets of therapeutic attitudes, and finally of particular note, were more likely to report key clinical behaviours. 2. The number of nurses attending in-service education in this investigation was the minority. Albeit the relationship between in-service education and the key dependent variables was a positive one, the implicit statistical model does not inform this analysis as to the causal direction of the relationship. One possibility is that those attending in-service education gained knowledge and therefore changed their prevailing attitudes, and were thus more likely to act in a positive manner in terms of ATOD interventions. On the other hand, it is also possible that those choosing to attend in-service education, particularly in a workplace environment in which professional education on-site, of any sort, is seen as voluntary, and often constrained by workload and other priorities (Happell & Taylor 1999; Cowin & Jacobsson 2003b), have more positive therapeutic attitudes at the outset. This latter proposition is supported by the finding that nurses having the experience of somebody close to them with an alcohol or other drug-related problem

demonstrated more positive therapeutic attitudes, and were proportionately more likely to attend in-service education ($x^2 = 12.55$, df., 2, p<0.01).

Whatever the nature of the dynamic relationship may be, the positive effect for inservice education was noted across all clinical activities, as represented by factor scale scores. The strongest effect was for Information-giving Behaviour mean score (t = 7.01, df., 1157, p<0.001.). As already discussed, the giving of information specific to ATOD-related problems is a critical element of both early intervention and in particular, motivational interviewing. Given the current focus on motivational interviewing as a strategy for assisting change, and its established efficacy, this finding is of particular importance. Studies of screening and brief intervention for ATOD-related problems have commonly used nurses as the "agent for change" (Chick, Lloyd & Crombie 1985; de Crespigny et al. 2002; D'Onofrio & Degutis 2002; Ragaisis 2004). With this considered, these findings suggest that nurses who attended in-service education demonstrated a greater preparedness to give information to their ATOD-affected clients, suggesting a further opportunity to assist clients to change irrespective of registered nurses' motivation to engage in ATOD in-service education. The possibility of including training and education in motivational interviewing techniques is thus likely to reap rich rewards. It is also of note that in strength of significance, in-service education has a positive association with increased Assessment Behaviour scores (t = 6.45, df., 1156, p < 0.001) and while of lower order, was still highly significant for Intervention Behaviour (t = 5.22, df., 1147, p<0.001).

In summary, in this sample nurses reporting having attended in-service education were more likely to give information to patients about ATODs, more likely to assess their patients for such problems, and more likely to intervene in ATODrelated problems. This finding suggests a positive result for the perennial question of whether change in nurses' attitudes is associated with change in their practice behaviour. Among these nurses the answer is yes; confirmed firstly by the finding that those attending in-service also had higher total Therapeutic Attitudes scores, but in particular, higher scores on Role Adequacy. As has already been discussed, Role Adequacy was the lowest scoring of all Therapeutic Attitude factors, but despite this, nurses on average actually did more in terms of assessment and intervention for ATOD-related problems than they perceived themselves as being adequate to do. That in-service education increases the perception of being adequate significantly demonstrates that education makes a difference. Higher reported values for Role Adequacy, a critical attitudinal set in the workplace, is reflected in practice by a higher reported frequency of key clinical behaviours.

Other educational variables were also of significance in terms of their effect upon Clinical Activity. First among these is the variable "Read Nursing Journals Regularly". Whereas professional initiatives such as "The New South Wales State Strategic Plan" may by its implementation increase the availability of in-service education and perhaps the numbers of nurses who would attend, thus improving nurses' therapeutic attitudes and practice behaviour, the reading of nursing journals is a self-initiated professional behaviour/responsibility. In this study, a majority (n = 779) reported reading nursing journals regularly. As already noted, what defines a nursing journal was not delineated in the questionnaire. This notwithstanding, those reporting reading nursing journals regularly, had higher levels of Clinical Activity, and of particular note, the greatest effect was demonstrated (Table 25) for Information-giving Behaviour. It is a reasonable assumption therefore, that in order for nurses to give information they must first have been informed, and it would seem that reading journals has the potential to do just that. The influence on nurses in relation to where they received their education was also of significance. The small number of registered nurses who reported having a nursing degree (n = 86) had significantly higher scores for Information-giving Behaviour (t = 3.68, df., 841, p<0.01) and also, albeit of lower significance, for Intervention Behaviour (t = 2.26, df., 1177, p<0.05).

5.8.1.4 Personal Alcohol and Tobacco Use

Measures of personal use were confined to tobacco smoking status; either smoker/non smoker, or ex-smoker, current levels of tobacco use if a smoker, and also the consumption level and frequency of alcohol use. These measures had no significant affect on Clinical Activity. This is of interest considering that nurses who drank alcohol and/or smoked tobacco had higher mean knowledge scores than those who did not. In particular, heavy to moderate use of alcohol on a single occasion was associated with higher total Therapeutic Attitude scores (see 4.6.1.2), and those nurses using tobacco moderately felt more kindly (Non-

judgement) towards those patients who presented for care due to the effects of ATODs. The more benevolent attitudes associated with these nurses' own substance use however, were not reflected in their clinical behaviour. Personal knowledge and experience alone therefore do not translate into nursing practice.

5.8.2 Factors Located in the Workplace

5.8.2.1 Current Clinical Area

The open-ended question "*Clinical area in which you currently work*?" (Q.4., Appendix I) elicited a broad range of responses. In the first instance these responses were coded to best match the Nurses Registration Board of New South Wales workforce categories (3.14, Table 8). It is noteworthy, and a reflection of the robust nature of these results, that the seventeen clinical area categories at first level on coding were very well matched in terms of their frequency distribution with the workforce of registered nurses in New South Wales (Table 7). When Total Clinical Activity scores were computed for all current clinical areas (3.10.2 "current clinical area"), psychiatric nurses had the highest level of Clinical Activity (mean = 3.67), followed by occupational health nurses, followed by nurses in administrative positions, and fourthly by community nurses.

Considering each of these clinical areas individually, clearly a high prevalence of patients with substance use problems prevails in psychiatric care settings (de Crespigny et al. 2002; Happell, Carta & Pinikahana 2002; Kessler 2004; AIHW 2005b), and it can be safely stated that psychiatric nurses will be commonly exposed to ATOD-related problems in their day-to-day practice. Again, the relationship between the manner of nursing practiced, the complexity of health problems that patients are presenting with, and the imperative to gain specific knowledge and clinical skills, seems apparent. This in large part may explain why psychiatric nurses have both the highest mean Total Knowledge scores and the highest reported mean Total Clinical Activity scores.

Other influences on the higher level of Clinical Activity reported by psychiatric nurses might relate to the construct of "Role Support" as described by Cartwright (1980). The multi-disciplinary team approach to care has long been embedded in the philosophy and practice of mental health/psychiatric nursing (Harmon, Carr & Lewin 2000; Bartels et al. 2002; Gerber et al. 2003). It is possible therefore that beyond being commonly exposed to ATOD-affected individuals, nurses in psychiatric care settings are more likely to have support and "encouragement" from the care team. Further, the possibility of psychiatric nurses receiving more formal and structured support through clinical supervision is more likely in psychiatric mental/healthcare settings than in other settings (Severinsson & Kamaker 1999; Winstanley & White 2003).

Second to psychiatric nurses, respondents reporting themselves to be working in occupational health had the second highest mean Total Clinical Activity score (mean = 3.34). It is contended here that the likelihood of working within a multidisciplinary team prevails. Beyond this, the issue of clinical autonomy also arises, whereby in this setting the occupational healthcare nurse must accept a high level of individual responsibility for a broad spectrum of occupational health problems (Dyck, & Roithmayr 2002). Therefore, with or without support; assessment, recognition, and intervention of ATOD-related problems may well be imperative out of necessity. The growth of Employee Assistance Programs (EAPs) since the 1980s in a wide range of occupational healthcare settings (Ryan & MacLochlainn 1995; Childre 1997; Dyck & Roithmayr 2002), and the nurse's expanded role in this area of practice are likely to strongly influence the high levels of reported Clinical Activity by these nurses.

Nurses reporting as working in administrative positions were associated with third highest mean Total Clinical Activity score (mean = 3.28). This is encouraging given the potential of nurses in administrative positions to influence policies and the clinical behaviours of others. The critical differences however, between thinking that something should be done compared with actually doing it, or ensuring that it is done, is of issue among this group. Analysis of their qualitative responses is discussed in detail later, and suggests that there is some ambivalence among senior nurses in administrative/management positions as to how much time and energy should be devoted by nurses to this population of "problem patients".

Last among the top four mean values according to current clinical area were community nurses (mean = 3.27). Once again the influence of working within a multi-disciplinary structure, the greater possibility of team discussion and support is likely to have had effect. Community health nurses practise within a less structured environment than the hospital provides, and thus are also likely to practise with a higher level of clinical autonomy.

5.8.2.2 Current Clinical Area Re-Coded

As noted in the Method section, the range of responses elicited by this particular item was problematic in terms of coding. Many nurses, particularly in the rural sector, gave multiple responses as a reflection of their practice, as they could be working in accident and emergency one day and paediatrics the next. The complexity of the responses, and the wide range of possibilities across the sample, led to the categorical variable "Current Clinical Area" being recoded to collapse the seventeen main clinical area categories into four (see 3.9.2). A consequence of this data reduction is recognised in that some current clinical areas in which high levels of Clinical Activity were reported were lost within the broad re-coded category, as is the case in occupational health being re-coded to be included in primary healthcare. Limitations of re-coding have been met by reporting and discussing high scoring clinical areas individually, as above, and by using the more powerful statistical tool of multivariate analysis in the regression model to follow. A second limitation is implicit within the quantitative method itself. The strength of the multi-method approach used in this study is further discussed in Chapter Six to follow.

The reduction of the seventeen categories *Current Clinical* into four: Acute Care, General Nursing, Primary Health Care, and Administration/Education allowed for this important variable to be entered into the predictive model developed for regression analysis (5.9 Predictors of Key Clinical Behaviours), and ANOVA to be performed. ANOVA demonstrated that nurses working in primary health care (n = 294) and administration/education (n = 125) had significantly higher Total Clinical Activity scores than either acute care (n = 237) or general nursing (n = 309), (F = 8.61, df., 3, 1197, p p<0.0001). The amount of clinical autonomy and primary nature of care afforded the nurses working in primary health care, as the term itself suggests, resonates well with a reported high level of Clinical Activity. When the high mean value for Clinical Activity for nurses working in administration and/or education was considered however, the distinction needed to be made between what these respondents collectively thought should be done, as opposed to what they actually did, given that their roles were largely managerial and educative respectively. This notwithstanding, the influence of their authority implicit in nursing administration and nursing education is considerable (Duchscher & Cowin 2004). Accordingly, if this high level of subscription to clinical activities for ATOD problems was devolved to nurses they manage and/or educate, this would become a positive finding.

Clearly, where nurses' work is of consequence in regard to the possibility of encountering patients with ATOD-related problems, and in their responsibility and/or motivation to respond to these problems, and finally, whether nurses feel they can implement interventions and be supported in their actions. The scale measures used in the quantitative analysis encompassed all these attitudes and behaviours. It is acknowledged however that a point scored on a scale can not always represent a respondent's "point of view". "Factors Located in the Workplace" was a major category code of the thematic qualitative analysis discussed in the next section. It is in this next section (Chapters Six and Seven), that the contextually rich influences of the nurses' clinical area are compared and contrasted with the quantitative findings reported in the present section (Chapters Four and Five).

5.8.2.3 Current Clinical Area and Information-Giving Behaviour

Analysis of the three component factor scales of the Clinical Activity Scale added a further dimension to the influence of clinical area of work and clinical activity. Nurses working in primary health care and administration/education had significantly higher mean scores for Information-giving Behaviour than the other two groups. Statistically, this difference was of high order (F = 22.69, df. 3, 1197, p <0.00001). Again the primary, commonly longer term, one-to-one, and continuous relationship primary health care nurses have with patients perhaps provided for greater opportunity to give information. There is also a possibility that being involved in more everyday life of patients outside the hospital context encouraged providing information about ATOD use. This finding is consistent with the stated high value of patient education generally to be found in primary health care contexts(Childre 1997; Samet et al. 2003). That nurses working in administration/education were significantly more likely to report Informationgiving Behaviour than colleagues working in the more direct, "hands-on" clinical setting of acute care or general medical-surgical nursing is of note. Comments from nurses in their verbatim responses, often noted competing pressures of workload, clinical priority and an acknowledged lack of interpersonal skills and/or active encouragement for "talking" interventions were constraints to patient education (Information-giving).

5.8.2.4 Current Clinical Area: Assessment Behaviour, and Intervention Behaviour

Nurses working in acute care settings were more likely than others groups to assess for ATOD-related problems, as is demonstrated by a significantly higher mean score for Assessment Behaviour (F = 4.32, df. 3, 1197, p = 0. 004). As suggested by Knowledge scores, these nurses were likely to be met with acute presentations of ATOD-related problems and wanted to know what was happening, and what needed to be done to get the best possible outcome for both their patients and themselves. This finding was consistent with the previously noted bias in scores towards assessing physical problems opposed to assessing the more complex interpersonal and psychosocial ones. It was primary health cares nurses however who were most likely to report actually doing something about the problems. Nurses working in primary health care had significantly higher mean scores for Intervention Behaviour Factor (F = 10.6, df. 3, 1197, p <0.00001).

5.8.2.5 Current Clinical Position

Current Clinical Position refers to the position that the respondent held within the structure of the New South Wales nursing workforce. The clinical position as such is an index of seniority and role attribution, ranging from registered nurse, through clinical nurse specialist, clinical nurse consultant, nurse unit manager, assistant director of nursing, director of nursing and so forth. As noted in Chapter Three (3.1.5, *Current Clinical Position*), the frequency distribution of respondents by clinical position was well matched with the overall nursing workforce in New South Wales. The overrepresentation of respondents from senior nursing positions such as Nursing Unit Manager, and Deputy Director of Nursing is also noted among this randomly selected sample of nurses in practice (n = 1281). As argued earlier, because respondents had greater length of service and were more likely than the current workforce to be in positions of seniority, they could be considered as more knowledgeable and likely through depth of experience and seniority to be more clinically active in the workplace in regards to ATOD-related problems. This was not the case, as there was no significant difference by seniority for Knowledge Scores and no statistical difference by current clinical position for Clinical Activity. The implications of this finding in respect to leadership, role modelling and role support are apparent.

5.8.2.6 Work Status

Being employed in the public health care system rather than the private sector was associated with significantly higher mean scores for Total Clinical Activity (t = 6.71, df., 1201, p < 0.001). This association was also found for both Total Knowledge and Total Therapeutic Attitude scores. That nurses in the public sector knew more, had more positive Therapeutic Attitudes, and of importance, were more likely to carry out key clinical activities than their counterparts from the private sector, is associated numerically with higher proportions of nurses in the public sector attending ATOD specific in-service, and is underpinned by the progressive implementation of "*Strategic Plan: Nurse Education and Nursing Management of Alcohol and Other Drugs*" (NSW Health Department 1991), a

New South Wales State Government initiative aimed at the public health care sector. Qualitatively, nurses' verbatim responses pointed to issues such as autonomy, lack of "Authority to Act", and a sense of role confusion as to how far their nursing role extended to areas such as ATOD assessment, intervention, and information-giving in the private health care sector, which respondents also reported as being more medically dominated.

Due to the process of coding respondents by their New South Wales postcode area, it was possible to clearly differentiate between nurses working in metropolitan health care settings from those working in rural settings. Nurses working in rural settings demonstrated significantly higher mean Total Clinical Activity scores (t = 4.92, df., 1101, p< 0.001), and significantly higher mean scores for all Clinical Activity Factor Scales. The greatest difference was shown for "Assessment Behaviour"; that is, nurses working in rural settings (n = 550) were significantly more likely to carry out assessments for ATOD-related problems than their metropolitan counterparts (n = 559). Rural nurses were also significantly more likely to carry out ATOD interventions (t = 3.58, df., 1097, p<0.001) and of lower order of significance, more likely to give information (Table. 25). Again, the influence of clinical autonomy, possibly born from necessity, was of issue. Verbatim responses from rural nurses indicated that they often felt isolated geographically and professionally, and saw themselves as being "desperately autonomous".

As a function of an increasing awareness of the high prevalence of ATOD problems in health care settings, there has been an expansion and progressive development of incumbent expert services in both medicine and nursing. As is often the case, there is an enduring disparity in distribution of health care resources to rural versus urban settings (NSW Health Department 1999; Day et al. 2002; McNeese-Smith 2003). When workplace factors are considered, a nurse in a rural care setting, particularly in remote areas, is much less likely to have 'on site' support in the form of expert ATOD professional services. It is contended that the higher levels of Clinical Activity, in particular those of assessment, arise out of nurses having to undertake these activities due to the likelihood of no-one else being available in the remote setting. In support of this contention it is noted that

a Nursing Policy Manual to assist in dealing with ATOD-related problems than registered nurses working in metropolitan areas (Country, 63.9%, n = 269; Metropolitan, 36.1%, n = 152.) This proportionate difference in manual consultation was highly significant ($x^2 = 29.23$, p<0.00001).

5.8.2.7 The Use of the Nursing Procedure Manual

Nurses working in less supported clinical environments rural care areas were significantly more likely to use a Nursing Procedure Manual (NPM) to assist them with ATOD-related problems. As discussed earlier, the use of such a manual is dependent firstly, on the nurse identifying the ATOD-related problem, secondly having such a manual, and thirdly having a manual that includes useful supportive procedures and protocols for the management of ATOD-related problems. There is little question that NPMs are regarded as very important within all nursing contexts with such use of manuals being deeply embedded in the practice of nurses. In this large sample, 95% of respondents stated they had ever consulted a NPM, and of relevance to this thesis, 36% had referred to the Policy Manual to assist them in dealing with ATOD-related problems. The importance of consulting the NPM to assist in the care and management of ATOD-related problems was reaffirmed in the analysis of its influence on all dependent variables. Referring to the NPM for example, was second only to attending in-service education in the strength of association with Total Mean Knowledge scores. Further, respondents reporting having consulted the NPM had significantly higher mean Total Therapeutic Attitudes, and of particular note, significantly higher scores for Role Adequacy. This strength of association is found also with Clinical Activity. Respondents who consulted a NPM to assist in dealing with ATOD-related problems had significantly higher Total Clinical Activity scores (Table 24) than those who had not (t = 11.93, df., 1201, p<0.001).

When Total Clinical Activity was considered in respect to the component parts of the Clinical Activity Scale as represented by factor scores, the effect for NPM consultation was greatest for Assessment Behaviour (t = 11.22, df., 1039, p<0.001). The strength of this association was also high for Information-giving Behaviour (t = 9.76, df., 888.9, p<0.001) followed closely by Intervention

Behaviour (t = 8.94, df., 1051, p<0.001). In short, nurses who consult protocols and procedures that assist them in dealing with ATOD- related problems were found to have greater levels of knowledge about these problems, felt more able and adequate to do something about them, and were far more likely to actually do something about them. There is clearly a temporal relationship between NPM consultation and Clinical Activity with more recent consultation having a higher level of Clinical Activity. This was affirmed by statistical analysis with respondents who consulted a NPM within the last month, and within the period of one to six months, having significantly higher Total Clinical Activity scores than those who consulted less recently (F = 4.79, df.,3, 1210, p< 0.01). The strength of association between NPM consultation and ATOD Knowledge, Therapeutic Attitudes and importantly Clinical Activity cannot be overstated.

5.8.2.8 Seeking Clinical Advice

Responses to the question "When you want clinical advice/information in regard to the nursing management of a patient with an alcohol or other drug-related problem, what do you usually do first?" (Q.19, Appendix. I) lead to the following considerations. Respondents who reported having never sought advice on ATODrelated problems had significantly lower Clinical Activity scores, as was the case for Knowledge and Therapeutic Attitude scores. The source of clinical advice however was not of influence for Knowledge or Therapeutic Attitude scores; the significant differences being only between the action of seeking clinical advice, or not seeking clinical advice. The source of clinical advice however, was of marked importance to the frequency of Clinical Activity. One-way Analysis of Variance demonstrated that higher mean scores were associated with the respondents who first referred to the NPM for advice (n = 147, mean = 3.45, SD. 0.79 [F = 41.8, df., 5, 1163, p<0.00001)). The second highest mean value was associated with contacting a Clinical Nurse Consultant or Clinical Nurse Specialist in ATODs (n = 287, mean = 3.33, SD.0.77). The third highest mean value was associated with contacting a local ATOD specialist service (n = 195, mean = 3.32, SD.0.70). Therefore, although greater numbers of respondents reported consulting with nurses expert in ATOD management, or contacting a specialist ATOD service,

greater effect was found for Clinical Activity among the fewer numbers of nurses who referred to the NPM as their first action. The importance of this is not only the strength of the effect of the NPM itself, but also its utility in the many nursing environments away from large referral hospitals in metropolitan settings, where nurses do not have options for immediate referral to specialist colleagues in ATODs.

5.9 Predictors of Key Clinical Behaviours

Chapter Three, Four, and Five provided in-depth examination and discussion of the univariate analysis of a broad range of independent variables within this large cohort of practising registered nurses. The strength of association between these independent variables and three dependent variables was analysed and discussed. The process of investigating factors that determine self-reported knowledge, attitude and clinical behaviours of registered nurses towards people with ATODrelated problems, is partly completed. The statistical strength and power inherent in this large, randomly selected sample of nurses who also closely matched the New South Wales workforce of registered nurses adds strength to the findings so far reported. The analysis has extended the examination of relationships between the knowledge and attitudes, in this case Therapeutic Attitude, to a third and critical outcome variable; the self-reported frequency of clinical activities considered essential by nurses, to assessment, recognition and minimal intervention for ATOD-related problems. It has been argued that it is not enough to know what knowledge nurses have and their attitudinal sets towards people with ATOD-related problems. The critical question is what do nurses do about ATOD-related problems, and what determines the frequency of these desired behaviours?

Chapter Five

5.9.1 Univariate Analysis

The univariate analysis provided an examination of the "usual" sociodemographic variables anticipated in a systematic examination of a large population, in this case a cohort of registered nurses in practice. These would include age, gender, length of service, seniority, current clinical setting, personal substance use/exposure, and so forth. This univariate analysis also provided an extra dimension of examining the strength of association between ATOD-specific Knowledge, Therapeutic Attitude and Clinical Activity, with measures of how frequently and in what manner nurses accessed and utilised purpose-designed protocols, policies, and service resources to aid them in their management of ATOD-related problems. A further dimension of interest was education and investigation as to whether the type of pre-service and/or in-service education that the nurse have been exposed to, and their reported perception of the value of that education, is of influence in determining measures of ATOD-specific Knowledge, Therapeutic Attitude and Clinical Activity, and in particular, nurses preparedness to act.

The univariate analysis has been useful in determining the strength of association between pertinent independent variables and the outcome variables of interest, particularly that of Clinical Activity. It is acknowledged however, that the large number of respondents, the large number of independent variables, and three dependent measures has inherent limitations due to co-variance and confounding that exists within the large number of possible relationships (Kleinbaum, Kupper & Muller, 1988). A common response to the problem of co-variance between a large number of independent variables and the dependent measures is that of regression analysis.

"Regression analysis is a statistical tool for evaluating the relationship of one or more independent variables $X_1, X_2, ..., X_k$ to a single, continuous dependent variable Y. It is often used when the independent variables cannot be controlled, as when collected in a sample survey" (Kleinbaum, Kupper & Muller 1988, p. 36).

5.9.2 Multiple Regression Analysis

In this investigation Clinical Activity was selected as the dependent variable on which to develop a regression model to establish predictors of the frequency of Clinical Activity, using multiple regression analysis (3.13). A combined regression model was developed after systematic analyses of independent variables, and their selection to be entered into the regression equations based on hierarchical order of significance. Further, as an initial step to building a predictive model, variables of high order significance were ordered into three sets of predictors and these were conceived as; *"Readiness"*, *"Exposure"*, and *"Clinical Setting"*. The combined regression model in which the three sets of predictor variables, or domains, Readiness, Clinical Setting and Exposure were combined (3.14), is one of considerable explanatory power, and in which the combined regression model explains 41% of the variance in Total Clinical Activity ($R^2 = 0.41$, F = 78.57, df.9, 1014, p<0.00001).

5.9.2.1 Predictors of Key Clinical Behaviours: "Readiness"

Of the three conceptual domains in the Combined Regression Model, and the related sets of variables entered into the equation for each domain, it is the *Readiness* domain that was the strongest predictor. *Readiness* explains 34% of the variance in Total Clinical Activity, ($R^2 = 0.34$, F = 19.94, df., 11, 428, p<0.0001). *Readiness* was conceived of in the most literal of ways, that is, the motivation of registered nurses and their potential to act ("Readiness"). It is of note, that the domain of *Readiness*, explaining as it does the most powerful predictive domain for Clinical Activity, included Total Therapeutic Attitude score, Total Knowledge score, specific ATOD in-service attendance, first action to seek clinical advice/information for ATOD-related problems, last use of nursing policy manual, reading nursing journals regularly, and finally a degree in nursing.

The domain of *Readiness* was largely consistent with the univariate analysis and also logically consistent in that, to carry out Clinical Activity, or perhaps any

activity, the nurse must firstly be ready to act. In this investigation, prediction of the frequency of Clinical Activity related to the clinical behaviour of these nurses in the key areas of assessment, patient education, and intervention for ATODrelated problems. Registered nurses with positive Therapeutic Attitudes, high levels of knowledge, who had attended in-service, who took action to seek clinical advice about ATOD-related problems, who had recently used a NPM specific to ATOD-related problems, who took professional responsibility for their own education, and had a degree in nursing were the nurses who were ready to undertake assessment, patient education and intervention.

5.9.2.2 Predictors of Key Clinical Behaviours: "Exposure"

The conceptual domain of "*Exposure*" related variables, included variables that indicated the likelihood of nurses' exposure to patients with ATOD-related problems. These were firstly, use of NPM to assist in dealing with an ATOD-related problem. This variable was entered into the equation due to its strength of association, and the assumption that the precursor to using a NPM to assist in an ATOD-related problem was that the nurse had been exposed to the same. Years of service as a registered nurse was entered into the equation based on strength of association with Clinical Activity and an assumption that given the known high prevalence of ATOD-related problems among patients in health care settings, the longer the nurse had been nursing the greater exposure he/she will have had to these problems. Family or personal experience of a person with an ATOD-related problem was included in the domain of *Exposure* as, while outside the clinical context, is a common experience reported by nurses.

When modelled alone, *Exposure* variables explained 12% of variance in Total Clinical Activity ($R^2 = 0.12$, F = 22.75, df., 7, 1139, p< 0.0001). Being exposed to ATOD-related problems within and outside of the clinical context therefore predicts Clinical Activity in recognising problems, informing the patient about the nature and consequences of problems, and doing something about ATOD-related problems. The predictive power of exposure to ATOD-related problems was of lesser order than *Readiness* in predicting Clinical Activity, but of high statistical order (p > 0.0001).

5.9.2.3 Predictors of Key Clinical Behaviours: "Clinical Setting"

The final conceptual domain entered into the Combined Regression Model was *Clinical Setting. Clinical Setting* had the lowest strength of prediction, explaining 8% of variance in Total Clinical Activity ($R^2 = 0.08$, F = 19.55, df., 5, 1091, p< 0.0001). Included in this domain were the following: Clinical area (Acute Care, General Nursing, Primary Health Care, and Administration/Education); work status (Fulltime, Part-Time, Casual); area of work (Public, Private); and area of work (Country, Metropolitan). As discussed above in the univariate analysis in the considerations of Factors Located in the Workplace (5.8.2.), where the nurse was working at time of survey was strongly associated with Clinical Activity.

5.10 A Hierarchy of Predictors of the Alcohol, Tobacco, and Other Drug-Related Clinical Activity of Registered Nurses

The three variable domains *Readiness, Exposure and Clinical Setting* were combined in a regression model for Total Clinical Activity. In this final model only those variables that were statistically significant in the initial analysis were used as predictors. This final set of predictors of Total Clinical Activity are ranked by order of strength of association in Table 29 (Predictors of the ATOD-related clinical activity of practising registered nurses by order of strength of association (n = 1281). This rank order of predictors by strength of association merits careful consideration.

5.10.1 Total Therapeutic Attitude

The predictor of greatest strength in this large group of nurses is a mean score on Total Therapeutic Attitude scale. That an attitude or sets of attitudes predict behaviour has long been of interest to researchers of human behaviour. The strength of this relationship has not been without conjecture and controversy (Lewis, 2002). An enduring and appealing hypothesis is that if positive behaviours are desired and this relationship is a real one, the outcome of shifting attitudes from negative to positive will result in positive behavioural outcome (Lewis, 2002). In respect to Clinical Activity in this study, increased frequency of assessment, recognition and intervention for ATOD-related problems was a much sought after positive behavioural change. In the investigation of these nurses (n=1281), the relationship between positive Therapeutic Attitudes and high levels of Clinical Activity was established by univariate analysis and a regression model using multivariate analysis. In this predictive model it was the Total Therapeutic Activity score that was found to be the predictor of the highest order when entered into the regression equation. It should be remembered that the Total Therapeutic Attitude score is computed by calculating the mean score value of the twelve items comprising the scale, and that these twelve items were also clustered by Factor Analysis to derive three factor, or sub-scales. It is important therefore to recall that, of these three factor scales derived from the overall Therapeutic Attitude scale, scores on Role Adequacy sub-scale were significantly lower (p<0.001) than the other two measures of Role Legitimacy and Non Judgemental sub-scales.

Given that the Total Therapeutic Attitude score was the strongest predictor of Clinical Activity, it was a critical consideration that the lowest contribution to this relationship is that of these respondents' self-reported belief that they had adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems (Role Adequacy). Further, it has been established that there is a strong correlation between Total Therapeutic Attitude Score and Total Knowledge Score (3.7). As discussed earlier, it has also been established in terms of Clinical Activity that there was marked disparity between self-reported ratings of Role Adequacy and clinical behaviour in that nurses commonly performed more desired clinical activities in respect to ATOD-related problems than they themselves believed they had been educated and prepared to do. One conclusion would be that a continued approach aimed at increasing the knowledge and skills of nurses has merit, and given the strength of these existing relationships, there would be a strong likelihood of increasing rates of detection and intervention for these commonly occurring health problems.

5.10.2 Refers to Nursing Policy Manual (NPM)

Second ranked in the hierarchy of predictors of ATOD clinical behaviours was nurses referring to a NPM for advice on the care of people with ATOD-related problems (Table 29). Whereas it may be speculated that there are a wide range of influences involved in the development of therapeutic attitudes of nurses, the relationship between them referring to a NPM and the prediction of their associated clinical behaviour is likely to be more direct. This contention was supported by the influence that recency of NPM consultation had on Total Clinical Activity Score (3.9.5). The important consideration here is that nurses' consultation with the NPM occurs as a response of nurses to gain assistance "... in dealing with an alcohol or other drug-related problem" (Question 14, Appendix I). Given the inherent limitation that referring to a NPM, is contingent on recognising an alcohol or other drug problem in the first instance, this self-directed nursing behaviour was the second most powerful predictor of desired clinical behaviour, and thus merits the highest level of support within the workplace. This finding is also supported by the high value that nurses place on NPMs in general, and in particular as shown in this survey. As noted previously, respondents reported a very high level of use of NPMs commonly believing them to be of help. Greater than one third of respondents (36%) had used NPMs to assist them in the care of ATOD-related problems. The suggestion arises therefore that an increase in the use of NPMs to assist in the care of people with ATOD-related problems by nurses can result in a greater frequency of desired clinical behaviour. A caveat for this is that NPMs need to contain accurate, current, and relevant clinical information and be readily accessible to the nurse in the workplace. The ideal existence of NPMs with reliable ATOD information and guidelines was challenged in many of the verbatim comments of the respondents. Both quantitative and qualitative findings in this investigation support the very recent endeavours in South Australia by Flinders University, School of Nursing and Midwifery, and Drug & Alcohol Services Council, South Australia in developing and releasing "Alcohol, Tobacco & Other Drugs: Guidelines for Nurses and Midwives A Framework for Policy & Standards" (Flinders University 2003), in South Australia and Western Australia, and the supportive strategy of making electronic versions of the Clinical Guidelines available on-line. This enterprise

was based on the earlier endeavours of the New South Wales Nursing Project – Alcohol and Other Drugs and the publication of; "Alcohol and Other Drugs Policy for Nursing Practice in NSW: Clinical Guidelines 2000-2003" (NSW Health Department 2000), also available in electronic version, on-line.

5.10.3 Total Knowledge Score

The third ranked predictor of ATOD clinical behaviours was mean Total Knowledge score. It is noted that of the "top three" predictors, first and third being Total Therapeutic Attitude score and Total Knowledge score are described as "Factors within the nurse". The second ranked predictor, referring to Nursing Policy Manual was a "Factor within the workplace" though still a factor that arises out of the nurse's self-initiated behaviour. Of importance within these rankings of One to Three, was that Therapeutic Attitude outranked Knowledge score. In other words, knowing more about ATOD-related problems was of less real-life significance than having positive motivation, acceptance and perceived ability or adequacy, to recognise, assess and intervene in ATOD-related problems. Therefore it is not that lack of knowledge is not a significant predictor of Clinical Activity; rather, it is less significant. Knowledge specific to ATOD-related problems is clearly an important prerequisite to assessment, intervention, and information-giving that the nurse must firstly know, so as to act effectively. Knowledge of itself however, is not enough. Both univariate analysis and the combined regression model of predictors of Clinical Activity demonstrated that the nurse must also have the combination of belief, intention, and perceived adequacy extant in therapeutic attitudes. This considered however, the more positive the therapeutic attitude, the greater the likelihood of desired clinical behaviours being employed.

5.10.4 Works in a Rural Postcode Area

Working in a rural postcode area as opposed to a metropolitan area was the fourth ranked predictor of ATOD-related clinical behaviours of respondents. Whereas there was no significant difference for total Therapeutic Attitude score between nurses working in rural areas and those working in metropolitan areas, nurses working in country regions had significantly higher Mean Total Knowledge scores, and were proportionally and highly significantly more likely to refer to a NPM to assist them in dealing with patients with an ATOD-related problem. It is consistent with these two univariate measures that this combined regression model demonstrated that working as a nurse in a rural area predicted a high level of ATOD-related clinical behaviours.

The independent variable *Work Status* encompassed other variables; whether the respondents worked fulltime, part-time, or casually, worked in the public or private health care sector and finally whether they worked in a rural or metropolitan health care setting. All of these categorical variables had a positive association with Clinical Activity. When these variables were entered into the regression equation however, it was the singular factor of working in a rural health care setting that remained as a high order (fourth ranked) predictor of ATOD-related clinical activity. This was of interest given the high level of strength in association between higher Knowledge scores and Therapeutic Attitude scores associated with working in the public sector as opposed to the private sector. Also, nurses working in the pubic sector and nurses working in the rural sector were proportionately more likely to have attended in-service ATOD education than their respective counterparts. Nevertheless it would seem that there was something inherently different in working in rural health care settings that predicted higher levels of desired clinical behaviour in respect to ATODrelated problems. As discussed above (5.8.2.6. Work Status) the relationships between higher levels of knowledge, in-service education, and higher frequency of NPM consultation shared the same imperative of necessity that may well explain not only higher levels of total Clinical Activity, but also significantly higher frequencies of the component measures of Clinical Activity; assessment, intervention, and information-giving behaviours. The contention that working as a registered nurses in a rural area was associated with higher frequency of ATOD-

related clinical activity, due in large part to the lack of supportive infrastructure available to their metropolitan counterparts was confirmed by regression analysis. That is, "Works in a Rural Postcode Area" was the only work status variable that remained as a predictor of ATOD-related clinical activity when the combined regression model was applied.

5.10.5 Reads Nursing Journals Regularly

Being a regular reader of nursing journals was the fifth ranked predictor of ATOD-related clinical activity. The strength of prediction was of high order significance (Table 29). It is of interest that this self-directed learning, that is, nurses taking responsibility for their own professional development by reading professional journals, is ranked well above the workplace initiative of learning gained through in-service education albeit, the nature and quality of journals is unknown.

5.10.6 Works in a Primary Health Care Setting

As a factor of influence within the workplace, working in a primary care setting (Rank = 6^{th} , see Table 29) was ranked below working in a rural health setting in strength of prediction of desired clinical behaviour. What both of these factors had in common was the amount of clinical autonomy of nurses in these settings. In the first instance, for nurses working in a rural health care setting, their autonomy arose out of necessity imposed by distance from readily available support services as is implicit in the very term "remote area nursing". In the second instance, working in a primary health care setting, has an implicit first-degree level of responsibility due to the primary nature of this role. Thus it was that higher levels of clinical autonomy and consequent higher frequency of clinical activity prevailed. Nuances to which this clinical autonomy was desired or even actively sought in respect to care for people with ATOD-related problems, is further elaborated in the content analysis of verbatim reports of these nurses, to follow later in the thesis (Chapters Six and Seven).

5.10.6.1 Clinical Setting: Implications of Where the Nurse Works

Where nurses worked was incorporated within the variable set *Clinical Setting* that comprised Domain III of the Regression Model (3.13.1). The categorical variable *Clinical Area*, that is the clinical area in which the respondent currently worked, was recoded to collapse seventeen categories into four: Acute Care, General Nursing, Primary Health Care and Administration/Education. It is of note that when these four Clinical Areas were entered into the equation of the combined Regression Model (the final level of analysis) the only Clinical Area that demonstrated strength of prediction was that of working in a Primary Health Care area. This was of interest as it is noted in the discussion pertaining to the univariate analysis, that the area in which the nurse worked was strongly associated with particular aspects of Knowledge and also Clinical Activity. For example registered nurses working in Acute Care settings (n = 237) had demonstrably greater knowledge of withdrawal management and general management of ATOD-related problems, and pathological indicators of harmful ATOD use. Further, nurses working in Acute Care settings had significantly mean scores for Assessment Behaviour. The more discriminatory and rigorous process of multivariate analysis and regression modelling however, has demonstrated that when total Clinical Activity was the dependent measure, of the four major Clinical Areas analysed within Domain III Clinical Setting the singular predictor is that of working in the Clinical Area; Primary Health Care.

This finding is important when it is considered that due to a variety of influences, the focus of nursing care is shifting from hospital-based care, to home and community-based care in which the role of the primary health nurse is fundamental (Cowin & Jacobsson 2003b; Fernandez & Greening 2005). This shift in the context of care is also apparent in the changing devolution of care from inpatient to community outpatient care for the alcohol, tobacco and other drug-affected individuals (Day et al. 2002; McNeese-Smith 2003) as it is for a range of medical conditions. The trend in shorter hospital stay means that increasingly, acute care, formerly hospital-based, is provided in the community. Given the high prevalence of substance use among medical and surgical patients (Watson 2000; Day et al. 2002; AIHW 2003; Lopez-Bushnell & Fassler C 2004;

Ministerial Council on Drug Strategy 2004), and this shift in the context of care, it was encouraging to find that primary health care nurses were those most likely to carry out clinical activities related to the assessment, recognition and intervention of ATOD-related problems.

5.10.7 Years of Service as a Registered Nurse

The continuous variable; 'Years of Service as a Registered Nurse', was entered into the Combined Regression Model under Domain II (*Exposure*). This variable was included because of its strength of association enduring throughout the regression process and the conceptual sense of *Exposure*. The assumption was made that the longer a nurse is nursing, the higher the relative possibility of being exposed to patients with ATOD-related problems. This variable was ranked seventh, that is second to last, in the hierarchy of predictors of alcohol and other drug-related clinical behaviour (Table. 29). Consequently the statistical significance of this predictor was much lower than those above it. Nevertheless, years of service as a registered nurse was a predictor of clinical activity, and as such was somewhat at odds with the variable, Age of the Registered Nurse, at point of survey. It was found in the univariate analysis that older nurses had lower levels of knowledge, and were more likely to have negative or judgmental attitudes towards people with ATOD-related problems. The age of the nurse per se, had no significant association with Total Clinical Activity scores or subscores; however length of time working as a registered nurse demonstrated a weak positive relationship for Total Clinical Activity score and Information-Giving Behaviour score. It is therefore the variable Years of Service as a registered nurse that endured the rigour of regression analysis.

There is some value in considering the repository of nursing experience and length of exposure to ATOD-related problems that existed among long-serving nurses. The predictive strength of Years of Service as a Registered Nurse becomes highly relevant when the high mean age of nurses in New South Wales and elsewhere is considered, as is the common phenomena of nurses coming in and out of the workforce during their nursing careers (Cowin & Jacobsson 2003a). Strategic consideration could well be given to how best use long-serving nurses whose greater length of service predicts clinical activity. An interesting finding and one that is seemingly contradictory, was that despite lower levels of knowledge and more negative attitudes among older nurses, those nurses with greater length of service, as opposed to age, were more likely to assess and intervene in ATOD-related problems. There are two possibilities here; the most apparent being that it is not the age of the nurse per se that is of influence but how long he/she has been nursing that predicted clinical activity. The other interesting consideration and one that may be considered paradoxical is that nurses are certainly capable of demonstrating desired clinical behaviours even in the face of their own stated negativity, and sometimes hostility, towards the patients they care for (see Chapter Six). That is, the imperative of giving care prevails against the dynamic force of negative attitudes that the nurse may hold towards the person for whom the care is required.

5.10.8 Alcohol, Tobacco and Other Drug-Specific In-Service Education

The high strength of association between attending in-service education and higher levels of Knowledge scores, Total Therapeutic Attitude scores and subscores and Total Clinical Activity scores and sub-scores has been discussed in detail. For example, Table 24 (Relationships between Total Clinical Activity Scores and Key Variables), attending in-service education was associated with the highest Total Mean Clinical Activity score when compared with any of the other key independent variables. Using regression analysis, attending in-service education remained in the hierarchy of predictors but at the lowest acceptable level (p = 0.01). That is, ATOD specific in-service education was the weakest predictor of Clinical Activity in the combined regression model (Table. 29). It is likely that this lower order of significance was confounded by the relatively low proportion of the total sample who had attended in-service education (yes = 174, no = 984) and the amount of co-variance in the proportional distribution of inservice education by other variables. For example, as noted, the differential between those attending in-service education in public sector versus private sector

health care settings, and rural versus metropolitan health care settings. The "reallife" significance of these associations found by univariate analysis has been discussed at length. It is perhaps the specificity and relevance of the effect of inservice education that was most important. Considered within the combined regression model however, in-service education still remained as a predictor of clinical activity albeit of lower order strength.

5.11 Summary

The first section of this chapter discussed differences between "readiness' intention, motivation, and action that are manifest in the dynamic relationships between nurses' ATOD knowledge, therapeutic attitudes and ATOD clinical activity. The disparity between "believing" and "doing", and thus the differences between ideal and actual practice, has been considered in depth. The most important findings from the quantitative analysis that benefit from triangulation with the qualitative analysis were as follow.

- 1. Registered nurses subscribe strongly to the belief that their patients should be routinely assessed for ATOD-related problems. Despite this desired behaviour, it occurs at a significantly lower frequency than the strength their belief suggests
- 2. Measures of ATOD clinical activity demonstrate that *Assessment Behaviours* are reported at significantly greater frequency than *Intervention Behaviours*.
- 3. The giving of information about safe ATOD use and/or smoking cessation, a clinical activity that is critical to brief intervention, occurs at a significantly lower frequency than any other ATOD clinical activity.
- 4. There was a highly significant difference between nurses' perception of *Role Adequacy* and the frequency of *Assessment* and *Intervention Behaviours* respectively. This finding suggested that nurses actually do more in terms of assessing ATOD-related problems and offering timely

intervention, than they believe they have been educated for, and/or are supported to do This disparity was identified for closer examination in the qualitative data.

- 5. There was significant difference between: "Intention" and "Support". For these nurses, the intention to intervene with patients with identified ATOD-related problems was of significantly higher strength than their belief that they would receive encouragement to do so This finding was identified as a powerful limitation to ATOD clinical activity and is further explored in the qualitative themes; "Factors located in the Workplace" "Lack of cooperation and support", and "Factors located within other health care providers".
- 6. Higher reported values for *Role Adequacy*, a critical attitudinal set in the workplace, is reflected in practice by a higher reported frequency of key clinical behaviours.

The chapter concluded with a discussion of the hierarchy of predictors of clinical activity as determined by multiple regression analysis. The dimension and statistical power of the sample, and the robustness of the *Clinical Activity Scale*, add to the strength of this predictive model.

Total Therapeutic Attitude score was the strongest predictor of clinical activity and it was a critical consideration that the lowest contribution to this relationship is that of nurses' self-reported belief that they had adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems (*Role Adequacy*). Further, it was established that there was a strong correlation between *Total Therapeutic Attitude* score and *Total Knowledge* score, and that *Total Knowledge* score was the third strongest predictor of clinical activity. It was thus argued that strategies that increased the knowledge and skills of nurses would increase rates of assessment, detection and intervention of ATOD-related problems. Nurses' perceptions of their ATOD knowledge and skills, as represented by the domain of "Readiness" to assess and intervene in ATOD-related problems, is examined in depth within the qualitative theme; "Factors located within the Nurse" (Chapter Six).

The need for continued development and promulgation of ATOD nursing policy, protocols and procedures was confirmed by the strength of positive relationships between Nursing Policy Manual consultation to ATOD knowledge, therapeutic attitudes, and of critical importance, frequency of ATOD clinical activity. This relationship remains when analysed independent of attendance at ATOD specific in-service education and has been established as the second strongest predictor of ATOD clinical activity.

CHAPTER SIX: THE NUMBERS ADD UP... BUT:

Statistical analysis of this large sample of practising registered nurses (n = 1281), demonstrates significant difference between positive attitudinal sets and motivation to perform desired ATOD-related clinical behaviours, and the reported lower frequency at which this occurs... why is this so? As contended, the desired nursing behaviour of recognising and intervening in ATOD-related problems is complex and multi-faceted. It has been argued that triangulation, in this case, within-method triangulation, is a method well suited to investigate complex human behaviours. This chapter provides a systematic analysis and discussion of the qualitative data comprised of nurses' verbatim responses to the question: *"Please list the factors that affect your ability to intervene with patients who have alcohol and/or other drug-related problems*" (Question 72, Appendix I).

Beyond advantages in gaining insight into what nurses are tell us in their own voices, from their point of view; it is pertinent to actively consider the "shop floor" experience of nurses in dealing with common yet often difficult to manage health problems of patients such as those with ATOD-related problems. The content analysis and thematic coding of the qualitative data as described in Chapter Two has added important contextual depth to the understanding of the quantitative data. Neuendorf (2002) describes the nature of qualitative content analysis as being:

"... human language expressing the concepts of everyday experience as they pertain to a specific context" (Neuendorf 2002, p. 68)

It is the nurses' viewpoint that this investigator has taken to better understand phenomenologically some of the "whys" and "hows", and indeed, "why nots" as experienced by nurses when meeting and intervening with a person who is alcohol, tobacco or other drug-affected. The process of comparing and contrasting qualitative data with quantitative enabled a rich and deeper understanding of phenomena to be gained and also generated greater understanding of the complexity, contradiction and conflict in relation to ATOD issues for nurses.

6.1 Convergent and Divergent Findings

The rationale for using a multi-methods approach, and triangulation in particular, is to achieve a sense of completeness from a more holistic and comprehensive understanding of the phenomena under investigation. There is debate, as previously noted, as to whether triangulation should be merely confirmatory and used to elaborate understanding with compatibility between quantitative and qualitative findings (Morse 1991; Morgan 1998). For others divergent findings are problematic (Madej 1996). For this investigator and the nature of the questions that have been considered, it was accepted that both convergence and divergence were likely, and of themselves are useful in enriching the understanding of complex phenomena. The quantitative analysis used scaling measures; the Therapeutic Attitude scale and Clinical Activity scale, and deliberate quantification of the ATOD-related knowledge of respondents. A primary rationale for using multi-method approach was that measuring a particular point on a scale may not be enough, may not tell the whole story and therefore not allow for nurses' "a point of view". This point is made by Jick (1983) as an early proponent for triangulation:

"Triangulation, however, can be something other than scaling, reliability and convergent validation. It can also capture a more complete, holistic, and contextual portrayal of the unit (s) under study... [it can] enrich our understanding by allowing for new or deeper dimensions to emerge." (p. 138)

This understanding was one that this investigator embellishes in the qualitative analysis to follow. In considering the issue of divergent findings, it must be remembered that it is divergence or disparity that this qualitative analysis particularly hoped to explain. That is, *the rhetorical gap*, between intention and

action. In this respect this study is in accord with Rossman and Wilson (1985) when they propose:

"Rather than seeking confirmatory evidence, this method [triangulation] searches for the provocative." (p. 633)

Analysis of the qualitative data provoked other possible explanations from what the nurses reported. One real possibility being that their "lived experience" of completing the questionnaire designed to elicit responses particular to their professional concerns about ATOD issues, was a qualitatively different experience from reflecting upon the experience of their own professional behaviour as a registered nurse. That is to say, the items within the Therapeutic Attitude scale and Clinical Activity scale respectively were singular in their intent to obtain a measure of a particular belief, thought or behaviour, via the use of closed questions. When the nurse was asked to respond to open-ended questions this became an exercise of reflection and a fuller consideration of what happens in their day-to-day experience of nursing practice in respect to patients with ATODrelated problems. This was not, and could not, be pre-determined by the researcher. Notably their responses to the open-ended questions ranged from a single word to several pages, with some respondents spending a great deal of time in considered thought and reflection.

What was noticeable about the overall nature of qualitative responses was the large quantity, and depth of consideration. The majority of participants responded, (n=1017), of the one thousand, two hundred and eighty one completed questionnaires (n=1281) gave some sort of response to the open-ended question under examination. For the investigator, reading all responses and considering these data through content analysis and thematic coding gave a sense that the question was well considered and elicited many issues and concerns that would otherwise be unknown from quantitative data alone. It is possible that responding to an open-ended question may well have distanced the respondent from the demand characteristics implicit in trying to give a proper and pleasing answer to the authorities that seemed to be seeking them.

6.2 Qualitative Themes: Factors Located Within the Nurse

The first of qualitative theme was conceptualised within the major category code, 'Factors Located within the Nurse'. In Table 30 below the detail codes (qualitative sub-themes) are tabled in hierarchical order according to the proportion of respondents who wrote something pertinent to that particular detail code or qualitative sub-theme. This hierarchical ordering of proportion of response offers an initial level of understanding and interpretation. For example foremost amongst factors that affect ability to intervene with patients with ATOD-related problems was that nurses acknowledge their own possible lack of knowledge or education. More than two in every five respondents (45.5%) reported, with varying degrees of elaboration, a lack of education and/or knowledge as a major constraint to their ability to intervene with ATOD-related problems.

Table 30: Factors Located Within the Nurse – Ranked by Percentage of Responses (n=1281)

1. 2. 3. 4. 5. 6. 7.	Nurse lacks Knowledge/Education Nurse lacks Skills Nurse Not Aware of ATOD issues Nurse lacks Experience Nurse has Negative Attitudes Nurse lacks Confidence Nurse has No Authority to Act	¹ (45.5% ² [36%]) (14.9% [11.8%]) (13.7% [10.8%]) (12.8% [10.1%]) (6.6% [5.2%]) (6.4% [5.1%]) (3.9% [3.1%])
9. 10. 11.	Nurse Frightened/Fearful Frustration/Impatience/Hopelessness Nurse Knows Patient	$\begin{array}{cccc} (3.2\% & [2.8\%]) \\ (3.1\% & [2.5\%]) \\ (0.5\%) \end{array}$
1. 2.	 (%) Proportion of responses to open-ended Question, n=1017 [%] Proportion of responses of total sample, n=1281 	

6.2.1 Nurse Lacks Knowledge/Education

|--|

	Freq.	Percent
YES	463	36.0
NO	822	64.0

That a large proportion of nurses (n = 463) noted their lack of knowledge and education in ATOD-related problems in their own words, confirms the low mean Total Knowledge score and low mean scores for Role Adequacy within the Therapeutic Attitude scale. The volume of responses confirms the proposition that nurses perceive themselves as inadequately prepared, and having insufficient knowledge, or as stated, "a lack of knowledge", in ATOD matters. Some respondents stated "ignorant", "don't know", "simply don't know and never have known". These unambiguous statements about lack of knowledge is of concern, given that having specific knowledge about ATOD-related problems is an important prerequisite to nurses recognising them in the first instance, and then knowing what to do about them. Further, for nurses to take an active responsibility for informing and educating their patients about ATOD use and related problems, nursing knowledge is a critical element. That more than one in three nurses believe they lack basic knowledge to do so, explains why the Information-giving Behaviour scores within the Clinical Activity scale were of such low order. The self-disclosed lack of knowledge and education was in accord with the quantitative findings in the knowledge section, in that general knowledge pertaining to the use of alcohol, tobacco and other drugs amongst nurses was no greater than that of the general population as surveyed by the, 2004 National Drug Strategy Household Survey (AIHW 2005).

6.2.1.1 Have No Knowledge – Does it Matter?

Leadership and role modelling:

Of concern was that nurses in senior positions in education and administration were amongst those who reported lack of knowledge and education specific to ATOD-related problems. That a senior lecturer in nursing with ten years experience in that position, acknowledged that his/her limited knowledge would affect his/her ability to intervene and to teach about such matters is noteworthy:

"Overall though my limited knowledge would affect my ability to intervene and/or teach how"

(Senior Lecturer, 10 years in position, Metropolitan Area)

Some nurse academics may claim they do not need ATOD knowledge in that the nature of their job requires specialised rather than generalised knowledge, this is problematic however given the known high prevalence of ATOD-related problems, across all health care settings in which their students will practice. It is encouraging therefore to note the comment of an experienced clinical educator who recognised the need for further knowledge in order to be "... a more effective educator".

"It's really made me realise that to be a more effective educator, I really need to update on D & A as well as have access to ongoing education with D & A

(Clinical Educator, 7 years in position, 22 years Registered, Public Sector, Metropolitan Area)

Less encouraging is the frank comment of another clinical facilitator from a major teaching hospital:

"Insufficient knowledge" (Clinical Facilitator, 7 years in position, 20 years registered Public Sector, Teaching Hospital, Metropolitan Sydney)

Insufficient knowledge indicates the possibility of limiting the type of clinical direction and "facilitation" this particular nurse may offer.

The following reports provide particular concerns related to the leadership, deployment of resources, and role-modelling that is implicit in senior administrative positions (Director of Nursing, Deputy Director of Nursing).

"Insufficient education in this field" (Director of Nursing, 12years in position, Private Sector, Rural NSW)

"Lack of formalised education in clinical area - including medical officers"

(Deputy Director of Nursing, 6 years in position, Registered 33years, Public Sector, Base Hospital, Rural NSW)

These responses add perspective to the quantitative findings in regard to work status (working in Rural or Metropolitan postcode area). Univariate analysis found significantly higher knowledge scores in registered nurses working in the rural sector, than in metropolitan, with rural nurses being significantly more likely to have attended in-service education, and proportionately more likely to refer to a
Nursing Policy Manual to assist them in dealing with a ATOD-related problem, than their metropolitan counterparts. Further, multivariate regression analysis found that working in the rural sector is a high order (fourth ranked) predictor of clinical activity. Respondents' self-reported lack of education and knowledge amongst nurse leaders in the rural sector may suggest that, either the large group of respondents working in the rural sector (n=550), gain higher levels of ATOD knowledge in spite of this, or possibly because of it.

The comments of nurses in leadership position in metropolitan settings were characterised by polarity. Firstly the comment of this nurse coordinating the quality assurance program in a major teaching hospital.

> "Lack of expert knowledge" (Quality Assurance Coordinator, 5years in position, Registered 32 years, Public Sector, Metropolitan Area)

Secondly this comment from a Deputy Director of Nursing in another teaching hospital reflected the need for increased knowledge and skill in the staff he/she administers.

"Need to increase awareness & skill base in work environment of all staff" (Deputy Director of Nursing, 4years in position, Registered 14years, Public Sector, Metropolitan Area)

6.2.1.2 Have No Knowledge in Clinical Settings with High Prevalence of ATOD-Related Problems

The following response was one of a number in which nurses self-disclosed their lack of education, training, and/or knowledge as having particular significance, when it is known that the care setting and type of patient that the nurses would encounter were strongly associated with ATOD-related problems.

"No education or training - no time to learn" (Clinical Nurse Consultant, Diabetes Education, 21 years in position, Public Sector, Metropolitan Area)

The above respondent, a senior clinical nurse consultant working in the area of diabetes education for twenty-one years, states that no education or training and no time to acquire it is a factor that affects ability to intervene in ATOD-related problems. The Clinical Nurse Consultant below, this time in practice in the rural

sector, acknowledged a lack of current knowledge. This respondent has a Knowledge Score of 13 of a possible maximum of 22.

"Out dated knowledge of current treatment trends & drugs" (Clinical Nurse Consultant, Diabetes Education, 11years in position, Public Sector, Rural NSW, Knowledge Score: 13)

It is contended that the association of alcohol and tobacco use with the aetiology and complications of diabetes, particularly Type II diabetes, is clear (Goettelman & Schafer 1997; Watkinson 2004). One would anticipate that a nurse with direct responsibility for patient (diabetes) education would have a high level of knowledge regarding alcohol and tobacco use specifically. In like manner it may be anticipated that nurses in senior positions in the specialised area of infection control would also have high levels of ATOD-related knowledge. Alcohol use is known to be strongly associated with poor outcome in patients with hepatitis B and C (Riley & Bhatti 2001; Holmwood 2002), and intravenous drug use is a potent causative factor in Hepatitis C (Swift, Copeland & Hall 1996; National Centre in HIV Epidemiology and Clinical Research 2003). The following responses are thus sobering, considering both specialist nurses are working in "centres of excellence".

> "Knowledge base -, no specific training, experience with this group" (Clinical Nurse Consultant, Infection Control, 10.5 years in position, 17 years Registered, Public sector, Metropolitan Area)

"Lack of knowledge"

(Clinical Nurse Consultant, Infection Control, 4.5 years in position, 10 years Registered, Public sector, Metropolitan Area)

Lack of concordance, between the necessities for high level of knowledge amongst senior nurses who identify themselves as working in areas in which ATOD-related problems are known to have high prevalence, is disturbingly common. For example, a nurse unit manager in the public sector working in a rural intensive care – coronary care unit, reported a "lack of education in this field", and in this situation adds "could use regular in-service," and, an assistant director of nursing in a large rural private surgical hospital acknowledged her:

"Ignorance; lack of education"

Empirical results found that nurses working in acute care settings (n=237) had higher levels of ATOD-related knowledge, specific to assessment, and management of withdrawal and intoxication syndromes, when compared to other clusters of clinical settings (General Nursing, Primary Health Care, and Administration/Education). In the discussion of quantitative analysis it was argued that, particular areas of knowledge were more salient or relevant to acute care nurses due to greater exposure to acute ATOD-related problems. It is surprising therefore that the qualitative data showed some registered nurses with lengthy experience in accident and emergency settings, the "front-line" of acute care, and in which ATOD-related problems are known to be both acute in nature and prevalent (D'Onofrio 2003; Ragaisis 2004) reported;

> "No specific training in these areas" (Nurse Unit Manager, Accident & Emergency, Public sector, 12 years in position, Registered 24year, Rural NSW)

> "Lack of understanding of problems" (Registered Nurse, Accident & Emergency, 7 years in position, Registered 12years, Public Sector, Metropolitan Area)

> "Not trained recently in this area" (Registered Nurse, Accident and Emergency, 2 months in position, Registered 15years, Public sector, Rural NSW)

The above may reflect the short period of time this nurse had worked in accident and emergency, compared with data from senior and otherwise more experienced nurses in this clinical setting. A final response from an accident and emergency nurse with long tenure in a remote-area rural hospital was:

> "I feel I am inadequately trained in most aspects of alcohol & drug abuse. I do feel confident with alcohol withdrawal when following prescribed Dr's orders"

(Registered Nurse, Accident & Emergency, 10years in position, Registered 16years, Public sector, Remote-area hospital, NSW)

Qualitative data from nurses comprising the largest clinical group, those working in "General Nursing" (medical/surgical settings [n=609]), showed their lack of salient knowledge.

A scant factual knowledge" (Clinical Nurse Specialist, Surgical, 7years in position, Registered 15years, Public Sector, Metropolitan Area) "I have no education or real experience with patient who have alcohol & drug problems" (Registered Nurse, Surgical, 2years in position, Registered 34years Public Sector, Metropolitan Area)

"Lack of D&A experience & knowledge myself, don't know what to do with these patients" (Registered Nurse, Medical/surgical, High Dependency, 3 years in position,

Registered 7years Public Sector, Metropolitan Area)

Lack of knowledge of nurses working in clinical settings with high exposure to ATOD-related problems may motivate nurses to a) recognise their need for further knowledge and b) to gain it. The nurse below demonstrated such motivation:

"I think I would need more education and training. I need to read more on the subject. I think it is a very important part of nursing" (Registered Nurse, Medical/Surgical, 1 year in position, 7 years Registered, Public Sector, Metropolitan Area)

The combination of personal insight and motivation was not universal among these nurses. A participant from a medical surgical setting with over ten years experience in public health care in a rural setting said:

"No training in D&A – have no desire to have any, do not like these patients, please do not send me another questionnaire"

([Knowledge Score: 9/22])

6.2.1.3 Primary Health Care Nurses do More – Do They Know More?

Multiple regression analysis showed that working as a nurse in primary health settings was a stronger predictor of ATOD – related clinical activity than working in any other major category group of clinical setting. The qualitative data however suggests that an assumption that primary health nurses are well educated in ATOD-related issues cannot be safely made. Qualitative data has shown lack of knowledge amongst senior nurses in primary health positions with responsibilities to deliver clinical care and coordinate services, or in the emerging nurse practitioner role in this field;

"No education given in my day, Lack of training in this speciality area"

(Nurse Unit Manager (Team Leader) Generalist Community Nursing service, 1 year in position, Registered 27 years, Public sector, Rural, NSW)

"Have had no training whatever in alcohol and/or other drug related problems"

(Coordinator, Community Health service, 2year in position, Registered 6years, Public sector, Rural NSW)

"Lack of education and therefore current knowledge" (Clinical Nurse Consultant, Community Nursing, 3years in position, Registered 22years, Public sector, Metropolitan Area)

"Not adequately trained to deal with someone who has a drug related or alcohol problem"

(Nurse Practitioner, Community Health, 1year in position, Registered 9years Public sector, Metropolitan Area)

"Lack of knowledge as to how to best deal with the situation" (Nurse Practitioner, Women's Health, 2years in position, Registered 21 years, Private sector, Metropolitan Area)

What many of these primary health nurses had in common was their leadership roles, either as area managers, team leaders, or clinicians. Others commonly worked in areas in which ATOD-related problems are known to have a pervasive effect, for example child and family health, community education and community mental health. They reported:

"My knowledge base would be inadequate - I am sorry to say" (Community Nurse, Child and Family Health, 12years in position, Registered 25 years, Public sector, Rural NSW)

"I have not been trained in this area of nursing, I have little knowledge to share with others, patients or staff"

(Clinical Nurse Consultant, Early Childhood Health, 10years in position Registered 25 years, Public sector, Rural NSW)

"I have never worked in Drug & Alcohol. I have limited knowledge in this area"

(Health Education Officer, Community Health, 5years in position, Registered 26 years, Public sector, Metropolitan Area)

"Limited knowledge & training specifically related to D & A related problems"

(Nurse Unit Manager, Community Mental Health, 9 years in position, Registered 12 years Public sector, Metropolitan Area) There is a qualitative difference in the nature of some responses in that these primary health nurses also report a lack of knowledge about strategies for intervention, available services, and sources of ATOD-related information.

> "Lack of knowledge, unsure of strategies for assessment and referral and sources for same" (Clinical Nurse Specialist, Women's Health, 3years in position, Registered 22

> > years, Public sector, Rural NSW)

"Lack of up to date knowledge in drugs & alcohol... awareness of local services(D&A), sources of information"

(Area Manager, Community (Home)Nursing, 10years in position Registered, 25 years, Private Sector, Metropolitan Area)

6.2.1.4 Desired and Useful Knowledge

Some participants were specific about the type and nature of knowledge that they needed in their clinical context, and were motivated towards attaining it:

"I would value knowledge of drug/alcohol problems & how best to handle the situations that arise in the interests of both patients and staff"

> (Assistant Director of Nursing, Medical/surgical, 2 years in position, Registered 15 years, Private sector, Rural NSW)

This participant was seeking knowledge to enhance management acumen. Others were seeking further ATOD-related knowledge so as to be able to predict problematic areas of care, withdrawal management for example;

"I have not been formally trained to assess these people.... pharmacology and effects.. basis of withdrawal regimens, how and why they came about"

(Nurse Unit Manager, 1year in position, Registered 10 years, Public sector, Metropolitan Area)

"Limited knowledge of specific affects to the body of long term abuse of alcohol and drugs. Limited knowledge of withdrawal symptoms and treatment"

> (Clinical Nurse Specialist, Community Health, 3 years in position, Registered 14 years Public sector, Metropolitan Area)

"Lack of knowledge of Assessment procedures; levels of drug use and implications for health; appropriate interventions-especially withdrawal and toxicity"

(Lecturer, 3 years in position, Registered 15years, Public sector, Rural NSW)

Others were seeking knowledge about the dynamic, aetiological, and/or psychological aspects of ATOD-related problems, and dependence syndromes in particular.

"Lack of knowledge. No way of knowing what caused the problem in the first instance"

(Registered Nurse, Rehabilitation, 4years in position, Registered 9 years, Public sector, Metropolitan Area)

The prevalence of ATOD-related illnesses found in specialised gastro-intestinal clinical settings (Chick 1994; Lopez-Bushnell & Fassler 2004; Ragaisis 2004), reveals the concern nurses have about patients' long term ATOD use.

Knowledge - nurses need to know about the psychological aspects of drug and alcohol patients"

(Registered Nurse, Gastroenterology, 3 years in position, Registered 21 years, Public sector, Metropolitan Area)

The following two comments further represent this common concern.

"Lack of a basic knowledge of management of these patients ... lack understanding of precipitating factors that cause some people to become drug dependent"

(Registered Nurse, Intensive Care, 2 years in position, Registered 18 years, Public sector, Rural NSW)

"Lack of information & understanding of alcohol & drug related dependency"

(Registered Nurse, Child and Family Health, 10 years in position, Registered 22 years, Public sector, Rural NSW)

Other nurses were particularly concerned about illicit drug use:

"I feel confident to assess in tobacco, prescription drugs and alcohol limited in illegal drug use/abuse/intoxication, lack information" (Nurse Unit Manager, Medical, 6 years in position, Registered 21 years Public sector, Rural NSW)

While understandable given that respondents overall were more likely to work hospital settings, it is a concern that nurses who seek knowledge focus on the more severe presentations of ATOD dependent or "addicted' individuals, rather than the full spectrum of ATOD-related problems. At a fundamental level however, that nurses recognised they lack knowledge in how to assess ATODrelated problems in the first instance and refer on as needed, is a useful finding. "Lack of knowledge of assessment instruments to know what level of addiction/life crisis to be referred and to whom – or how" (Clinical Nurse Specialist, Child and Family Health, 2 years in position,

Registered 20 years, Public sector, Metropolitan Area)

A concern for some participants in respect of their poor knowledge and lack of education was that they were never offered such education in the first instance. This finding is strongly convergent with the education and training item within the scale measure of *Role Adequacy;* "*I have received sufficient nursing education and training to care for persons with alcohol and/or other drug-related-problems,*" a total of 67.9% of respondents either strongly disagree (12.1%) or disagree (55.8%) that they had received sufficient nurse education and training. The essential nature of the qualitative responses above re-affirmed this. More senior nurses reported that they had never received ATOD-related education, whereas those more recently trained/educated reported having had some ATOD-related education.

I do not have the knowledge. My training did not include any information about these issues. My post graduate work & interests have been in other areas"

(Clinical Nurse Specialist, Generalist community health, 8.5 years in position, registered 32 years, Private sector, Rural NSW)

The participant below, an area manager of a private occupational health service, reported that ATOD issues were not taught their training. This was the case for many of his/her colleagues. However younger, more recently trained nurses seemed to have higher levels of ATOD knowledge.

"Your survey makes me aware of how little I know. Drug & Alcohol was not taught during my training... as is the case for my senior nurses ... less than more recently trained staff" (Area Manager, Occupational Health Service, 5 years in position, Registered 28 years, Private sector, Metropolitan Sydney)

This response supports the empirical data, which demonstrated a negative relationship between the age of the nurse and their level of knowledge. Older nurses demonstrated lower levels of knowledge empirically. This next response suggests that younger, less experienced nurses, also felt a lack of specific ATOD education. Empirical findings also demonstrated higher levels of ATOD-related

knowledge amongst registered nurses with a degree in nursing, compared to those without. This report suggested that more needs to be done.

"I strongly believe this is a specialised area within the health care system & requires to be addressed within our universities as a total unit. Not only nurses but also medical personnel as I have observed mismanagement & discrimination"

> (New Graduate, Surgical, 10 months in position, Registered, 1 year, Private sector, Metropolitan Area)

6.2.2 Nurse Lacks Skills

	Freq.	Percent
YES	152	11.8
NO	1133	88.2

Table 32: Theme A.02 - Nurse Lacks Skills (n=1281)

This detail code of the major category code, 'Factors Located within The Nurse', had the second highest proportion of qualitative responses (n=152). As a theme for content analysis this was strongly related to the theme of lack of education and training. In the thematic coding, the word 'skill' or 'skills' were key words used to draw the verbatim comment into this thematic code. The type of skill that the participant reported as lacking was largely generic to necessary clinical activities of assessment, information-giving and intervention. Noticeably the participants' relational or interpersonal skills were perceived as lacking, and they reported having a desire to obtain them. Again the culture and environment of nursing must be considered, whereby biomedical, technical interventions are favoured above counselling and interpersonal practices (Chick, Lloyd & Crombie 1985; Adams & Stevens 1994; Peters et al. 1998; Lewis et al. 2005) Curriculum developers for both pre-service and in-service nursing education may well need to consider this aspect. A lack of counselling skills was commonly identified.

"I don't feel as though I have enough skills to enter into a counselling situation with a patient with these sort of problems" (Nurse Practitioner, women's health, 1 year in position, Registered 24 years,

Private sector, Metropolitan Area)

Lack of counselling skills and interviewing skills were often reported by nurses who were in senior clinical positions.

"Lack ability to take appropriate history. Lack of counselling skills' (Clinical Nurse Specialist, Community Midwife, 2 years in position, Registered 18 years, Public sector, Rural NSW)

"Lack of counselling skills ...not sure how to interview these patients or advise my staff"

(Nurse Unit Manager, Surgical, 2 years in position, Registered 10 years, Public sector, Metropolitan Area)

"Lack of counselling skills, do not have the training to deal with these patients appropriately"

(Clinical Nurse Specialist, Orthopaedics, 9 years in position, Registered 27 years, Public sector, Metropolitan Area)

The above response indicates that this senior clinical nurse specialist working in a major trauma centre, with a known high prevalence of alcohol-related trauma, was aware of the need for training as was this nurse unit manager in community health.

"Lack of up to date skills/training, difficulty is accurate assessment of situations, especially in assessing alcohol intake" (Nurse Unit Manager, Community Health, 7 years in position, Registered 24 years, Public sector, Metropolitan Area)

A report below from a "shopfloor" RN, early into his/her career, also reflected lack of skills due to lack of training.

"No general or assessment skills in this area. Lack of training clinically in alcohol & other drug related problems"

(Registered Nurse, Surgical, 5 years in position, Registered 7 years, Private sector, Metropolitan Area)

Some participants focused on the skills they perceived as necessary for dealing with more severe problems such as the ATOD dependent (or "addicted") patient. For example:

"Lack of ability to approach alcohol and/or drug addicted people and show tact"

(Registered Nurse, medical/surgical, 9 years in position, Registered 10 years, Public sector, Rural NSW) A significant number of participants (n=152) made some comment that identified lack of appropriate clinical skills as a primary factor affecting their ability to intervene in ATOD-related problems. It is noted that the word "appropriate was often used, as below:

"I have no appropriate skill/knowledge' No training in this area (as is obvious)"

(Clinical Nurse Specialist, Labour ward, 12 years in position, Registered 27 years, Public sector, Metropolitan Area).

It is contended that appropriate (salient) knowledge and training is most likely to elicit appropriate clinical behaviours in terms of ATOD-related interventions. The comment above, made by one senior and experienced nurse, ("as is obvious") is a telling self-assessment of lack of necessary knowledge. This participant had a Knowledge score of 6 (of a maximum of 22), compared with the mean knowledge score for all participants (n=1281) of 11.70, and a *Role Adequacy* Score of 2.0 (Total mean score = 2.53[n = 1281]). Quantitative analysis demonstrated that *Role Adequacy* was the lowest scoring component of the composite scale measure; *Total Therapeutic Attitude* and Total Therapeutic Attitude was the strongest predictor of ATOD-related clinical behaviour (3.13, Predictors of Key Clinical Behaviours). This convergence of quantitative and qualitative result suggests that this clinical nurse consultant would have a low level of ATOD-related clinical activity.

That so many participants, the majority experienced and in senior positions, reported that they lacked appropriate skills and knowledge was strongly convergent with empirical measures of overall low levels of knowledge and *Role Adequacy*. In particular, the perception that participants have been inadequately trained in the first instance was very informative. The empirical relationship between therapeutic attitude (*Role Adequacy*) and clinical activity was illustrated in the response below. This less experienced nurse clearly raises the question does lacking the clinical skill to ".... face the situation" (*Role Adequacy*), mean the situation cannot be faced, and thus best practice assessment and intervention cannot be offered.

"Not enough clinical skills to face the situation it is hard to do something if you don't know what you are doing" "

(Registered Nurse, Paediatrics, 5years in position, Registered 12years, Public sector, Metropolitan Area)

6.2.3 Nurse Not Aware of ATOD Issues

Table 55: Theme A.06 - Nurse Not Aware of ATOD Issues (n=126)	Table 33:	Theme A.08 -	Nurse Not	Aware of ATOD	Issues	(n=1281
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	Freq.	Percent
YES	139	10.8
NO	1146	89.2

In this particular thematic code the judgement that nurses are not aware of ATOD issues is implicit rather than explicit in their verbatim responses. That is to say, the investigator has interpreted the data against the known epidemiology, prevalence and incidence of ATOD-related problems within the health care system. It is this dissonance between the high likelihood that nurses will encounter ATOD-related problems and their explicit statements that they simply do not see them that is cause for reflection here. As part of the 'Factors Located within the Nurse' this detail code, is strongly related to the detail code; "Nurse lacks Experience" (of ATOD-related problems). Both thematic codes demonstrate a central concern of this investigation, this being the disparity between the known prevalence of ATOD-related problems and the low frequency with which nurses recognise them. A major barrier to their recognition is reflected in the explicit lack of awareness among nurses. Two very striking examples come from the areas of obstetrics/midwifery, firstly:

"I have no training in the area and secondly, I have never come across an Obstetric patient with an obvious drug or alcohol problem at my present place of employment"

(Assistant Director of Nursing, Obstetrics, 3years in position, Registered 16years, Private sector, Metropolitan Area)

In this above response above "... obvious drug or alcohol problem" is a key phrase. It is of issue that clinical units developed to support women affected by ATOD use are in the public sector and are largely aimed at pregnant women's illicit drug use, particularly heroin dependent women, and women who are heavy users of alcohol and risk of causing foetal alcohol syndrome among their unborn (Swift, Copeland & Hall 1996; Day et al.; Markovic et al. 2000). ATOD use and related harm, and national concerns based on the evidence that more than one in five (27%), women smoke tobacco during pregnancy , despite the association between smoking and pregnancy, small-for-date babies, premature labour, premature birth and other perinatal complications, are key issues for nurses and midwives (Allnutt & Reid 1999; Oliver et al. 2001; Beldon & Crozier 2005). It is also known that there is a broad spectrum of hazardous alcohol use amongst pregnant women who are not alcohol dependent (Riley et al. 2003; Pullen 2004). It is concerning that, for example, a director of nursing with sixteen years of experience could not recognise ATOD problems amongst his/her patients, and this may be because they have not been assessed for ATOD use. This was reinforced by another experienced midwife private sector who reported having nothing to do with "... patients with drug and alcohol problems" and added "well not that I am aware of anyway".

"This [questionnaire] is impossible for me to accurately complete as I never have anything to do with patients with drug & alcohol problems (well not that I am aware of anyway) I don't know what questions to ask"

(Clinical Nurse Consultant, Midwife, 10 years in position, Registered 22 years, Private sector, Metropolitan Area)

Lack of awareness of ATOD-related problems in contexts in which the prevalence is known to be high was reported by participants working in surgical settings. Their lack of awareness was divergent with the higher levels of knowledge demonstrated amongst acute-care nurses from the quantitative data. This was especially in relation to knowledge of withdrawal management possibly because surgical nurses are often confronted with the concomitants of post-operative shock, confusion, and ATOD withdrawal syndromes.

> "I do not come in contact with such patients as ours is a private surgical hospital and most patients are well behaved do not stay longer than a few days"

(Assistant Director of Nursing, Surgical, 1 year in position, Registered 22 years, Private sector, Metropolitan Area)

"We don't have these patients"

(Registered Nurse, Surgical, 1 year in position, Registered 25 years, Public sector, Metropolitan Area) "These patients rarely present in an acute situation I would not be in a position to answer these questions - totally outside my workplace experience"

(Registered Nurse, Recovery, 6 years in position, Registered 11 years, Public sector, Metropolitan Area)

Some participants demonstrated their lack of awareness and attitudes possibly illustrating their lack of access to ATOD professional development.

"I don't understand why anyone could use a substance which takes away their willpower and control. When there is so much publicity about the ill effects and dangers of drug & alcohol abuse why does anyone still go ahead and use same?"

(Registered Nurse, Accident & Emergency, 10 years in position, Registered 17 years, Public sector, Rural NSW)

"Why are we doing this? [the survey]" (Registered Nurse, Intensive Care, 2 years in position, Registered 9 years, Public sector, Rural NSW)

This experienced participant from a large teaching hospital reported lack of awareness of the increasing prevalence of ATOD-related problems, both licit and illicit, amongst young Australians.

> "I have next to nothing to do with alcoholics or drug users, as my experience is in young people e.g. birth → 16 yrs. Intoxicated or drug users are not admitted to my area - this is the hospitals policy" (Nurse Unit Manager, Paediatrics, 14 years in position, Registered 25 years Public sector, Metropolitan Area)

A question to ask in relation to the above could be why a hospital policy would not admit young people who are intoxicated or have other ATOD-related problems, and who has the responsibility for their care and management? The implication of this lack of awareness is not only that it is antithetical to early intervention, but it can also have profound clinical implications.

"I do feel, at times that if the patient does not wish to be "detoxified" then there is sometimes little point if we do. Even to allowing a ration of alcohol/day + valium might be simpler course of action"

(Registered Nurse, Surgical, 1 year in position, Registered 28 years, Public sector, Metropolitan Area). "Sometimes to prevent withdrawal, a patient might be charted for one drink per day or valium. As patients do not come in for help with their drug or alcohol problem, we cannot pursue the situation"

> (Nurse Unit Manager, Medical/Surgical, 13years in position, Registered 22years, Private sector, Metropolitan Area)

The notion of giving some alcohol to the alcohol dependent patient was quite entrenched amongst older nurses, even though this contradicts current clinical guidelines (NSW Health Department 2000; Flinders University and Drug & Alcohol Services Council 2003). Implicit in the data was an acknowledgement that while patients in medical/surgical settings were not admitted for the primary treatment of their ATOD-related problems, this does not abrogate responsibility for delivering safe care or take away the opportunity for ATOD referral. The comments above reflected "therapeutic nihilism" that is nurses believed that any effort made to alter the course of ATOD dependency would be of little value. It is of note the more senior participants (Nurse Unit Manager) had Role Legitimacy mean score of 2.6. [Total mean=3.58]), and knowledge scores (7/22 [Total mean=11.6]), well below the mean scores for the total sample. This illustrates the relationship between low level of ATOD knowledge and negative therapeutic attitude (low Role legitimacy score) and self-reports of negative ATOD clinical activity.

This next response was from a psychiatric nurse and is perplexing, being divergent from empirical findings whereby psychiatric nurses had high levels of ATOD-related knowledge. Patients with "Dual Diagnosis", that is, the coexistence of a diagnosable psychiatric disorder and substance use disorder, are now well recognised. The clinical cluster of "Dual Diagnosis" is known for being the most problematic and often treatment resistant of psychiatric populations (Kavanagh, Baker & Teesson 2004; Kessler 2004). Contemporary nursing literature and a National Comorbidity Initiative argue that it is a primary responsibility of nurses in psychiatric care settings to assess for ATOD use and any relationship to the mental status and psychosocial function of the patient(de Crespigny et al. 2002; AIHW 2005c). In other words, contemporary approaches do not see ATOD-related problems as secondary to psychiatric problems, but rather integrated and are problematically synergistic (Kavanagh, Baker & Teesson 2004; Kavanagh, Baker & Teesson 2004; Kavanagh, Baker & Teesson 2004; Kavanagh, Baker & Teesson 2005c).

"This survey difficult to answer... as I work with psychiatric patients. Their drug &/or alcohol problems are usually secondary to their psychiatric problems"

> (Registered Nurse, Psychiatry, 10 years in position, Public Sector, Metropolitan Area)

Included in this thematic code "Nurse Not Aware of ATOD Issues" were counterviews, that is to say, participants who demonstrated a high level of ATOD awareness. This participant for example demonstrated awareness that the psychiatric nurse above, seemed to lack.

> "Working as a registered nurse in an acute medical ward we rarely have clients for voluntary detoxification. We don't have to diagnose but we do have to know of their daily alcohol intake so we can watch for withdrawal symptoms. They are usually in hospital for another medical reason perhaps caused by their alcohol intake but usually that is secondary"

> > (Registered Nurse, Acute Medical, 8 years in position, Public sector, Metropolitan Area)

A further example was from an experienced neonatal nurse in a major hospital who saw the need for a comprehensive ATOD assessment for the sake of the neonate, the health of the mother, and an understanding of the family.

"Not knowing of mothers' use of drugs/alcohol leads to delay & confused treatment of neonates. It is important for nursing staff to assess parents of neonate for drug problems - but as they are not the "patient" it is difficult to instigate or suggest treatment except if it is endangering the neonate. This is difficult if drug use has been during the pregnancy as it effects baby before and after delivery. More comprehensive assessment is needed - family assessment would be useful"

(Clinical Nurse Specialist, Neonatal ICU, 8 years in position, Registered 20 years, Public sector, Metropolitan Area)

Encouragingly a childbirth educator reported their sense of responsibility for information-giving in this context.

"In my area of employment I deal with educating my clients. I try to give them information on the effects of drug & alcohol use on their infants and themselves

(Childbirth educator, 5 years in position, Registered 18years, Public sector, Metropolitan Area) Another useful counterview came from a nurse working in oncology giving rise to the pragmatics of cross tolerance, understanding the interrelationship between pharmacological agents and their influence on treatment.

> "My reason for obtaining a detailed history of the patients alcohol/drug history is because in the area in which I work high doses of chemotherapy are used & their history is very important" (Clinical Nurse Specialist, Oncology, 3 years in position, Registered 11 years, Public sector, Metropolitan Area)

6.2.4 Nurse Lacks Experience

Table 34:	Theme A.04	- Nurse I	Lacks I	Experience ((n=1281)
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	Freq.	Percent
YES	130	10.1
NO	1155	89.9

Under this theme participants reported their lack of experience. Two major issues arose; the first being that nurses are exposed to ATOD-related problems but lack awareness of the full continuum of problems and hold the belief that they have not nursed patients who experienced them. The second was that the participants worked in areas where there genuinely was a low prevalence of ATOD-related problems. To deal with the first, lack of experience was in fact lack of awareness. It is useful to contrast the response from a palliative care nurse of five years with a counterview of her colleague from the related area, oncology.

> "As I am not involved with clients with these problems I feel I am not at all qualified to answer this question"

(Registered Nurse, Palliative Care, 3 years in position, Registered 9 years, Public sector, Metropolitan Area)

"Survey has made me aware how little I know re drug/alcohol addiction/dependency and following /appropriate after care particularly pain management"

(Registered Nurse, Oncology – surgery, 2 years in position, Registered 10 years, Public sector, Metropolitan Area)

A response from an experienced clinical nurse consultant working in neonatal care, did not make explicit a lack of experience, but made implicit a degree of hostile ignorance.

"My patients are newborn infants they do not use drugs ha-ha. I do not have the counselling skills to intervene & I do not wish to learn these. I am so sorry but am unable to answer adult questions"

> (Clinical Nurse Consultant, Neonatal/Paediatric, 5 years in position, Registered 18 years, Public sector, Metropolitan Area)

This was in contrast to this response from a nurse also working in neonatal care, and who showed an active concern about ATOD use of mothers and families acknowledging that this would affect the wellbeing of the neonate and mother at delivery, and ongoing.

> "Have a feeling of helplessness - i.e. unable to assist people with complicated drug (including alcohol) addictions; also their complicated personal problems. I have more contact with the victims (infants) of Drug/Alcohol abuse than with the Substance abuser; so I have more sympathy for the victim but I would like to know how to do more. It is troubling to think that problems will be ongoing so even if we get baby and the mother well both are at risk in a family setting were Drug/Alcohol abuse occurs"

(Registered Nurse, Neonatal ICU, 6.5 years in position, Registered 12 years, Public sector, Metropolitan Area)

The qualitative data revealed a lack of experience in nurses working in aged care settings. Such settings may have a lower prevalence of ATOD-related problems than many other health care settings. It is of note that under the major theme of 'Factors within the Workplace', participants from aged care, and in particular dementia care settings, acknowledged on-going difficulties of clients with alcohol-related brain damage, and those who were nicotine dependent, and thus, related smoking hazards. A final note is that of an accident and emergency nurse with two years experience, registered for eleven years. This comment was divergent with published research and anecdotal reports relating to the extraordinarily high incidence of ATOD-related problems and associated trauma presenting to accident and emergency settings.

"Lack of experience in dealing with such patients. I have no background in the field of drug or alcohol related problems" (Registered Nurse, Accident & Emergency, 2 years in position, Registered 11 years, Public sector, Rural NSW)

It is of concern a nurses working in an accident and emergency setting reported lack of experience in dealing with patients with ATOD-related problems. The phrase "... in dealing with such patients", needs to be considered. It is contended

here that this may be an issue of a lack of expertise (Role Adequacy), rather than a lack of the experience due exposure to ATOD-related problems.

6.2.5 Nurse Has Negative Attitudes

 Table 35: Theme A.05 - Nurse has Negative Attitudes (n=1281)

	Freq.	Percent
YES	67	5.2
NO	1218	94.8

As discussed, the therapeutic attitudes of nurses towards individuals affected by ATOD-related problems have attracted considerable research interest, and have been of longstanding interest to this investigator. It is useful to remember that the empirical results of this study that measured the total therapeutic attitudes of 1281 nurses revealed that attitudes do impact on clinical activity for ATOD-related problems, and much can be learned by comparing the composite components of therapeutic attitude. It is significant that when nurses' responses to *Non-Judgment, Role Legitimacy* and *Role Adequacy* were compared, respondents demonstrated a far higher subscription to *Role Legitimacy* and *Non-Judgment* than they did to *Role Adequacy*. That is to say, of therapeutic attitudes overall, the major contribution to low levels of total therapeutic attitude of these nurses was their perception that they were unable, or inadequately trained to give the sort of care required, more so than believing these patients were not worthy of their care, or that it was not a proper thing to do.

Reference to Table 30 'Factors Located within The Nurse' (above), demonstrated that nurses' qualitative responses to factors that influence their ability to intervene were convergent with the quantitative results. Nurses were proportionally much more likely to identify their lack of knowledge, skills, and awareness of ATOD-related issues, and lack of experience, as factors influencing intervention. It was a relatively smaller proportion (5.2% of total sample, and 6.6% of participants who responded to the open-ended question) who predominantly held negative attitudes as a self-identified factor influencing their willingness and ability to intervene in ATOD-related problems.

One can surmise that when 'Factors within the Nurse' are considered it is the nurse's belief in being unable or ill-prepared to intervene in common ATOD-related problems that is of strongest influence rather than the more singular, and often written about influence, of not liking these types of patients. It is of notable that comments made by these 67 registered nurses were unequivocally negative. As with consideration of other 'Factors within the Nurse', it is of concern that many of these comments arose from nurses in senior positions in education, administration and clinical environments.

As illustrated in the qualitative responses below, particular themes arose. Some of these were the belief that ATOD-related problems are "self-willed" or "self-inflicted". Negative clinical stereotypes were evident demonstrating lack of awareness of the full spectrum of ATOD-related problems and pejorative terms such as "alcoholic", "addict", "junkie", and "drunk" were used. There was clearly some resonance with some of the qualitative responses with the major category code 'Factors Located within the Patient' in that nurses' attitudes can quite clearly be influenced by their view that the patient is non-compliant, recidivistic, disruptive, abusive, and so forth. Some qualitative data clearly showed negative attitudes of nurses, as revealed through language such as "unable to be compassionate", "unable to tolerate", "do not like these people" and so forth. The statement below (lecturer in nursing of seven years in university) illustrates intolerance that is particular in its focus.

"My own intolerance of people who are self indulgent and selfish. I am very tolerant of a range of people with disabilities (e.g. schizophrenia, diabetes, cerebral palsy, D.D.) but drug problems and addictions are an area of neutral interest to me. I would never choose to work in the area of drug addiction etc."

> (Education, Lecturer 7 years in position, Registered 21 years, Metropolitan Area)

The next comment from an assistant director of nursing from a major rural, base hospital is markedly judgemental.

"I detest drunks & cannot bear the smell of beer & cigarettes. I object strongly to smokers, smoking in my presence. I have never known a rehabilitated methadone client or a drunk that could stop drinking"

(Assistant Director of Nursing, 10 years in position, Registered 29 years, Public sector, Rural NSW) That ATOD-related problems are known to be a major public health problem nationally and internationally (Monteiro 2001; Naegle 2002; Kessler 2004), seems of little consequence to this nurse. Working in public health units is a new and emerging role for nurses however this nurse would seemingly have no interest in ATOD-related problems as a public health policy priority.

"Don't work with them & never want to .. no interest in drug and alcohol nursing whatsoever-someone else's problem thankfully" (Public Health, 10 years in position, Registered 29 years, Public sector, Metropolitan Area)

The next two reports from mental health nurses illustrate their low tolerance and personal disdain towards people with ATOD-related problems.

"My low tolerance of abusive, aggressive behaviour from alcohol & drug abusing persons. My preference over the years to avoid working in D & A area"

(Registered Nurse, Comm. Mental Health, 10 years in position, Registered 24 years, Public sector, Rural NSW)

"Personal disdain for "drunks" negative experience with drunken relatives"

(Registered Nurse, Psychiatry, 7 years in position, Registered 15 years, Private sector, Metropolitan Area)

A personal preference of a mental health nurse not to work with ATOD-related individuals runs contrary to what is known about the prevalence of dual diagnosis (concurrent ATOD and mental health problems) in mental health care settings, particularly as the published research demonstrates that the majority of consumers of mental health services are ATOD-use affected (Gournay et al. 1997; Mojtabai 2005).

Registered nurses working in the "frontline" of accident and emergency departments have been noted to have particular attitudinal responses to people presenting with ATOD-related problems (Peters et al. 1998; D'Onofrio & Degutis 2002; Stuhlmiller et al. 2004). These attitudinal responses have often been reflected against a framework of work overload, environmental, and interactional stress, so often found in a busy and acute care environment. Although the responses below may not be universal, the emergence of value-laden adjectives such as "cunning", "waste of time", and "self-inflicted" are telling in themselves.

"People with dependency problems are very cunning and I find this hard to deal with at times, ie. what attitude to take"

(Registered Nurse, Accident & Emergency, 16 years in position, Registered 21 years, Public sector, Metropolitan Area)

"Lack of interest in self inflicted diseases" (Registered Nurse, Accident & Emergency, 2 years in position, Registered 23 years, Public sector, Metropolitan Area)

"A waste of time - no thanks from pt. for a lot of my own time & effort"

(Nurse Unit Manager, Accident & Emergency, 9 years in position, Registered 19 years, Public sector, Metropolitan Area)

A further comment from a registered nurse in a busy metropolitan accident and emergency unit illustrates the complexity of attitudes that seem to be an admixture of both internal and external factors. This nurse did not see it as being the nurse's role to intervene in ATOD-related problems.

> "I don't think it's a nurse's place to intervene, there is often not enough time (especially in a busy A & E unit) & often the patients are resentful & have no desire to alter their behaviour or lifestyle even for the sake of their health - why should I put up with any more shit than I already do?"

> > (Registered Nurse, Accident & Emergency, 2 years in position, Registered 13 years, Public sector, Metropolitan Area)

Participants from other acute care areas such as intensive care units, high dependency units, and recovery units reported various attitudinal responses, some being categorical and unequivocal.

"Lack of tolerance to drunks & junkies" (Assistant Director of Nursing, High Dependency, 1.5 years in position, Registered 21 years, Private sector, Metropolitan Area)

"Find IV. drug users conniving/cheating & abusive" (Clinical Nurse Consultant, ICU, 5 years in position, Registered 18 years, Public sector, Metropolitan Area)

This next report from an intensive care nurse illustrated a demarcation that many nurses may make, that is a sense of professional responsibility, a duty of care to help and protect the patient whilst in care but as noted in this response "... after that I avoid them and others with such problems".

"Do I care? ... I don't think I care much ...I nurse drug/alcohol dependent clients, help & protect them in my environment but after that I avoid them and others with such problems"

(Registered Nurse, ICU, 9 years in position, Registered 21 years, Public sector, Rural NSW)

The response below from a clinical nurse specialist in infection control revealed that even if more education and training were available to nurses it would not be of interest to her. This has particular concern considering the strong association with injecting drug use, HIV and Hepatitis B and C.

"If this survey is designed to establish a base line of knowledge & introduce more courses - even if they are available they would not interest me and may not interest any nurses not working in areas where management of drug & alcohol is an issue to them." (Clinical Nurse Specialist, Infection Control, 10 years in position, Registered

21 years, Public sector, Metropolitan Area)

It is understandable that the care of the vulnerable neonate elicits powerful emotional responses. As has been revealed in this Chapter, nurses working in neonatal care, commonly responded very fully and descriptively, while having quite polarised views. Both of these next responses seem to be influenced by the neonatal nurses' experience of patients with late order presentations of ATOD dependence, not reflective of the full spectrum of ATOD-related problems that can influence perinatal outcomes. It is of note that in the more vitriolic response of the two, this clinical nurse specialist not only acknowledged a lack of current ATOD knowledge but was also frank in his/her lack of interest in attaining it. It is of considerable concern, that this respondent had a low non-judgement score (2.5 [mean for total population = 3.57 of a maximum of 5]) and a low knowledge score (knowledge score = 9 [mean knowledge score for total population = 11.7 of a maximum of 22]).

"I am a Neonatal Nurse and although we have children of substance abusing parents I really do not know what the current treatment for alcohol or drug withdrawal nor do I have any interest. It takes me all my time just to be civil to drug users. They are so demanding and have little time for anyone but themselves. They steal i.e. money, anything they can get from the Nurses who care for their babies with no remorse! And are encouraged by Social Workers, etc."

(Clinical Nurse Specialist, Neonatal, 10 years in position, Registered 21 years, Public sector, Metropolitan Area)

The second response acknowledged an attitude problem which prevented intervention and this finding was highly convergent with the regression analysis finding that therapeutic attitudes overall were the strongest predictor of clinical activity.

> "I have very little sympathy for alcoholics or drug addicts - it is their families that suffered the most. I guess I have an attitude problem towards drug related problems which prevents me intervening in such cases. I work in an area where the patients are not alcoholics or drug addicts, but as a result of their parents abuse, their infants suffer" (Clinical Nurse Specialist, Neonatal, 1year in position, Registered 18 years,

> > Public sector, Metropolitan Area)

The issue that emerged here, as found elsewhere, was a lack of sympathy from some neonatal nurses for patients due to their ATOD behaviour, and as parents causing their "innocent" infants to suffer. While this is understandable at a dynamic level this was also contradicted by nurses from neonatal care who spoke clearly and passionately of the need for structural, institutional support for nurses, in order to get a better outcomes for the ATOD affected neonates and support to deal with parenting and family situations they identify. Responses of this nature will be discussed more fully under the category code of 'Factors Located in the Workplace' and 'Factors Located within Other Health Care Providers'.

6.2.6 Nurse Lacks Confidence

	Freq.	Percent
YES	65	5.1
NO	1220	94.9

 Table 36:
 Theme A.03 - Nurse Lacks Confidence (n=1281)

As this theme suggests it was statements such as "lack confidence", "I am unsure", and "not sure of what I'm doing" that were particular to this thematic detail code. The first observation to be made is that as a 'Factor Located within the Nurse' that affects nurses' ability to intervene with ATOD-related problems, the proportion of respondents was only marginally lower than those demonstrating negative attitudes and markedly lower than other factors, for example, lacking knowledge, and lacking skills (Table 30). It is noted below that some responses from across a range of clinical settings, were stated as lack confidence.

"Don't know what to do" (Registered Nurse, Community Generalist, 7.5years in position, Public sector, Metropolitan Area)

"Lack of confidence in my ability to intervene" (Clinical Nurse Specialist, Midwifery, 6 years in position, Registered 18 years, Public sector, Metropolitan Area)

"I have never nursed someone with a serious drug problem, would feel very inadequate to handle the situation - not confident" (Registered Nurse, A & E/Midwifery, 9 years in position, Registered 21 years, Public sector, Rural NSW)

As may be anticipated, respondents commonly reported their lack of confidence as due to a lack of education, knowledge, training, skills, and information and/or experience.

"Lack of information & skills in approaching drug-related problems in a effective manner"

(Nurse Unit Manager, Cardiology, 5 years in position, Registered 15 years, Public sector, Metropolitan Area)

"With little education on D & A & little amount of practice dealing with these types of patients I forget what to do" (Registered Nurse, Obstetrics, 7 years in position, Registered 10 years, Public sector, Rural NSW)

"Lack of knowledge on how to manage the person. Uncertainty in relating to these people - mainly due to lack of knowledge" (Registered Nurse, Palliative Care, 2 years in position, Registered 17 years, Public sector, Metropolitan Area)

Some respondents such as this senior nurse in risk management made the point that their confidence is variable and relates to the amount of clinical exposure they have with ATOD-related problems. This sort of response is consistent with the domain of "exposure" used in the regression model, that is to say the more commonly the nurse is exposed to ATOD-related problems, the greater their level of confidence and clinical activity (5.9.2.2).

"I feel I can intervene effectively sometimes, but other situations I feel less confident to approach due to the fact that I do not work with alcohol/drug related pts/situations on a regular basis and have limited contact"

> (Clinical Nurse Consultant, Risk Management, 4 years in position, Registered 21 years, Public sector, Metropolitan Area)

Another relationship demonstrated empirically was that positive therapeutic attitudes were the strongest predictor of clinical activity. Furthermore within the aggregate set of therapeutic attitudes it was Role Adequacy, the sense of being able to intervene, that was most poorly subscribed to by nurses. Such a relationship begs the question, if nurses perceived themselves as being more adequate (more confident) and in fact knew more and had higher levels of skills and knowledge, would they do more? The response of this experienced nurse in women's health supports the likelihood of this being so.

"If I had a good knowledge of alcohol & drug related problems & therefore was confident... I would be more inclined to encourage the client to discuss the problem & the client would feel more confident disclosing"

(Clinical Nurse Consultant, Women's Health, 2 years in position, Registered 12 years, Public sector, Metropolitan Area)

The response of this clinical nurse specialist in mental health suggested a sense of inadequacy was due to lack of education, but also lack of confidence in how and when to refer on without "... being thought as, as being silly", was a source of embarrassment.

"Because I have had little formal nurse education on "drug' problems (in the broad sense of the word) I feel a bit inadequate. I feel they should be dealt with elsewhere than in an acute Psych Ward and should be treated by specially trained staff. In my hospital we do have specialist D&A services but as my base knowledge is so low I am not sure when to refer to them without being thought of as being silly"

(Clinical Nurse Specialist, Mental Health, 6 years in position, Registered 33 years, Public sector, Metropolitan Area)

Of a similar nature was the comment of a deputy director of nursing, suggesting a relationship between level of confidence and credibility. The above two comments add strength to an argument for standardised assessment and intervention protocols that facilitate communication between health care disciplines, referral between clinical settings and improving practice.

"Ability to feel able to assess & make valued judgement to fellow peers - e.g. taken seriously by M.O. and outside services such as counselling"

(Deputy Director of Nursing, 4 years in position, Registered 14 years, Public sector, Rural NSW)

The following are reflections of the influence of clinical support and supervision as factors influencing nurses' ability to intervene with ATOD-related problems. The first of these suggests conflict between close and hierarchical supervision and the professional development of one's own clinical confidence.

> "96% of times worked I have Senior Reg. Nurses in charge of unit and/or Clinical Nurse Consultant - both of which wish all interventions discussed with them first - which is re-assuring & comforting to me in past. It's takes any responsible action away from me and often leads to tentative & unsure action"

(Registered Nurse, Accident & Emergency (Casual), 4 years in position, Registered 8 years, Public sector, Metropolitan Area)

In an ideal environment having collegiate supervision and support from senior clinical nurses occur, however nursing shortages mean that this is often not the case (Severinsson & Kamaker 1999; Cowin & Jacobsson 2003a). At a minimum level having access to standardised nursing manuals and protocols that inform the nurse about assessment, intervention procedures and protocols for ATOD-related problems seems essential. The next report illustrates a shift in clinical confidence possibly due to a change in the context of care. This nurse, registered for eighteen years, but only working in the community for six months, noted sense of greater confidence when working in the more controlled hospital environment compared with a sense of less confidence due to a lack of experience in a wider community context.

"During my nursing prior to commencing community health work, I found nursing in the hospital situations well controlled & able to apply this nursing confidently. But with the increase of drugs to younger people in the community situation, I am not experienced enough"

(Registered Nurse, Community Generalist, 0.5 years in position, Registered 18 years, Public sector, Rural NSW)

There was also a common theme related to nurses' sense of lacking confidence due to their lack of interactional or interpersonal skills. The nature of these comments was strongly linked to the larger group of responses under the detail code 'Nurse Lacks Skills'. It was found that the type of skills nurses identified as lacking were often described as counselling skills or communication skills. That the nurse may say something to the patient that was judgemental or insulting was a common concern.

> "Unsure as what to say to the patient, without being judgemental. Sometimes it's not what you say but how you say it. May come across the wrong way to the patient"

(Registered Nurse, Orthopaedics, 0.5 years in position, Registered 5 years, Graduate, Private sector, Metropolitan Area)

"Fear that patient will be "insulted" and therefore put at risk any further approaches by trained people" (Registered Nurse, ICU/CCU, 2 years in position, Registered 9 years, Public

sector, Metropolitan Area)

Concerns about establishing trust were indicators of nurses' understanding the importance of trust within the therapeutic relationship.

"My understanding of the effects of alcohol or other drugs on people. My understanding of how to handle the patient. Ability to build up trust with the patient"

(Registered Nurse, Outpatients, 1 year in position, Registered 23 years, Public sector, Metropolitan Area)

Concern about encroaching on the patient's privacy was one that often arose from nurse's tentative sense as to whether it is a rightful and proper thing to enquire of a patients' ATOD use.

"Not sure of my position in overstepping the boundary of personal privacy-is it any of my business?"

(Clinical Nurse Specialist, Operating Theatre, 4 years in position, Registered 14 years, Public sector, Metropolitan Area)

Central to this comment is the nurse's lack of surety. That ATOD-related assessments and interventions should be carried out is central to the therapeutic attitude set of *Role Legitimacy*. It has already been noted empirically that *Role Legitimacy* was the most highly scored of the attitudinal sets or subscales that comprised the overall therapeutic attitude of these nurses. In other words nurses more commonly thought that ATOD-related assessment and intervention were a proper and legitimate nursing activities than not. This notwithstanding this particular nurse raised the concern that other nurses have expressed; that asking

about ATOD use is personal and intrusive, even if necessary. This particular concern is discussed later, but it is noted at this point that under the category code 'Factors within the Social/Cultural Context', 7.1% of respondents made comments consistent with the view that ATOD interventions by nurses were intrusive or an invasion of a patients' privacy (Chapter Seven).

6.2.7 Nurse Has no Authority to Act

	Freq.	Percent
YES	40	3.1
NO	1245	96.9

 Table 37:
 Theme A.11 - Nurse has No Authority to Act (n=1281)

That nurses did not feel they had authority to assess and intervene in ATODrelated problems, or indeed in some instances even speak about them, was confined to a relatively small proportion of respondents in the major survey (3.1%). As noted in the section describing the method of content analysis (Chapter 2) "No Authority to Act" was a theme that emerged only when thematically analysing all qualitative data (n = 1017) in the major survey. It is of interest however that in the pilot study the smaller number of respondents (n = 255) of which 145 responded to the open-end questions, this theme did not emerge. It is likely that with the more broadly based and diverse population issues such as this could emerge that may have otherwise not arisen.

The sense that the nurse does not have the authority to act on ATOD-related problems was more common amongst respondents from the private sector than from the public sector within the major survey, but not exclusively so. It needs to be considered that 'No Authority to Act" was an amplification of the more common empirical finding that a large proportion of nurses felt that they were not encouraged in their workplace to intervene with patients with ATOD-related problems. Quantitative data demonstrated that over 40% of respondents responded to this *Role Legitimacy* item within the Therapeutic Attitude scale. The theme "No Authority to Act" however was also an expression of something else.

seemed to more explicitly believe that they were actively discouraged, and the authority to act was not extended to them, as it was commonly held by the medical practitioner.

"The Nurse's role we don't have authority - limited by the Medical officers in charge of treatment"

(Clinical Nurse Specialist, ICU, 5 years in position, Registered 14 years, Private sector, Metropolitan Area)

"Private patients - Doctors control all care. NB: Prescribed Drug Addicts - Medication of Addiction prescribed by M.O.'s for extended periods"

(Assistant Director of Nursing, Med/Surg., 14 years in position, Registered 31 years, Private sector, Metropolitan Area)

This theme strongly emerged from nurses working in the medical/surgical setting, and then particularly in the private sector.

"Private patient come under the care of VMO's ...dictate patient's medical care"

(Nurse Unit Manager, Surgical, 4 years in position, Registered 20 years, Private sector, Rural NSW)

"Work, in a private hospital of some Repute-nurses do not get involved - in this domain it is Dr/Pt relationship"

(Clinical Nurse Consultant, Med/surg., 8 years in position, Registered 24 years, Private sector, Metropolitan Area)

"Working in an acute medical/surgical private hospital, I rarely nurse patients with alcohol or drug withdrawal symptoms. Treatment is always guided by the admitting medical officer"

(Registered Nurse, Med/Surg., 7 years in position, Registered 10 years, Private sector, Rural NSW)

This last comment demonstrates that there was some overlap between this particular thematic code and others namely; 'Not relevant/not my business', within the category code, 'Factors Located within the Workplace', and 'Predominance of medical model', within the category code 'Factors Located within Other Health Care Providers'. The qualitative difference between this code and others was that nurses lacked the right and authority to act. It is of note that of 40 respondents commenting that they had no authority to act, there were no such comments made by any of the 294 nurses working in primary health care settings. This finding seems to be consistent with the higher level of clinical autonomy and a broader range of caring responsibilities afforded to primary

health care nurses. It was also convergent with the empirical finding that of the four major clinical categories, that of administration/education, acute care, general nursing, and primary health care, primary health care was the only clinical area that was of statistical significance in predicting clinical activity (Table 29).

6.2.8 Do Not Know Policies/Referrals/Resources

	Freq.	Percent
YES	37	2.9
NO	1248	97.1

Table 38: Theme A.10 - Do Not Know Policies/Referrals/Resources (n=1281)

Qualitative responses were drawn into this detail code because nurses made explicit their lack of knowledge about supportive services, referral pathways, or ATOD-related management policies. There was some degree of overlap between this theme and other similar themes; 'Lack of Backup Support Structures' to be found in the category code, 'Factors Located within the Workplace', and, 'Lack of Specialist Referral Options', found within the category code, 'Factors Located within Other Health Care Providers' (Chapter 7). The qualitative difference being that within this code it is the respondent that acknowledges that he/she has no knowledge of what support services may be available, rather than noting the lack of available support. The small number of respondents, (n=37) who were located within this thematic code demonstrated in the first instance, that not knowing about ATOD-related services and resources was far less commonly identified as a factor that affected intervention than those discussed above, particularly, lack of knowledge, skills, experience and awareness. Responses within this theme fall loosely into two groups. Firstly those that state they did not know current intervention policies.

> "Lack of knowledge re Appropriateness of intervention at this level." (Clinical Nurse Specialist, Surgical, 11 years in position, Registered 22 years, Public sector, Metropolitan Area)

"I am not really sure of drugs used currently for patients on either rehab programmes or those withdrawing from different drugs" (Nurse Unit Manager, Surgical, Registered 24 years, Private sector, Metropolitan Area)

The second group of responses had in common respondents who reported that they did not know of available support services and more importantly, the best or most appropriate services for referral.

> "Lack of knowledge of the range of resources available- don't know where help is available, eg, counsellors & how effective it is"

(Clinical Nurse Specialist, Community Generalist, 8 years in position, Registered 25 years, Public sector, Metropolitan Area)

"Lack of knowledge of all appropriate services available to the patient and/or family"

(Nurse Practitioner, Community, 5 years in position, Registered 27 years, Public sector, Rural NSW)

"Lack of knowledge of local Services & actual people to contact for referral"

Community (HACC) Co-ordinator, 4 years in position, Registered 31 years, Public sector, Metropolitan Area)

It is notable that concerns about not knowing available services was more likely to come from primary health care nurses, community health nurses in particular, and responses pertaining to intervention were more likely to arise from general nurses. These data suggest that nurses working in a primary health care role have a more active concern about continuity of care (as reflected by higher level of ATOD clinical activity) than their hospital based counterparts. Important exceptions were the intensive care nurse, and senior nurse working in obstetrics and gynaecology in the public sector:

"Lack of knowledge of back up D&A facilities in the area"

(Registered Nurse, ICU, 0.5 years in position, Registered 20 years, Public sector, Rural NSW)

"Knowledge of worthwhile programs available for patients on discharge"

(Nurse Unit Manager, Obstet & Gynae., 7 years in position, Registered 21 years, Public sector, Metropolitan Area)

6.2.9 Nurse Frightened/Fearful

	Freq.	Percent
YES	33	2.8
NO	1252	97.4

Table 39: Theme A.07 - Nurse Frightened/Fearful (n=1281)

The relatively small number (n = 33) of respondents who made explicit statements about being frightened or fearful of interacting, and intervening, with patients with ATOD-related problems, was somewhat surprising. Earlier published works in regard to nurses' negative attitudes towards patients with ATOD-related problems has often portrayed such patients as "troublesome", "violent" and "dangerous". In relation to this study nurses' perceptions of patients' aggressive and violent behaviour is implicit in the thematic code 'Nurse has Negative Attitudes' (above). The qualitative data from smaller group of respondents seemed to identify their own fearfulness rather than the patient's behaviour as a limiting factor for intervention. Their fear relates largely to nurses' fear of violence, physical injury or harm as these reports below attest.

"Concern about a violent response thus a worry about safety for me and my staff"

(Assistant Director of Nursing, 8 years in position, Registered 24 years, Public sector, Rural NSW)

"Afraid I might suffer some physical violence and there would be no one to help"

(Registered Nurse, Community Generalist, 3 years in position, Registered 20 years, Public sector, Metropolitan Area)

That the ATOD-affected individual may be "unpredictable" was also an emergent theme.

"Personal safety when making home visits due to their "unpredictable behaviour at times"

(Registered Nurse, Community Generalist, 3years in position, Registered 24 years, Public sector, Rural NSW)

"Fear of aggression/ unpredictability of behaviour" (Clinical Nurse Specialist, Midwifery/Education, 7 years in position, Registered 20 years, Private sector, Metropolitan Area) A community midwife (see below) suggested that aggressive behaviour was "perceived":

"I am not comfortable with the perceived aggressive behaviour that can be part of their lifestyle" (Clinical Nurse Specialist, Community Midwife, 8 years in position,

Registered 22 years, Public sector, Rural NSW)

For other respondents it was not only their fear of injury but also of contracting infectious disease e.g., Hepatitis, HIV/Aids and so forth.

"Risk of HIV/Hep B/Hep C. Work in a high risk area" (Clinical Nurse Specialist, ICU, 5 years in position, Registered 18 years, Public sector, Metropolitan Area)

"Fear of: physical injury ... due to violence, disease Hepatitis, AIDS etc ... to myself and through to my family eg transmission of Hep A,B" (Registered Nurse, Community Generalist, 8 years in position, Registered 19 years, Public sector, Metropolitan Area)

For some nurses the fear of aggression was sufficient enough for them to be quite frank in reporting that they do not want to get involved, as this accident and emergency nurse makes clear.

"Don't want to get involved in case they get aggressive, etc Keep all personal conversation to a minimum found it best not to ask too many questions."

(Registered Nurse, Accident & Emergency, Internal Ambulance, 3 years in position, Registered 10 years, Public sector, Metropolitan Area)

Some nurses, as illustrated by this medical nurse, feared being hurt physically because of a previous experience of this having occurred.

"I become very nervous when a patient is withdrawing from an alcohol or drugs as I was hurt in my training by a man withdrawing" (Registered Nurse, Medical, 4 years in position, Registered 14 years, Public sector, Rural NSW)

The occurrence of nurses being assaulted was a reality, and such events had received recent local media publicity and have been described in the literature (Lyneham 2000; Adeb-Saeedi 2002; Cowin et al. 2003; Crilly, Chaboyer & Creedy 2004). It is known that there is an established relationship between violence and the use of some drugs, particularly alcohol, and more recently psycho-stimulants (Degenhardt et al. 2005). Given a public perception of violent

drug-using individuals and the violent alcoholic, the small number of responses from these nurses in 'frontline', was surprising. What was clear, having emerged strongly within the category theme 'Factors Located within the Workplace' (Chapter 7) nurses felt the need for support in terms of personnel resources and established and clear protocols for management of aggression and violence. Research into critical incident debriefing and strategic interpersonal programs aimed at de-escalating violence have been shown to be effective, both in reducing actual and potential harm to care givers, but also in significantly reducing their perception of anticipating harm, that is being fearful. (Cowin et al. 2003). The recognition of both the potential for violence and the nurse's need for security and safety was well articulated by this psychiatric nurse below.

"I feel the impediments for nursing staff could be security, safety, violence, so I feel resource personnel for back up is needed. Size of client (and level of intoxication) maybe threatening to other clients and staff"

(Registered Nurse, Psychiatry, 5 years in position, Registered 23 years, Public sector, Metropolitan Area)

6.2.10 Frustration/Impatient/Hopelessness

YES

NO

Table 40:Theme A.0	9 - Frustration/Impatience/	Hopelessness (n=1281)
	Frea.	Percent

32

1253

The sense of hopelessness and frustration revealed by some nurses in dealing with ATOD-related problems fell lower in the hierarchy of expressed feelings about dealing with patients with ATOD-related problems. It is important to differentiate that this was conceptualised as a 'Factor within the Nurse' for the sense of hopelessness, frustration and despair also emerged under 'Factors Located in the Workplace', notably the perception of a lack of structural and contextual support. 'Hopelessness' was also an emergent theme within 'Factor within the Patient' associated with recidivism, non-compliance and denial. All of these findings can be seen as part of the complex and dynamic nature of what Anderson and others (Anderson et al. 2004) refer to as "therapeutic nihilism".

2.5

97.5

In clinical terms the nurses' sense that as there is little chance of positive outcome means there seems little point in actively doing anything. A related construct is that of "therapeutic pessimism", the idea that even if you do go to the bother of doing something it is not likely that there will be any positive therapeutic outcome. (see chapter 1) What is interesting about the small number of responses, (in total 32), was that they varied and represented different dimensions and sources of nurses' frustration and sense of hopelessness in dealing with this patient population. Those responses closest to the construct of "therapeutic pessimism" are illustrated in the first three responses below.

"I doubt there's much anyone can do anyway"

(Registered Nurse, Community Generalist, 3 years in position, Registered 20 years, Private sector, Metropolitan Area)

"Sense of hopelessness - these patients are rarely cured" (Registered Nurse, Community Generalist, 8 years in position, Registered 22 years, Public sector, Metropolitan Area)

'Feeling that intervention is hopeless unless the person is motivated from within to stop"

(Nurse Unit Manager II, 5 years in position, Registered 24 years, Public sector, Rural NSW)

The comment of another senior nurse unit manager, hospital-based, suggests an important relationship between "revolving door admissions" and nurses' sense of helplessness in being able to optimally manage these patients.

"Frustration at the revolving door admissions of these patients. My personal feelings of helplessness in being able to manage these patients optimally"

(Nurse Unit Manager II, 8 years in position, Registered 22 years, Public sector, Metropolitan Area)

The sense of professional, and perhaps, personal hopelessness reported by some nurses related not only to their sense of poor outcomes but also their perception that there are just not enough adequate treatment services available.

> "The low success rate of superficial, short term approaches to treatment & the lack of availability of alternatives to these, makes it a depressing problem to come up against in general nursing work. Where to refer that will really help?"

(Clinical Nurse Specialist, Palliative Care, Community 9 years in position, Registered 22 years, Public sector, Metropolitan Area)
"Lack of adequate facilities & lack of staff. These people need much of your time - it's frustrating when you can't provide them with what they need. It's also very difficult coping with patients with drug & alcohol problems in a busy general ward"

(Nurse Unit Manager I, Surg. H. Dep Unit, 4 years in position, Registered 16 years, Public sector, Metropolitan Area)

There was also a sense of hopelessness as expressed this registered nurse below who was working in a coronary care unit in a major teaching hospital. Implicit in this rather provocative response was the question of continuity of care. The sense of frustration arose perhaps from the sense that too little had been done too late.

> "Sometimes a heavy drinker is recognised but I do not see what happens afterwards to help them. Does the doctor talk to them? Does a social worker see them? Personally I feel these things are unchecked or disregarded at the time of admission until discharge. Should nurses have to carry the problem??"

> > (Registered Nurse, CCU, 5 years in position, Registered 7 years, Public sector, Metropolitan Area)

For this neonatal intensive care nurse the sense of helplessness seemed to arise out of the complexity of ATOD-related problems, and also the clinical reality that this nurse had to deal with in terms of far-reaching consequences for newborn and family.

> "Have a feeling of helplessness - i.e. unable to assist people with complicated drug (including alcohol) additions; also their complicated personal problems. I have more contact with the victims (infants) of Drug/Alcohol abuse than with the Substance abuser; so I have more sympathy for the victim"

(Registered Nurse, Neonatal ICU, 7 years in position, Registered 12 years, Public sector, Metropolitan Area)

This experienced accident and emergency nurse expressed frustration that seemed to arise more clearly from 'Factors Located within the Patient' that is, the patient's behaviour.

> "People who present for treatment at A&E department who are inebriated are the most aggravating and impossible people to treat, as the majority of them are violent and hard to handle"

> > (Registered Nurse, Accident & Emergency, 5 years in position, Registered 16 years, Public sector, Rural NSW)

Finally a report from another accident and emergency nurse from a rural-based hospital related to 'Factors within the Workplace' and 'Factors within other

Health Care Providers', and their sense of inequity within the nursing hierarchy. That this "shop-floor" nurse had a sense of frustration in not being able to attend ATOD-related education courses to improve knowledge and skills was an important comment, reflecting the strong and significant empirical relationships found between in-service education and clinical activity, and the large proportion of nurses who identified a need for in-service education as an important 'Factor Located within the Workplace'.

"The problem of access to D&A courses and the preference given to NUMs and other seniors at cost of ward staff (who have the most after hours contact) is often discussed with great frustration - nursing staff would appreciate knowing more"

(Registered Nurse, Special Care/Accident &Emergency, 3 years in position, Registered 12 years, Public sector, Rural NSW)

6.2.11 Nurse Knows Patient.

	Freq.	Percent
YES	5	0.4
NO	1280	99.6

 Table 41: Theme A.06 - Nurse Knows Patient (n=1281)

Knowing the patient socially and being associated with them to a degree that it affected or restricted the nurse's ability to intervene in ATOD-related problems, was a far stronger emergent theme in the pilot study than the larger state-wide survey. Whereas the number of respondents was much lower and only 145 responded to the open-end question, it was significant in that this pilot study was conducted in rural New South Wales. Nurses were recruited from two major base hospitals (Dubbo and Broken Hill) and from a wide geographic area that could be described as "outback" Australia (Wilcannia, Bourke, and Cobar.) Due to the closeness of small community networks in the pilot study a common response was that identifying a patient as having an ATOD-related problem was highly stigmatising. That the nurse knew the patient was less of an issue in the major state-wide survey, and in fact only 5 respondents could be linked with this thematic code. It is of little surprise therefore that all respondents who worked in the rural sector identified that working in a small community and having local knowledge of their patients were inhibiting factors, for example:

"Small community - pt. Knows staff & vice versa" (Registered Nurse, General/A&E/maternity, 10 years in position, Registered 25 years, Public sector, Rural NSW)

"Personality clashes - local knowledge of clients" (Registered Nurse, Med/Surg/A & E, 13.5 years in position, Registered 30 years, Public sector, Rural NSW)

6.3 Qualitative Themes: Factors Located Within the Patient

This qualitative theme; 'Factors Located within the Patient' was largely comprised of attributions that nurses conferred on the patient. Such attributions may have related to behaviours of the patient, for example "patient is uncooperative" or that the patient was considered to have, for example "denial", or "lack of insight", or attributions of the patient's diagnosis or health status, for example "level of intoxication", or "already in treatment". Comparisons of this qualitative theme with the one discussed previously; 'Factors Located within the Nurse', suggests that there is a relationship between these two qualitative themes. Attributing a particular characteristic or behaviour to another is likely to reflect underlying values and experiences of those who make the attribution (Cartwright 1980; Lewis 2002). Where this overlap between these themes became apparent is noted as this discussion progresses. Albeit the division between 'Factors Located within the Nurse' and 'Factors Located within the Patient' may be somewhat artificial, the investigator has endeavoured to make this distinction as clear as possible by including reports that are patient centred, as opposed to internal attributes from the nurses' perspectives.

Data that indicated factors located within the patient that affected the ability of the nurse to intervene with patients with ATOD-related problems also gave rise to other considerations. First was consideration of the contribution of the empirical measure *Non-judgement* to the overall measure of *Total Therapeutic Attitude*, and the degree of resonance this had with self-reports of nurses. It is important to note again, with reference to Table 42 (Mean Scores of Total Therapeutic Attitude Scale and Factors Scales), that the *Non-Judgement* score is second only to the *Role Legitimacy* score in the strength of contribution it makes to *Total*

Therapeutic Attitude. It is remembered that regression analysis demonstrated that *Total Therapeutic Attitude* was the strongest predictor of clinical activity.

Mean	Standard Deviation
3.31	0.46
2.53	0.94
3.58	0.59
3.57	0.60
	Mean 3.31 2.53 3.58 3.57

 Table 42: Mean Scores of Total Therapeutic Attitude Scale and Factor Scales (n=1281)

The smaller contribution that *Role Adequacy* made, as demonstrated by the lowest mean score (2.53), was reflected in this qualitative analysis by the differences in the proportional response to the two category codes 'Factors Located within the Nurse' as opposed to 'Factors Located within the Patient'. In simple terms nurses far more commonly identified factors within themselves as opposed to factors within the patient as factors that affected their ability to intervene in patients with ATOD-related problems. As can be noted in Table 30 above, ('Factors Located within the Nurse' – Ranked by percentage of responses), the top four detail codes within that theme draw a higher proportion of responses than the first ranked detail code within the 'Factors Located within the Patient' (below).

 Table 43: Factors Located Within the Patient – Ranked by Percentage of Responses (n=1281)

1.	Patient is Uncooperative/Non-compliant/Does not want to stop	¹ (10.5% ² [8.3%])
2.	Denial/ Lack of acceptance of a problem	(8.6% [6.8%])
3.	Level of Intoxication/Type of drug use/Withdrawal/Long Term effects	(7.7% [6.1%])
4.	Inappropriate	(4.9% [3.9%])
5.	Disruptiveness/Abusive behaviour/Aggression	(4.6% [3.7%])
6.	Social Status /Age	(4.5% [3.6%])
7.	Less deserving or Lower Priority of care	(2.3% [1.8%])
8.	Recidivism	(2.0% [1.6%]
9.	Apathy/Lack of Insight	(1.6% [1.3%])
10.	Already in Treatment	(1.1% [0.9%])
11.	Untrustworthy	(1.0% [0.8%])
12.	Inability to Cope	(0.5% [0.3%])
13.	"Personality Clash"	(0.3% [0.2%])
1.	(%) Proportion of responses to open-ended Question, n=1017	

^{2.} [%] Proportion of responses of total sample, n=1281

These particular qualitative findings are highly convergent with the empirical ones. It is the nurse's self-identified lack of knowledge, skills, experience and confidence that had a greater effect on their ability to intervene, and these self-reports were convergent with the low *Role Adequacy* scores as measured. The lower proportion of responses that located factors affecting intervention as being "within the patient", were convergent with the empirical finding that *Non-Judgement* mean score was significantly higher than *Role Adequacy* mean score. These findings must be considered against the literature that commonly reports nurses as attributing patients with ATOD-related problems as being "combative", "disruptive" and "difficult to manage". However, notwithstanding that the proportional response was lower for 'Factors Located Within The Patient' it is noted that the top two ranked themes were characteristic of these conventional negative, patient-centred attributions in that ranked number one was; patient is "uncooperative/non-compliant", and second, "denial/lack of acceptance of the problem".

In discussing the qualitative responses categorised under 'Factors Located within the Patient', there was a general sense that many comments pertained to late stage presentations of ATOD-related problems, and that the severely ATOD dependant individual, particularly in the acute and dramatic presentations of withdrawal and intoxication syndromes, can be difficult to manage and uncooperative. The interpersonal, clinical, and pragmatic value of early recognition skills and early intervention again becomes apparent.

Before progressing to a detailed analysis of reports of attributes located within the patient by detail code, it is notable that in reviewing the qualitative self-reports below, the value of using the multi-methods (quantitative and qualitative) approach was reaffirmed. By using different data sources within this one study in order to better identify and understand complex behaviours and ideas, "... a more complete, holistic and contextual portrayal" (Jick, 1983, p.138) emerged. To reiterate Jick:

"...triangulation, however, can be something more than scaling, reliability and convergent validation." (p. 138)

The *Non-judgement* scale items seen below in Table 44, and nurses' self-reports that follow, have implicit within them judgements that are more diverse, better elaborated and thus allow for a deeper understanding of the phenomena to emerge.

Table 44: Non-Judgement Scale Items

For the vast majority of alcoholics and addicts counselling is a waste of effort

Only those patients with a history of frequent intoxication should be asked about their drinking

Recently detoxified patients are likely to drink and/ or take drugs as soon as they are out of hospital

Drug addicts have a weak will

6.3.1 Patient Is Uncooperative/Non-Compliant/Does Not Want to Stop

Table 45: Theme B.01 - Patient Uncooperative/Non Compliant/Doesn't Want toStop (n=1281)

	Freq.	Percent
YES	107	8.3
NO	1178	91.7

It is of interest that this first ranked thematic category, to which 107 nurses made qualitative responses, represented a more common group of responses than the theme; patient was "disruptive", "abusive" or "aggressive", which ranked number five. The first three responses suggested that the nurses are aware that ATOD use is problematic and/or destructive, and that there is a need for intervention. It is the patient's intention for action that was of issue here and not that of the nurse.

"Lack of willingness to change on the part of the patient, despite the fact that tobacco has such a profound effect in diabetes complications"

(Clinical Nurse Consultant, Diabetes Education, 11 years in position, Registered 22 years, Public sector, Metropolitan Area)

"These clients are not very cooperative about being referred to Specialist Services despite clear evidence their injury was due to alcohol – most commonly and/or other drug use"

(Area Coordinator, Injury Prevention, 10 years in position, Registered 23 years, Public sector, Metropolitan Area)

"They have no desire for intervention even when no-one is arguing it is needed!"

(Director of Nursing, Aged Care, 6.5 years in position, Registered 16years, Public sector, Metropolitan Area)

The next cluster of responses had in common firstly, that they were comments from senior nurses, either clinical nurse specialist, or clinical nurse consultant, secondly, three nurses worked in psychiatry where it is known that the concurrence of ATOD use problems and mental health problems is of high prevalence (de Crespigny et al. 2002) and thirdly, all comments were centred on non-compliance, low motivation, or unwillingness of patients to change. Such comments resonated with the construct of "Therapeutic Nihilism".

"Patient's unwillingness - non compliant .. not willing to change habits"

(Clinical Nurse Specialist, Community Generalist, 5 years in position, Registered 25 years, Public sector, Rural NSW)

"Low motivation- their own willingness to change" (Clinical Nurse Specialist, Acute Psychiatry, 8 years in position, Registered 20 years, Public sector, Rural NSW)

"Their willingness to listen and participate in their treatment" (Clinical Nurse Consultant, Acute Psychiatry, 7 years in position, Registered 15 years, Public sector, Metropolitan Area)

"Patients lack of motivation, despite clear evidence and sometimes a clear understanding that that D&A use is a central problem" (Clinical Nurse Specialist, Community Mental Health, 5 years in position, Registered 16 years, Public sector, Metropolitan Area)

The next response from an experienced mental health nurse reflected the *Non-judgement* scale item; "*Recently detoxified patients are likely to drink and/or take drugs as soon as they are out of hospital*", it also reflected "therapeutic pessimism".

"Once de-toxed., client is often unwillingly to stay in hospital, Rehab Centre. Client does not admit he/she has a drinking problem – the most likely outcome is that they will continue and we will see them back with us"

(Clinical Nurse Specialist, Mental Health, 10 years in position, Registered 23 years, Public sector, Metropolitan Area) It is acknowledged that relapse is the most common complication of ATOD dependence (Schuckit et al. 2003), and responses of the nurses overall were less unequivocal than from this particular mental health nurse. When the total sample was analysed (n=1281), more than two out of every five respondents (42.8%) responded to the above item by indicating that they were "not sure". More respondents disagreed (30.8%), or strongly disagreed (1.8%), than agreed (21.2%), or strongly agreed (1.6%) with this particular item. (See Table 17: Agreement with Therapeutic Attitude Items by Percent).

That the experience of nursing the person with an ATOD-related problem influenced nurses' perception of the patient was affirmed by the pessimistic comment of this ATOD specialist nurse.

"The client has no motivation or desire to change their behaviour" (Clinical Nurse Consultant, Drug & Alcohol, 5 years in position, Registered 18 years, Public sector, Rural NSW)

It is little wonder then that therapeutic pessimism may be found amongst senior nurses working in medical surgical care settings if it is also demonstrated by nurses who are positioned as being specialist in ATOD-related problems, and from whom other nurses might seek consultation.

"Refusal of pt. to do something even if they know there is a problem - pt. <u>Does not want</u> to have intervention"

(Nurse Unit Manager, Surgical, 10 years in position, Registered 25 years, Public sector, Metropolitan Area)

"Refusal of help by patient - patients willingness to receive treatment - Lack of information given by patient."

(Nurse Unit Manager, Surgical, 8 years in position, Registered 21 years, Public sector, Metropolitan Area)

"Most patients with these problems usually will not listen to any advice given by nursing staff or doctors about their problems, or deny that they exist at all"

(Registered Nurse, Neurology, 3.5 years in position, Registered 11years, Public sector, Metropolitan Area)

One nurse made the observation that people with ATOD-related problems are persistently resistant to change and this provides a major constraint to nurses' intervention. This nurse worked in a Spinal Injuries Unit, where the prevalence of spinal injuries due to alcohol related trauma, particularly amongst young men, was known to be high.

"Many of the patients with alcohol or drug related problems don't want to change their habits so I find it difficult to intervene with this attitude"

(Clinical Nurse Specialist, Spinal Injuries, 4.5 years in position, Registered 20years, Public sector, Metropolitan Area)

These last self-reports from midwives with considerable experience provided a perspective on patients' non-compliance and apparent irresponsibility, and a counterview that pregnant women were responsible enough to reduce their ATOD use during pregnancy and were open to discussing such use.

"Non compliant patients - failure to keep appointments- they don't take responsibility- don't tell the truth" (Midwife, 10years in position, Registered 20years, Public sector, Rural NSW)

"Most women seem reduce their drug & alcohol use while pregnant. They feel guilty about the use & effect on baby - Usually open about drug, alcohol and tobacco use"

> (Midwife, 10 years in position, Registered 25 years, Public sector, Metropolitan Area)

These opposing views indicate that opportunities for information –giving and intervention are available to nurses and midwives.

6.3.2 Denial/Lack of Acceptance of a Problem

	Table 46:	Theme B.06 -	Denial/Lack	of Acceptance	of Problem	(n=1281)
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	Freq.	Percent
YES	88	6.8
NO	1197	93.2

Eighty-eight respondents (8.6%) made a response to this qualitative theme, which is strongly related to the one just discussed, "Denial/lack of acceptance of a problem". It is the second ranked theme by proportion of qualitative responses. It was apparent that for some respondents the patient was uncooperative and noncompliant as a product of their denial or lack of acceptance of their ATOD problem. Most respondents focused on ATOD dependence syndromes as opposed to the full spectrum of ATOD-related problems.

The defences of "denial", "minimisation", "rationalisation", and "resistance" were commonly reported by nurses as associated features of dependence. It is noted of ATOD dependence syndromes that a key diagnostic criterion is continued use despite evidence of harm and a range of adverse consequences, and that the ATOD dependent individual will continue ATOD use despite clear advice to the contrary (Schuckit et al. 2003). The authoritative understanding of the natural history of ATOD dependence considered, it is of little surprise that if the nurse's eye is cast largely on those with ATOD dependence that attributed behaviours of denial and non-acceptance will emerge. There is also within these comments a sense that some nurses take this almost personally, and umbrage taken.

"Denial, I am constantly irritated, obvious drug misuse but person blatantly denies this"

(Clinical Nurse Educator, medical, 3 years in position, Registered 15years, Public sector, Metropolitan Area)

Some nurses readily made the association between denial, non-acceptance and resistance to intervention.

"Patients do not see themselves as having a drug & alcohol related problem. Patients don't want the problem discussed or to have anything done about it or have to do anything about it themselves"

(Assistant Director of Nursing, M/Surg., 14 years in position, Registered 30 years, Private sector, Metropolitan Area)

"Unwilling to accept help; Do not want any interference from anyone; Do not think they have a problem"

(Registered Nurse, Community, 1 year in position, Registered 19 years, Public sector, Metropolitan Area)

An association between denial, resentment, and prevailing community attitudes towards "drunks" and heavy drinkers, is offered by a deputy director of nursing.

"Denial, resentment & anger of afflicted person possibly because of community attitude to drunks/heavy drinkers" (Deputy Director of Nursing, Aged Care, 10 years in position, Registered 28 years, Private sector, Metropolitan Area) A clinical nurse specialist in psychiatric nursing identified the characteristic defence pattern, but in a somewhat fatalistic, "all or nothing" manner.

"Entrenched denial, Patient unable/unwilling to identify a problem .The client is not willing to admit they have a problem, they are therefore unable/unwilling to change"

(Clinical Nurse Specialist, Psychiatry, 10 years in position, Registered 26 years, Public sector, Metropolitan Area)

A younger psychiatric nurse suggested knowledge of the broader spectrum of ATOD-related problems.

"The inability of some patients to accept/understand their intake of alcohol/drugs is of an "at risk" nature and not helpful to life OR psychiatric problems"

(Registered Nurse, Psychiatry, 5 years in position, Registered 10 years, Public sector, Metropolitan Area)

It was useful to reflect on these comments in conjunction with the empirical findings of the total sample of nurses. Psychiatric nurses had the highest mean total knowledge scores, but it seems that knowledge alone is not enough. A psychiatric nurse/counsellor working in a methadone unit made a comment that perhaps reflects the clinical challenge of motivating change in patients in whom long-term ATOD dependency is well established:

"Major limitations to intervention are -The recognition of drug/alcohol problem. Their desire to address problem – their motivation to seek help/change" (Registered Nurse/Counsellor, Mental Health/Methadone Unit, 6 years in position, Registered 12 years, Public sector, Rural NSW)

This next cluster of four responses arose from nurses working in primary health care settings. The first of these was from an occupational health nurse who suggested that in this context, it may be the nurse who is the resistant, not the clients. The second was from a senior occupational health nurse who articulated difficulties of patient denial or "cover-up" as being complicit, and a sense of frustration is apparent.

"Lack of acceptance of problem; Heard all the arguments before & have built up 'resistance' so often don't bother to ask for the truth" (Registered Nurse, Occupational Health, 2.5 years in position, Registered 16 years, Public sector, Metropolitan Area) "As I work in industry, the main problem is that workmates cover for the person. I usually don't find out there is a problem until the person has "gone off the rails" e.g. absenteeism, more injuries, repeatedly late for work. Very hard to get change in others when those who need it are working against you."

(OH & Safety, Senior Advisor, 10 years in position, Registered 27 years, Private sector, Metropolitan Area)

This generalist community health nurse suggested that denial was best left unchallenged, for to confront it may well alienate the client and inhibit access for ensuing home visits. This comment overlaps with the qualitative theme 'Factors within the Social/Cultural Context', where some nurses commented that intervention was intrusive and an invasion of privacy.

> "Denial - Do not wish to alienate client and create a situation where they do not allow a visit for original reason for referral – some things are best left unsaid"

(Registered Nurse, Community Generalist, 3 years in position, Registered 10 years, Public sector, Rural NSW)

A community based palliative care nurse articulated the ideal situation in which intervention and change would seem possible. That is, the patient both accepted there was a problem and accepted help to resolve it.

> "Intervention is only possible if the patient recognises/admits to themselves they have a problem. If the patient is ready to confront the problem and accept help doing so"

(Clinical Nurse Specialist, Community Palliative Care, 8 years in position, Registered 17 years, Public sector, Metropolitan Area)

However, the following three responses suggested that when the situation was less than ideal non-acceptance and/or denial prevailed thus raising other concerns. The first of these was the belief that patients with ATOD-related problems very often underestimated, lied about, and/or otherwise kept hidden the true nature of their ATOD use.

> "Patients are often denying their own problem. Alcoholics tend to deny or underestimate alcohol use. People do not seem to be honest with tobacco, alcohol & drug conditions. How are we to know what is best for them if they do not tell the truth"

(Registered Nurse, Accident & Emergency, 10 years in position, Registered 16y years, Public sector, Rural NSW) A clinical nurse consultant in a medical surgical hospital suggested that a patients' denial not only kept the problem hidden, but the prospects of intervention were diminished when and if the problem was finally discovered.

"Denial by Patient that they have a problem. Its often hidden initially, when discovered patients not willing to change or receive help/intervention"

(Clinical Nurse Consultant, Med/Surg, 8 years in position, Registered 22 years, Private sector, Metropolitan Area)

Another medical surgical nurse suggested that the problem remains hidden until it emerged at a later point. As a nurse unit manager this nurse revealed some of the consequences of not only patient denial, but also inadequate history taking by nurses in the first instance, in that established ATOD dependency, in this case upon analgesics, gave rise to cross-tolerance and difficulties with analgesia postoperatively.

> "Some patients lie about their intake. This discovery is usually made within the first few days. Some patients with special operations are found to be reluctant to stop using pethidine due to their normally high analgesic consumption for many years"

(Nurse Unit Manager, Med/Surg., 10 years in position, Registered 27 years, Private sector, Metropolitan Area)

It is of note that the two comments above, come from senior medical/surgical nurses from the private sector. Under the theme of 'No Authority to Act' (above), it was a far more common experience in the private sector for nurses to feel that they did not have authority to ask patients about their ATOD use. The consequence of this was that they were often left to manage the difficult sequelae of ATOD withdrawal, dependence and cross-tolerance that could have been better recognized, predicted, and managed with the benefit of accurate clinical information in the first place.

The next two responses are unequivocal in that both are specific to alcohol and demonstrate nurses' belief that it is the majority of patients who refuse to accept or acknowledge they have a problem. Logic might suggest that a nurse with lengthy experience in orthopaedic nursing would have a high level of exposure to patients with alcohol-related problems, given the high prevalence of alcohol-related traumatic injury in orthopaedic care settings (Elvy & Gillespie 1985;

Chick, Rund & Gilbert 1991; Freedland, McMicken & D'Onofrio 1993; Walsh et al. 2004). This comment may have been a real life reflection of such exposure but such a comment becomes of active concern if the consequence is a related belief of nurses that intervention of any sort would be of little value.

"Most patients refusing to acknowledge that they have a problem with alcohol makes the possibility of change seem remote. If they tell us nothing-we can do nothing"

(Clinical Nurse Specialist, Orthopaedics, 5 years in position, Registered 20 years, Public sector, Metropolitan Area)

"Majority of patients with a drug or alcohol problem will not admit they have a problem"

(Registered Nurse, Surgical, 5 years in position, Registered 21 years, Private sector, Rural NSW)

A nurse working in an aged care setting reflected that even concerted attempts at, in this case simple information-giving, were not always met with the positive outcome of change.

> "The people I have met with problems with alcohol or drugs, firstly do not believe they have a problem. I have told people that heavy regular routine drinking is harmful, they always have a way to say that they haven't a problem"

(Registered Nurse, Aged Care, 7.5 years in position, Registered 17 years, Private sector, Metropolitan Area)

The next responses arose from maternity care, and offer enlightening but opposing viewpoints. The first was that readily available public knowledge and the client's self-knowledge suggested a self-responsibility model, with the patient being aware of their need not to use ATOD [during pregnancy or otherwise], and that the responsibility to do something about it was theirs.

"Aware that the person with the habit already knows his/her need to cease - people are well educated in Australia of the dangers of alcohol and drugs. They need to accept that they have a problem THEN do something about it!! It is NOT my responsibility even if I did want it" (Midwife, Maternity, 6 years in position, Registered 14 years, Public sector, Metropolitan Area)

The counterview was from another midwife who saw taking a patient's drug and alcohol history was normal [legitimate] and part of their nursing responsibility.

For this midwife, most mothers were both aware of the dangers of ATOD use and accepted the need to stop.

"Drug & alcohol history is always a part of booking in for confinement. Now even most mothers do seem to be very well aware of dangers associated with drinking, alcohol and tobacco use during pregnancy and accept the need to stop."

(Midwife, Maternity, 4 years in position, Registered 18 years, Public sector, Metropolitan Area)

In summary it is consistent with what is known about ATOD use and related dependence syndromes that ATOD dependency is a powerful self-reinforcing condition and prognosis can be poor. Further, it is part of the natural history of ATOD dependency for the individual to use defences of denial, minimisation and rationalisation (Schuckit et al. 2003). The self-reports of nurses suggest the reality of nurses encountering these dynamics in clinical practice, and this is reinforced by a tendency amongst nurses for ATOD-related problems not to be seen in their full spectrum. A sense of frustration and compromise becomes apparent for some nurses where the dynamics of patient denial have realistically kept hidden the true nature of the ATOD problem of the patient they are caring for. This sometimes leads to dangerous complications. The empirical findings of this investigation demonstrate that of all the clinical activities measured; Information-giving Behaviour was the least frequent. This considered whether or not the patient is actively "in denial", the patient is unlikely to change if not given simple accurate information and an honest appraisal of the meaning and impact of their ATOD use on their current health status.

6.3.3 Type of ATOD Problem, Level of Intoxication/Type and Pattern of Drug Use/Withdrawal/Long Term Effects

 Table 47: Theme B.O7 - Type of ATOD Problem, Intoxication/Type of Drug Use/Withdrawal/Long Term Effects (n=1281)

	Freq.	Percent
YES	78	6.1
NO	1203	93.9

In this third ranked detail code within the qualitative theme, 'Factors Located within the Patient', seventy-eight registered nurses identified the degree to which the patient was either chronically or acutely affected by ATOD use, as being the factor that affected their ability to intervene with ATOD-related problems. Registered nurses working in aged care settings were common respondents (n = 20). This may reflect the high prevalence of alcohol- related brain damage in Australia, and in particular the high clinical prevalence of alcohol-induced dementias amongst patients in nursing home settings (Widlitz & Marin 2002). The first three responses below suggest that these nurses sensed that intervention into alcohol-related problems would be somewhat belated as damage was already established.

"Residents in nursing homes have usually had a long history of damage done ... the after effects are what is treated"

(Director of Nursing, Aged Care, 7 years in position, Registered 27 years, Private sector, Metropolitan Area)

"Residents admitted with alcohol related problems are already suffering from it's long term effects - e.g. Korsakoffs, liver damage etc."

(Nurse Unit Manager, Aged Care, 8 years in position, Registered 19 years, Public sector, Metropolitan Area)

"Nurse patients in nursing homes with physical &mental results of alcohol abuse but these have rarely needed active intervention" (Registered Nurse, Aged Care, 15 years in position, Registered 36 years, Private sector, Rural NSW)

The following comments from experienced aged care nurses, the second of whom worked in a specialised dementia unit identified clinical limitations of diminished cognitive abilities and short-term memory loss.

> "Patient's medical condition. Other conditions present e.g. Dementia, Psychosis, Confusion. Memory loss and the ability to follow logical ideas to conclusion. Prior history of interventions and the challenge the settings presents for them"

(Director of Nursing, Aged Care, 6 years in position, Registered 18 years, Public sector, Metropolitan Area)

This specialist nurse unit manager indicated that stopping further ATOD use is an important intervention for substance-induced dementias.

"Residents that have multi infarct dementia from long term abuse of alcohol. Factors are: Their level of confusion; Their level of cognitive loss, STM [Short Term Memory] loss; Their level of agitation. The above reduce and/or severely limit my ability to intervene and reduce their behaviour disturbance. By stopping their ingestion of drugs/alcohol the damage to their brains can be arrested. This is the best we can offer up until the time we can repair/patch brain cells"

(Nurse Unit Manager, Dementia Unit, 3 years in position, Registered 17 years, Public sector, Metropolitan Area)

Also from aged care, a deputy director of nursing observed that the overuse [overprescription] of benzodiazepine medications such as *diazepam* (Valium) and *oxazepam* (Serepax) were problematic and tobacco use, i.e. smoking, was a safety issue.

> "Unusual for a patient with severe drug problem to be admitted to a nursing home.. overuse of Valium, Serepax more likely.. smoking more a safety issue than health problem"

(Deputy Director of Nursing, Aged Care, 5 years in position, Registered 21 years, Private sector, Metropolitan Area)

For primary health care nurses working in community health settings, impaired cognitive ability of patients was also recognised as a constraint on intervention,

"Inability of patients to take advice due to impaired cognitive ability" (Registered Nurse, Community Generalist, 8 years in position, Registered 17 years, Public sector, Metropolitan Area)

as were difficulties of intervening with the individual with dual (coexisting) diagnosis.

"Chaotic individuals - Schizophrenia with dual diagnosis of D&A problems difficult to deal with" (Clinical Nurse Consultant, Community MH (Welfare Officer), 10 years in

position, Registered 26y years, Public sector, Rural NSW)

Some general comments were made by community mental health nurses in regard to limitations and constraints of intoxication,

> "Intoxicated /high/'out of it' in community setting = difficult++" (Clinical Nurse Specialist, Community MH, 8 years in position, Registered 17 years, Public sector, Metropolitan Area)

"General intoxication makes any intervention troublesome" (Clinical Nurse Specialist, Community MH, 5 years in position, Registered 14 years, Public sector, Metropolitan Area)

A particular report made by a team leader in child and family health into clinical dangers of intoxication this was convergent with high knowledge scores of the overall sample to the question pertaining to management of intoxication and patient safety. (Table 15: Proportion of Correct Answers by Knowledge Item: Registered Nurses [n = 1281])

"Intoxication complicates assessment; Mood, understanding, behaviour are affected; Can mask serious illness; Threat to life; Depression of respiration, hypertension; Alteration in mental state; Self destructive behaviour"

(Nurse Unit Manager (Team Leader) Child & Family Health, 5.5 years in position, Registered 20 years, Public sector, Rural NSW)

A community nurse identified that the degree of physical and/or psychological ATOD dependence influenced nurses' ability to intervene in ATOD-related problems. This comment was central to the argument for early recognition and early intervention.

"Degree of physical dependence; Degree of psychological dependence; External problems/pressure keep the client drinking and/or drugging as they don't know how to stop or simply just can't" (Registered Nurse, Community, 5 years in position, Registered 31 years, Public sector, Metropolitan Area)

Common ground was revealed by for a mental health nurse and clinical nurse consultant in alcohol and other drugs, both of whom identified constraints to intervention as; patients' cognitive impairment, dual diagnosis, and particularly the complexities of concurrent personality disorder and ATOD use problems.

> "The client is in withdrawal - Brain damaged client - Short term memory loss (client unable to retain information) Anti-social and Borderline PDs [Personality Disorders]"

(Registered Nurse, Mental Health, 10 years in position, Registered 23 years, Public sector, Metropolitan Area)

"The client has serious psychiatric illness. Personality disorders. The client is developmentally delayed"

(Clinical Nurse Consultant, Drug & Alcohol, 5 years in position, Registered 15 years, Public sector, Metropolitan Area) A comment from a nurse working in acute psychiatry was useful in regard to the clinical reality of cannabis commonly being used by patients and complicating the course and prognosis of serious mental illness, in particular schizophrenic disorders (Graham et al. 2001; Kavanagh et al. 2002; AIHW 2005a).

"No mention of THC - very common with psychiatric disorders especially young pot smokers with schizophrenia" (Registered Nurse, Acute Psychiatry, 20 years in position, Registered 25

years, Public sector, Metropolitan Area)

Comments by nurses working in acute/critical care hospital settings were low in number (n=16). Very few nurses working in accident and emergency areas attributed the ATOD use status of their patients, either acute or chronic, as a major constraint on their interventions. Accident and emergency nurses seemed more likely to identify intoxication as a source of disruptive and uncooperative behaviour, being more concerned about the behavioural consequences of the intoxicated state than the medical risks of intoxication itself. The following comment from an accident and emergency nurse suggested that if the patient is under the influence of a substance, it is more a matter of faith than standard practice that the patient (and their intoxication) will be assessed, treated, and followed up consequently.

"Patient remains under influence on your shift... shift ended before they are sober.. pass on to next shift to follow up.. one must have faith that this will happen?"

(Registered Nurse, Accident &Emergency, 5 years in position, Registered 18 years, Public sector, Rural NSW)

A nurse unit manager in an accident and emergency department identified coexisting conditions of a patient as affecting nurses' ability to intervene in ATODrelated problems.

> "Other existing conditions e.g. (head injury, hyper/hypoglycaemia)" (Nurse Unit Manager, Accident &Emergency, 4 years in position, Registered 21 years, Public sector, Metropolitan Area)

The comment from a clinical nurse specialist working in post-operative care seemed realistic, given the practice setting and the condition of patients in recovery.

"As I work in the Recovery Room only and my patients are in pain or regaining consciousness & frequently agitated or anxious, it can be quite difficult to assess these patients –yet alone change their lives" (Clinical Nurse Specialist, Surgical (Recovery), 5 years in position,

Registered 18 years, Public sector, Metropolitan Area)

A less experienced nurse working in the high prevalence area of orthopaedics identified that it was difficult to speak with a patient who is incoherent and hallucinating. What seems to be lacking, given the perceptual changes known to occur in withdrawal syndromes, e.g. alcohol withdrawal, is the need to find out if, and why the patient is hallucinating.

"Patient may be hallucinating and talking nonsense (unable to speak coherently with patient)"

(Registered Nurse, Orthopaedics, 2.5 years in position, Registered 5 years, Private sector, Metropolitan Area)

The first of two comments below came from neonatal nurses. In caring for the neonate in drug withdrawal, one nurse noted that his/her primary responsibility was to the baby.

"Most contact I have is babies withdrawing from drugs taken by mum in pregnancy. My first responsibility is baby" (Registered Nurse, Paediatrics, 12 years in position, Registered 28 years, Public sector, Metropolitan Area)

The second from a clinical nurse specialist in neonatal care identified components of good quality care for the baby in drug withdrawal, but asked this question "... what is happening to mum?"

"I have occasionally cared for drug withdrawing neonates and these children are cared for by adhering to strict withdrawal routines e.g. drug scoring charts and sedation - babies are hospitalised in the acute phase of withdrawal. Baby is well cared for – but what is happening to mum??"

(Clinical Nurse Specialist, Paediatrics, 12 years in position, Registered 24 years, Public sector, Metropolitan Area)

In this instance it seems that the clinical nurse specialist thought beyond the immediate duty of care for baby, and management of withdrawal, to also consider the mother's situation.

The final two comments in this theme came from clinical nurse specialists in community health. A community mental health nurse made the point that

intoxication on presentation inhibits the nurse from obtaining an accurate mental state examination from the patient.

"Level of intoxication at presentation. Can't obtain accurate MSE (Mental State Examination)" (Clinical Nurse Specialist, Community M/Health, 2.5 years in position, Registered 15 years, Public sector, Metropolitan Area)

The other comment was by a clinical nurse specialist working in generalised community health, who viewed intoxication as being difficult to manage, but had an integrated approach to assessment that reflected best practice for the management of clients with dual diagnosis.

"Intoxicated clients are difficult. If Dual Diagnosis – assessment and intervention is complex - then Co-Case management situation is warranted. I don't personally have any problem in working with clients with Dual Diagnosis"

> (Clinical Nurse Specialist, Community Generalist, 8 years in position, Registered 27 years, Public sector, Metropolitan Area)

6.3.4 Inappropriate

 Table 48:
 Theme B.11 - Inappropriate (n=1281)

	Freq.	Percent
YES	50	3.9
NO	1231	96.1

This theme was related to the one discussed above in that the patient's physical/mental status was of issue. Responses included were proportionately less common than those pertaining to acute or chronic effects of substance use (see Table: 43: Factors located within the patient – Ranked by percentage of responses). Comments included in this detail code; 'Inappropriate' included observations by the nurse that the patient was otherwise too unwell, or focused on other activities, for example having a baby, for ATOD intervention to take place. For other respondents it was the judgement that a primary level of intervention, for example caring for the immediacies of an acute ATOD withdrawal state was appropriate, but more holistic interventions were not. Some comments like that of an experienced deputy director of nursing were straightforward and pragmatic in

that ATOD-related interventions have low relevance to nursing a patient who is terminally ill.

"It may not be always relevant to intervene in trying to change people's drug & alcohol dependence at certain stages of their lives, people with life threatening diseases do not need the added anxiety of being convinced to give up these alcohol and drug use"

(Deputy Director of Nursing, 13 years in position, Registered 26 years, Public sector, Metropolitan Area)

A view shared by two palliative care nurses below; a nurse unit manager suggested that ATOD use may be occurring to enable the patient to cope, and that this should be reconciled.

"I do not believe that changing my near/end-stage palliative care patients alcohol & drug habits would necessarily be in their best interest. Most, by this stage, are using the drugs to cope (i.e. those with H/O drug substance abuse)"

(Nurse Unit Manager, Palliative Care, 5 years in position, Registered 16 years, Public sector, Metropolitan Area)

"Nature of Hospice patients not appropriate at this time to begin to change behaviour"

(Registered Nurse, Palliative Care, 9 years in position, Registered 26 years, Public sector, Metropolitan Area)

For some nurses intervention was inappropriate because the patient was in a lifethreatening situation, such as needing intensive care. It was acknowledged by this nurse that ATOD-related problems existed, but the opportunity to explore them did not.

"In an acute ICU - we do get patients who have underlying D & A problems but our role is to manage the patient clinically in the acute life threatening situation, as soon as they are weaned off ventilation - they are transferred. There is not the opportunity to explore D & A issues in this setting"

(Clinical Nurse Consultant, ICU, 4 years in position, Registered 16 years, Public sector, Metropolitan Area)

For nurses working in operating theatres and immediate postoperative recovery settings, intervention was seen as inappropriate or "... obviously limited".

"Patients awakening from anaesthetic are not appropriate candidates for intervention"

(Registered Nurse, Recovery, 3 years in position, Registered 6 years, Public sector, Metropolitan Area)

"Difficult to counsel Patients pre-operatively- the opportunity for intervention on my part is obviously limited...." (Clinical Nurse Consultant, 12 years in position, Registered 20 years, Public sector, Metropolitan Area)

This operating theatre nurse recognised the limitations on opportunities to intervene, but also recognised the value of doing so, as complications may occur postoperatively due to heavy alcohol and tobacco use. This nurse was prepared to intervene in the heavy smoking patient, and interestingly, identified herself as being an ex smoker.

"Usually do not see our patients before they arrive ... while in recovery not receptive .. it would be useful to know alcohol intake as heavy drinkers are often more difficult to reverse [from anaesthesia] if obvious heavy smoker is having complications after anaesthesia I would mention hazards of smoking ...when they are conscious"

(Registered Nurse, Operating Theatre, 5 years in position, Registered 12 years, Public sector, Metropolitan Area)

This comment was convergent with the empirical finding within scale measures of clinical activity (Clinical Activity Scale: Information-giving Behaviours; "... *provide information about smoking cessation to patient's who smoke tobacco*", and was reported as the most frequently used information-giving behaviour amongst these nurses. The comment also resonated with other reports that emerged from the qualitative theme 'Factors Located Within The Workplace; Lack Of Clear Policy', in which nurses working in operating theatres and recovery areas reported a lack of clear policy in terms of ATOD history taking often leading them to feel that their care was compromised by lack of salient ATOD information.

Comments from midwives working in a labour ward setting revealed that a patient in labour was unlikely to be concerned with anything other than this situation, and at this time, intervention would be inappropriate. However midwives generally articulated in their self- reports that assessment and intervention into ATODrelated problems was a critical element of antenatal and postnatal care, for both mother and child.

"Pts seen are usually 40 weeks pregnant ... difficult to discuss problems while in labour"

(Midwife, Labour ward, 7 years in position, Registered 16 years, Public sector, Metropolitan Area)

"See patients in labour - Difficult to assess at this stage & obviously not interested in any problems other than their labour" (Midwife, 7 years in position, Registered 10 years, Public sector, Rural NSW)

A registered nurse working in a public hospital in metropolitan Sydney, in both the accident and emergency department and a purpose-designed medical detoxification unit of the same hospital reported:

> "Those patients presenting to A & E who have an obvious drug problem (alcohol/opiates etc.) may be there for a medical problem & may (quite often) resent any intervention at that time. As opposed to those patients admitted for detoxing, whereby they welcome intervention/counselling (and perhaps the not so popular) "confrontation"

> (Clinical Nurse Specialist, Accident & Emergency /Medical Detox., 3.5 years in position, Registered 14 years, Public sector, Metropolitan Area)

This nurse, differentiated between those patients with an ATOD-related problem, but who had not come to hospital for that as the health problem, noting the difference between those admitted for detoxification specifically, and likely to welcome intervention. There is little question that a patient who has entered a medical detoxification programme of their own volition, will have different motivation for ATOD intervention than those in hospital for an illness incidental to their ATOD use.

The concern of this research has been the disparity between known prevalence of ATOD-related problems and the frequency with which they are assessed and intervened in by nurses. The corollary of the comment above is that if intervention is offered only to those patients who self-identify their ATOD-related problem, then this disparity will remain.

6.3.5 Disruptiveness/Abusive Behaviour/Aggression

 Table 49: Theme B.03 - Disruptiveness/Abusive Behaviour/Aggression (n=1281)

	Freq.	Percent
YES	47	3.7
NO	1234	96.3

Earlier investigations into nurses' attitudes towards patients with ATOD-related problems found that nurses commonly view these patients as aggressive, abusive, and disruptive (Tweed 1989; Goodin 1990; Gerace, Hughes & Spunt 1995; Sullivan 1995; Barry, Tudway & Blissett 2002). In this research nurses' responses containing descriptors such as "aggression", "abusive", or "disruptive" were relatively few (n=47[3.7%]). Content analysis and thematic coding showed some overlap with this thematic code and the proportionately higher ranked code for the patient being "uncooperative" and "non-compliant" (6.3.1.). As previously noted, despite the historical trend to attribute nurses with value-laden statements towards the ATOD-affected individual, these nurses far more commonly located the factors that constrain their intervention as being within themselves ('Factors Located within the Nurse') as opposed to being 'within the patient'.

Of the low number of responses in this theme the majority arose from nurses working in acute care settings, in particular accident and emergency departments. This is of little surprise given that accident and emergency nurses are at the first point of contact, and patients' violent and disruptive behaviours due to a multiplicity of causes, is unfortunately a common experience for nurses in these settings (Lyneham 2000; Adeb-Saeedi 2002; Cowin et al. 2003; Crilly, Chaboyer & Creedy 2004). The comments below illustrate, that the aggression and disruptive behaviour are attributed by nurses more to the ATOD-affected state of the individual, rather than to an ingrained 'character flaw', per se. This notwithstanding the sense of potential threat of violence to the nurse must be recognised and this highlights the value of strategies aimed at de-escalation of violence and critical incident debriefing.

"During my years in Emergency, I found alcoholics & drug dependent clients amongst the most difficult to deal with in intoxicated or withdrawing states. Their behaviour could at many times be quite erratic, unpredictable & at times violent. For a nurse this can be quite frightening & physically threatening. An added worry with the ever present thought of needles etc. tucked away in handbags"

(Health Care Consultant, 3 years in position, Registered 15 years, Private sector, Metropolitan Area)

"Too intoxicated, won't listen & aggressive"

(Nurse Unit Manager 11, Accident & Emergency, 4.5 years in position, Registered 18 years, Public sector, Metropolitan Area) "Difficulty in dealing with people who become aggressive during withdrawal"

(Clinical Nurse Educator, Accident & Emergency, 3 years in position, Registered 18 years, Public sector, Metropolitan Area)

An accident and emergency nurse believed that it is the patient's inability to acknowledge their ATOD problem that gives rise to a defensive and aggressive response. This comment overlapped with the more common response that the patient's denial was a major factor that affects the ability of nurses to intervene.

> "Disruptive at point of first contact. Unwillingness for patient to acknowledge their problem often pointless to offer suggestions due to aggressive response, inability to recognise the problems associated with long term use of substances"

> (Registered Nurse, Accident & Emergency, 8 years in position, Registered 12 years, Public sector, Metropolitan Area)

The theme that disruptive and aggressive behaviour was due to ATOD withdrawal was reported by nurses from other acute care areas and illustrated by comments from the two nurses below working in a trauma unit and an intensive care unit respectively.

"I don't like it when they are withdrawing because they are loud, demanding, abusive and sometimes violent"

(Registered Nurse, Trauma/Surg., 3 years in position, Registered 8 years, Public sector, Metropolitan Area)

"Aggression - from patients who have overdosed, as they wake, or delirious alcohol abusers"

(Clinical Nurse Consultant, ICU, 14 years in position, Registered 25 years, Private sector, Metropolitan Area)

These comments converged with the empirical finding that nurses working in acute care areas had the highest knowledge scores specific to ATOD withdrawal syndromes of any clinical group. This clinical nurse specialist in intensive care reflected on the difficulty of dealing with an aggressive patient in an understaffed setting.

"Can't cope with the aggressiveness of patient especially if we only have few staff"

(Clinical Nurse Consultant, ICU, 3.5 years in position, Registered 18 years, Public sector, Metropolitan Area) This surgical nurse introduced another concern, that of the "unpredictability" of intoxication syndromes.

"A concern about the 'unpredictability' of patients' behaviour when intoxicated or drug effected. Trying to reason with these type of patients is often impossible"

(Registered Nurse, Surgical, 7 years in position, Registered 18 years, Public sector, Rural NSW)

A final comment from a nurse who had spent one year rotating through various clinical areas in a major teaching hospital suggested a more psychodynamic formulation. In this nurse's estimation it was not only an abusive attitude of such patients to staff, but also their behaviours of splitting staff, and their dishonesty that made them "... hard to care for".

"Their abusive attitude to staff, the way they try to split staff and set us against each other, their dishonesty makes them hard to care for" (Registered Nurse, Rotating, 1 year in position, Registered 7 years, Public sector, Metropolitan Area)

6.3.6 Social Status /Age

Table 50: Theme B.10 - Social Status/Age (n=1281)

	Freq.	Percent
YES	46	3.6
NO	1235	96.4

In this thematic category it was the patient's social and/or economic circumstances, or their age, that were seen as affecting the nurse's ability to intervene. This differs from the "Factors within the Patient" above in that it was not due to the effects of ATOD use, acute or chronic, or concurrent physical or mental health conditions. Of the small number of respondents (n = 46) the majority saw the age of the patient as a major factor, and this was polarised between those who were seen as too old and those who were too young. For example, a director of nursing working in aged care observed that for older Australians due to their age, acute ATOD problems were unusual, and acute interventions were not commonly called for. The point made by this respondent was also made elsewhere; the nursing emphasis for the older person with an

ATOD-related problem was for the management of the long-term consequences of their ATOD use such as brain damage and dementia.

"I currently work in Aged Care industry. Acute drug & alcohol dependencies are unusual. Greater emphasis on management of results of long term side effects especially neurological damage, rather than interventions for acute care"

(Director of Nursing, Aged Care, 6 years in position, Registered 16 years, Public sector, Rural NSW)

The nurse below reiterated this, in that in aged care patients may simply be too old to be concerned about drinking.

"All patients who have been alcoholics and even those who just liked a drink are now too old to worry about drinking" (Registered Nurse, Aged Care, 10 years in position, Registered 16 years, Public sector, Metropolitan Area)

A clinical nurse specialist working in community-based psychogeriatrics held a broader view that revealed the reality of a burgeoning population of older Australians living in poverty (AIHW 2005b), and the social status of being both old and poor in the estimation of this nurse rendered, ATOD-related problems "... relatively insignificant".

"Sometimes drug & alcohol problems seem relatively insignificant in terms of all the other life and social problems facing them eg POVERTY"

(Clinical Nurse Specialist, Community, Psychogeriatrics, 11 years in position, Registered 26 years, Public sector, Rural NSW)

A final comment from a nurse from the aged care sector disclosed an active sympathy for ".... elderly smokers", and thus allowed them to smoke if they are alert and in a safe situation (outside).

"I am sympathetic to elderly smokers & allow them to smoke in safe spot (outside) if they are alert. They are too set in their ways to change"

(Assistant Director of Nursing, Aged Care, 16 years in position, Registered 30 years, Private sector, Rural NSW)

There were no comments from those nursing the very young, for example neonates, as was common in other thematic categories. Two comments from nurses working in paediatric care raised issues pertaining to the increasing prevalence of hazardous ATOD use amongst adolescents, and more recently, preadolescents (Wilson et al. 2004; Kulig 2005). The first of these made explicit a common phenomena being the sense of invulnerability in combination with the reality of experimental ATOD use amongst young Australians, and that this may present a barrier to intervention or as more commonly stated, "resistance to treatment".

"Difficult due to the age of patients e.g. early teens that are nursed in my area - It is common in this age group to experiment. They think it's cool & nothing will happen to them. Nothing much can be done until they change there thinking"

(Registered Nurse, Paediatrics, 6 years in position, Registered 20 years, Private sector, Metropolitan Area)

Implicit in this nurse's comment was the less encouraging corollary that nothing can be done. The comments from another paediatric nurse also reflected a narrow perspective.

> "Parents of my patients have these problems but this is an entirely different situation. My duty of care is to the patient" (Clinical Nurse Specialist, Paediatrics, 6 years in position, Registered 22 years, Public sector, Metropolitan Area)

The viewpoint that it is not the young patient with the ATOD problem but the parents, seemed to be a common perspective of paediatric and neonatal nurses. It is of note as discussed above, that there appeared to be a more encouraging general sense amongst many other neonatal nurses that they wanted and needed to intervene with parents with ATOD use problems in order to enhance the wellbeing of the infant or child in their care. This viewpoint was particularly apparent in comments arising from 'Factors within the Nurse' where nurses working in neonatal and paediatric settings clearly acknowledged their desire for better counselling and family assessment skills.

6.3.7 Less Deserving or Lower Priority of Care

Table 51:	Theme B.04 -	Less I	Deserving or 1	Lower	Priority	of Care (n=1281))
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	Freq.	Percent
YES	23	1.8
NO	1258	98.2

A conventional wisdom, to a large degree supported by research into the attitudes of health care professionals towards persons with ATOD-related problems, suggests a negative, at times hostile, and commonly pejorative view that patients so affected are less deserving of care (Bartek 1989; Tweed 1989; Goodin 1990; Gerace, Hughes & Spunt 1995; Sullivan 1995; Barry, Tudway & Blissett 2002) The suggestion is has been made, although with less evidence to support this, that there is a covert system of "social triage" amongst nurses. It is contended for example that in the busy environment of acute care situations, patients with negative social diagnoses such as "alcoholic", "drunk", "addict" and "drug dependent" will be attended to with less alacrity than patients whose problems are not seen as "self-willed", and therefore are more deserving. (Adams & Stevens 1994; D'Onofrio 2003) Thus the construct emerges that a patient with an ATODrelated problem is "less deserving" of care, or in the deployment of nursing care, is given a lower priority. It was due to the longstanding nature of these dynamics that the attitudinal measure of Role Legitimacy was developed and refined (see Method), and is an important empirical scale measure of this investigation.

All of the above considered, the following points are to be noted. Firstly the high scores within the Therapeutic Attitude Measures of *Role Legitimacy* and *Non-judgement*, have challenged both the apriori expectations of this investigator, and that of the "conventional wisdom". Secondly as noted previously, it is the sense of *Role Adequacy* that most strongly affects the nurse's ability to intervene. Empirical measures show a gap between the intention to intervene in ATOD-related problems and the frequency with which this occurs. This is constrained by nurses' perceptions of their low level of ability or adequacy to do this, and less so by a view that the patient is not deserving of their care, or that it is outside of the legitimate framework of their nursing role. This is a major empirical finding of this investigation.

The small number of responses that could be validly coded into the theme that patients with ATOD problems were less deserving or a lower priority of care, converged with the empirical finding.

The responses in this theme are lower in number (n = 23) than other 'Factors Located within the Patient' above, and less directly focused on attributions within

the patient than on the care setting that the patient was in. That is to say it was nurses' view that other demands on their care were more pressing. The basis on which nurses make such a judgement is of issue. The viewpoint of an assistant director of nursing below is that ATOD diagnoses were of lesser importance as higher priority pathologies indicate the need for urgent intervention.

"We get to D&A patients when we can. There are Other pathology of higher priority in regards to urgency of intervention"

(Assistant Director of Nursing, 7 years in position, Registered 24 years, Public sector, Metropolitan Area)

This viewpoint "first things first" was shared by two nurses in accident and emergency.

"Too many other things are occurring simultaneously which take higher priority"

(Registered Nurse, Accident & Emergency, 1.5 years in position, Registered 3 years, Public sector, Metropolitan Area)

"Being a major trauma centre for Paediatrics - major referral centre for the full range of childhood illnesses & diseases, drugs & alcohol plays a low role in my nursing"

(Clinical Nurse Specialist, Accident & Emergency (Paediatrics), 7 years in position, Registered 13 years, Public sector, Metropolitan Area)

A lecturer of nursing made the global judgement that ATOD-related problems were unimportant and not the business of health workers.

"Lack of priority, ie. D & A problems are seen as unimportant, not relevant to admission/none of the business of Health workers" (Education (Lecturer), 4 years in position, Registered 24 years, Public sector, Metropolitan Area)

The comment of a senior nurse unit manager reflected the more conventional and negative viewpoint that nurses are busy, and when they are busy they give their attention to those that they "... perceive as being worth the effort to take the time with".

"Everyone is too busy nursing those people who they perceive as being worth the effort to take time with rather than the detox patient who is NOT acutely ill"

(Nurse Unit Manager, Medical, 7.5 years in position, Registered 23 years, Public sector, Rural NSW) Some nurses made it clear that ATOD-related problems were not a priority for them or were given low priority.

"My experience is that generally recognition and intervention into, Drug & alcohol problems is given low priority"

(Clinical Nurse Specialist, Disability Services, 14 years in position, Registered 20 years, Public sector, Metropolitan Area)

"Working in Palliative Care, these things are not considered a priority to address"

(Clinical Nurse Consultant, Community Palliative Care, 5 years in position, Registered 15 years, Public sector, Metropolitan Area)

Other nurses seem to be of the view that a lower priority is due to "... other more pressing needs".

"May overlook D&A situations due to other pressing needs" (Clinical Nurse Specialist, Women's Health, 3 years in position, Registered 10 years, Public sector, Rural NSW)

"Time - their alcohol and/or other drug related problem may not be why they are in my care ie. other priority at the time" (Registered Nurse, Community Generalist, 0.5 years in position, Registered 5 years, Public sector, Metropolitan Area)

A nurse, working as a coordinator of community health services suggested that once pressing needs had been addressed it was often difficult to return to the ATOD-related problem. An opportunity lost perhaps but surely a viewpoint that is antithetical to *early* intervention.

"When the problem is first highlighted e.g. on admission and there are other more pressing needs (physical & psychological) for the moment, it is often difficult to go back to the alcohol problem once the others are solved - depends on the circumstances & the patient"

(Clinical Nurse Consultant (Community Co-Ordinator), 6 years in position, Registered 18 years, Public sector, Metropolitan Area)

Considering that some nurses may see the individual with an ATOD-related problem as being "less deserving" of care, some comments demonstrated nurses' ambivalence about this. This ambivalence is made explicit by comparing the two comments below, a clinical nurse specialist in intensive care who acknowledged anger in caring for patients when a liver transplant was secondary to their ATODrelated liver damage, "Get angry when patients with Liver Failure secondary to Alcoholism & Drug use are given Liver Transplant. Other patients are not only more deserving but are also likely to have better outcome??"

(Clinical Nurse Specialist, ICU, 4 years in position, Registered 17 years, Public sector, Metropolitan Area)

and a clinical nurse consultant in surgical research who said "I have never been sure about how I feel about this".

"I work in Research & Liver Transplantation - have a number of patients who are <u>recovered</u> alcoholics & drug addicts – I have never been sure how I feel about this")

(Clinical Nurse Consultant, Surgical Research, 4 years in position, Registered 20 years, Public sector, Metropolitan Area)

Some nurses like this surgical nurse below preferred "not to get involved"

"Preferring to "not get involved", give my care to those who value it" (Registered Nurse, Surgical, 6 years in position, Registered 13 years, Private sector, Metropolitan Area)

As emerged in the category theme 'Factors located in the Workplace' some nurses reported that health care institutions that prefer nurses not to get involved in the care of patients with ATOD-related problems. Thus there is a lack of organisational support, as implicit in the comment below, nurses then would find it "too difficult" to implement assessment and intervention.

"Surgery booked –but NO booking code for D & A Consult/Detox patients ... etc too difficult to do anything about it so we manage without and hope there is no drama!."

(Nurse Unit Manager, Surgical, 10 years in position, Registered 30 years, Public sector, Metropolitan Area)

These next two nurses involved in the care of surgical patients acknowledged that "sick" patients and "acute problems" take precedence but reported their positive clinical activity of referring on patients with ATOD dependence to specialised care. This suggested that where organisational support was known to be available, nurses would use it.

"Being responsible for an alcoholic patient is very hard when you are in charge of a ward evening and night shift when we have 28 other patients (sick) on the same ward to look after you cannot give your time to these patients when most needed. They do need specialised care. When stable refer on"

(Registered Nurse Med./Surg., 3.5 years in position, Registered 10 years, Public sector, Metropolitan Area)

"I care for patients with acute surgical/neurological problems which take precedence.. when problems resolved .. refer to Drug & alcohol team"

(Registered Nurse, Surgical, 8 years in position, Registered 12 years, Public sector, Metropolitan Area)

The presence of coexisting and opposing attitudes and beliefs that comprise the state of ambivalence was well articulated by this clinical nurse specialist in gynaecology. The low tolerance of patients with ATOD-related problems is acknowledged, as is a clear sense of priority for the care of patients with other problems. The same nurse acknowledged a low level of ATOD-related knowledge and little motivation to do anything about that. While this may was less than ideal, the final outcome was that this nurse saw it as appropriate to refer on to specialist care "... at every opportunity".

"I am aware that I have a low tolerance for the behaviour of people with alcohol & other drug related problems, so I refer them on at every opportunity for the management of that problem. I try to not allow the D & A problem to interfere with my care of their other problems. My knowledge about D & A is limited but I have little motivation to learn about it. I am much more comfortable in bringing in others to manage that aspect of their care"

(Clinical Nurse Specialist, Gynaecology, 1 year in position, Registered 16 years, Public sector, Metropolitan Area)

6.3.8 Recidivism

Table 52:	Theme	B.02 -	Recidivism	(n=1281)
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	Freq.	Percent
YES	20	1.6
NO	1261	98.4

The term recidivism was used to capture comments that reflect the idea that even when patients are offered interventions into their ATOD-related problems there is a sense of inevitability that they will return to their old ways. In nursing and medical literature the term "revolving door syndrome" is more commonly used as a synonym. Related constructs would be those of "therapeutic nihilism", and "therapeutic pessimism". Both these constructs reflect the ideas thought to be common amongst nurses in regard to ATOD-related problems, that intervention is of little value for it is of little consequence in that the likelihood of there being any positive change is remote.

These negative assumptions have not been strongly evident in this investigation in either the quantitative or qualitative results. The small number of comments within this theme (n = 20) was convergent with the high scores on the non-judgement scale within the total therapeutic attitude scale, and the high percentage of disagreement with the negatively coded item within the non-judgement scale; *"Recently detoxified patients are likely to drink and/or take drugs as soon as they are out of hospital"*. Of the verbatim comments captured within this thematic code it is encouraging that they are not all negative or despairing. Some nurses clearly sought further explanation as to why the "revolving door syndrome" seemed to occur and others offered a well-considered analysis. The first two comments however were fairly archetypal, and of note, both arose from nurses in senior positions.

"In regard to D&A problems there are a high percentage of reoffenders we see the same faces time and time again"

(Assistant Director of Nursing, High Dependency, 1.5 years in position, Registered 21 years, Private sector, Metropolitan Area)

"Repeatedly see the same pts - "here we go again" (Nurse Unit Manager, Medical, 9 years in position, Registered 17 years, Public sector, Metropolitan Area)

An experienced medical/surgical nurse expressed another common concern being that a consequence of patients reverting back to their "old ways" was the burden imposed on the health dollar.

> "Patients afflicted with these problems usually end up at hospital because of them ... they are considered a waste of money because they will probably revert back to their "old ways" once they leave hospital"

(Registered Nurse, Med/Surg., 17 years in position, Registered 22 years, Public sector, Rural NSW) A clinical nurse educator took a step forward when expressing a need to know how to help people with ATOD-related problems and thus reduce repeated presentations.

> "<u>Knowing how</u> to help people with drug related problems who refuse to help themselves.. repeatedly present themselves at Hospital to have their symptoms treated"

Clinical Nurse Educator, 3 years in position, Registered 14 years, Public sector, Metropolitan Area)

The accident and emergency nurse below suggested there was a relationship between limited time available for counselling or to offer any other intervention, and repeated presentations and associated frustration.

> "Limited time for counselling or any other intervention therefore there is the frustration of repeated presentation as there is no opportunity for change"

> (Registered Nurse, Accident & Emergency, 2 years in position, Registered 21 years, Public sector, Metropolitan Area)

> "Anger towards these people, as you can spend hours with them and they have no intentions of changing their habits (particularly alcoholics.) You know you will see them again and again"

> (Registered Nurse, Accident & Emergency, 4 years in position, Registered 16 years, Public sector, Rural NSW)

Further comments from accident and emergency nurses have brought to light the related theme that multiple and repeated presentations were erosive of therapeutic attitudes.

"Usually I feel I can intervene without bias but find this difficult if it's the second or third admission of the same patient for similar problems"

(Clinical Nurse Specialist, Accident & Emergency, 5 years in position, Registered 12 years, Public sector, Metropolitan Area)

"I work in an emergency department. Our contact with people with acute problems is often stressed and in life threatening situations, often with people who have had multiple presentations due to their drinking and drugging, and it is difficult to maintain one's compassion for them"

(Registered Nurse, Accident & Emergency, 6 years in position, Registered 12 years, Public sector, Metropolitan Area)

The comment from the clinical nurse specialist below revealed that once the patient was well enough they sign themselves out of hospital before any kind of
"counselling" can be offered seemed to miss the fundamental rationale of early recognition and intervention in that the relationship of ATOD use to current health status is made at the earliest point.

> "Very often, once the person picks up they sign themselves out of hospital before we can offer them any kind of counselling etc." (Clinical Nurse Specialist, Medical, 3 years in position, Registered 16 years, Public sector, Metropolitan Area)

The next two comments were both from mental health nurses in senior positions with lengthy experience of a different nature than their medical surgical colleagues. Both of these rather comprehensive comments have in common a similar sense of frustration, but this time arising from a lack of continuity of care and comprehensive follow-up which would seem to be so necessary in the management of co-morbidity (Kavanagh et al. 2004). The first comment is from a coordinator of community mental health services, and whilst based on this nurse's clinical experience and perception of the world, is somewhat despairing in nature.

"Client on a C.T.O. [Community Treatment Order] for 6 months. Client is good for 6 months. Order is finished. Client decides not to cooperate with the community nurse regarding medications - Level of drug in the circulatory system subsides. Client does not agree. Decides to self-medicate – alcohol or anything client can get. Returns back to hospital for re-scheduling & another C.T.O. Complete waste of time & effort"

Community Mental Health Coordinator, 6 years in position, Registered 15 years, Public sector, Metropolitan Area)

The next comment from a clinical nurse specialist working in acute psychiatry echoed the frustration towards short stay admissions, and limited possibilities of comprehensive intervention and follow up, and that if ATOD use is the most available means of coping with a dysfunctional life, then the client's continued use is a real possibility, as are consequent re-admissions.

"Compliance by customer. In my unit, we have no control over where the customer comes from. We have no control over where the customer goes to on discharge (including OPD "follow up"). We have access to the customer for such a short period of time. Unfortunately, many customers leave possessing the same level of coping skills that they were admitted with ("pressure" on bed state). Where these coping skills are dysfunctional or "abortive" in outcome, there is a high potential that the customer will return to habitual substance using behaviours as means of "coping" with life. The customer becomes symptomatic again and we see them again and again"

(Clinical Nurse Specialist, Acute Psychiatry, 4 years in position, Registered 20 years, Public sector, Metropolitan Area)

Another insight obtained from both of these mental health nurses was that complex ATOD problems, particularly combined with complex mental health problems, require coordinated and comprehensive interventions.

A final and positive comment came from a nurse with a greater than average mean total therapeutic attitude score and mean total clinical activity score. This nurse worked in the rural sector across in general medical, surgical, and accident and emergency settings, and acknowledged that patients with ATOD dependency often returned after treatment to the same situations that brought them into care in the first instance, but also reported that treating them as individuals and assessing individual needs, "... goes a long way to starting changes".

"The main problem we see with both alcohol & opiate users with a dependency problem is returning to the same situation that brought them to hospital. Treating them as individuals, assessing individual needs & respecting their rights goes a long way to starting changes" (Registered Nurse, 8 years in position, Registered 12 years, Public sector, Rural NSW)

This comment reinforced the validity of using multi-methods approach, and particularly triangulation of quantitative and qualitative data. This positive qualitative response is convergent with this particular respondent's individual scores of total therapeutic attitude (4.62 of a maximum score of 5) and total clinical activity score (4.60 of a maximum of 5).

6.3.9 Apathy/Lack of Insight

	Freq.	Percent
YES	17	1.3
NO	1264	98.7

 Table 53: Theme B.08 - Apathy/Lack of Insight (n=1281)

This theme, like that above it, "less deserving of care" and the theme below it in terms of frequency of responses, "untrustworthy", had a low number of responses (n=17). The perception that patients' apathy, lack of interest in their ATOD-related predicament, or lack of insight into the consequences of their ATOD use as a significant factor affecting ATOD interventions was not strongly subscribed to by these nurses. This challenges ideas implicit in "therapeutic pessimism", particularly the idea that patients with ATOD problems are indifferent to consequences of their ATOD use. The low level of response is convergent with the high mean score for "non-judgement" and thus an overall tendency not to attribute blame to patients for low levels of ATOD intervention.

Within the small number of responses there two groups, firstly patients were attributed with apathy, indifference, and lack of interest;

"Apathy-NO commitment of patients to improving life expectancy and quality of general health"

(Assistant Director of Nursing, 4 years in position, Registered 24 years, Public sector, Metropolitan Area)

"Indifference in patient's attitude Patient's obvious Lack of interest in information you are giving them"

(Clinical Nurse Specialist, Community Midwife 2 years in position, Registered 15 years, Public sector, Metropolitan Area)

Secondly, in the more psychodynamic oriented clinical settings of acute psychiatry and rehabilitation, lack of insight was reported as a factor affecting ATOD intervention.

> "Patient reluctance and preference i.e. whether he is willing to listen to advice, often their insight level inhibits the possibility of change"

(Clinical Nurse Consultant, Acute Psychiatry, 10 years in position, Registered 15 years, Public sector, Metropolitan Area)

"Clients crashing lack of insight!"

(Clinical Nurse Specialist, Rehabilitation, 1year in position, Registered 16 years, Public sector, Metropolitan Area)

6.3.10 Already in Treatment

	Freq.	Percent
YES	11	0.9
NO	1270	99.1

 Table 54:
 Theme B.08 - Already in Treatment (n=1281)

The small number of respondents captured by this theme (n=11) had in common the belief that their need to intervene in ATOD problems was affected (reduced) due to patients already being treated by others; usually ATOD specialist services. It is of note that comments were exclusively from nurses working in midwifery and/or neonatal care in large metropolitan hospitals with incumbent ATOD specialist services available.

"Most of our patients with these problems already attend the drug & alcohol clinic before entering hospital and are on prescribed treatment, they also have their own Counsellor visit"

(Midwife, Postnatal, 7 years in position, Registered 16 years, Public sector, Metropolitan Area)

"I see mostly post-natal women who have been through the hospital system ... problems usually picked up during first history take... antenatal ...usually allocated D&A counsellor and I am informed as to referral"

> (Clinical Nurse Specialist, Community Midwife, 3 years in position, Registered 12 years, Public sector, Metropolitan Area)

"I see my patients usually when they present to delivery suite in labour. By this stage they have had regular counselling at the antenatal visits in regard to the above problems. By this stage the damage is done in regard to the baby, so counselling is not worthwhile when they present in labour"

(Clinical Nurse Specialist, Obstetrics, 3 years in position, Registered 14 years, Public sector, Metropolitan Area)

6.3.11 Untrustworthy

Table 55:	Theme B.05	- Untrustworthy	(n=1281)
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	Freq.	Percent
YES	10	0.8
NO	1271	99.2

The theme that the person with ATOD-related problems was "untrustworthy", as captured by this theme, pertains exclusively to reports that such patients, for various reasons, are not truthful about ATOD use and therefore such information (rather than the patient), cannot be trusted. It is useful to consider the low number of respondents (n=10) with regard to the following issues. 1. Lack of patients' truthfulness about ATOD use is reported in other research as a common reason for nurses being reticent to take ATOD histories (Burns & Adams 1997; NSW Health Department 2000; Flinders University and Drug & Alcohol Services Council 2003). 2. In this investigation quantitative data demonstrated a large and highly significant difference between stated belief that a comprehensive ATOD history should be a routine part of all nursing assessment, and the self-reported frequency with which this clinical activity occurs (5.2. Rhetorical gap). Analysis of quantitative and qualitative data determined that this low frequency of history taking is strongly associated with perceptions of having low levels of skill, knowledge, and experience ('Role Adequacy"). That the patient will not tell the truth is not regarded as a major factor that affects these nurses ability to intervene in ATOD problems. The responses although small number, were characteristic as is illustrated below.

> "Seldom is a true record of consumption given. Patients don't accept that they have a problem. Patients sometimes lie about their intake of drugs/alcohol. No time to persevere"

> (Education (Lecturer), 5 years in position, Registered 23 years, Public sector, Rural NSW)

> "Patient acceptance of you or perhaps shame – but you learn not trust patients history of D&A use"

(Nurse Unit Manager, Surgical, 2 years in position, Registered 15 years, Private sector, Metropolitan Area)

"Their pregnant state often masks their underlying lifestyle issues. They often deny or modify their histories because they feel guilty of it during pregnancy = hard to access the true story; story often minimised"

(Clinical Nurse Consultant, Midwifery, 3 years in position, Registered 20 years, Public sector, Metropolitan Area)

Chapter Six

6.4 Summary

Discussion in this chapter and the one to follow used the framework of sequential (within-method) triangulation to systematically consider the relationship between the quantitative and qualitative findings of this investigation. Convergence and divergence between quantitative and qualitative finding were elaborated in both chapters to provide a holistic and comprehensive understanding of the major empirical finding of the investigation; the significant difference between positive attitudinal sets and motivation to perform desired ATOD-related clinical activities, and the reported frequency at which this occurs.

Qualitative analysis discussed in this chapter was framed within the overarching structure of the nurse-patient relationship and was thus concerned with elaboration and examination of self-reports of nurses within the qualitative themes and sub-themes of: 'Factors located within the nurse' and 'Factors located within the patient'. When these two qualitative themes were considered in depth, the self-reports of nurses' practice were highly convergent with the empirical findings. Nurses' responses identified lack of knowledge, skills, experience and confidence as having greater effect on their ability to intervene with patients with ATOD-related problems than factors located "within the patient". Nurses' belief in being unable or ill-prepared to intervene in ATOD-related problems was of stronger influence than the more singular, and often written about influence, of not liking patients with ATOD-related problems and making the judgement that they were less deserving of care, than other patients.

There was however a small proportion of practising nurses who unreservedly expressed negative attitudes towards patients with ATOD-related problems that were divergent with the high scores on *Non-judgement* of the overall sample, but convergent with prevailing attitudes of 'therapeutic nihilism' and 'therapeutic pessimism', as discussed. This notwithstanding, the low level of response in more condemnatory sub-themes within 'Factors located within the patient' was convergent with the high mean score for "*Non-judgement*" and thus an overall tendency not to attribute blame to patients for low levels of ATOD intervention.

Unambiguous statements about lack of knowledge were identified as the most common qualitative response, followed by a high proportion of nurses reporting lack of skills and lack of confidence. High subscription to these qualitative themes is highly convergent with the low *Role Adequacy* scores as measured. Of particular note was where nurses reported their perception of lacking interpersonal and counselling skills and having a desire to obtain them. The frequency of nurses in positions of clinical leadership and executive control who reported that they lacked appropriate skills and knowledge was discussed as a particular concern. Qualitative analysis in this chapter helped answer the primary research question of this investigation; "what explains the enduring and prevailing disparity between the high rate of clinical prevalence of alcohol and other drug problems and the low frequency of recognition and intervention by registered nurses in practice?" A high proportion of practising nurses working in clinical settings in which published research has consistently demonstrated high prevalence of patients with ATOD-related problems, reported low ATOD knowledge, lack of experience and/or not being aware of ATOD issues. The conclusion made was that there remains much to be done.

CHAPTER SEVEN: NURSES, THEIR WORKPLACE, WORK MATES, AND ATOD INTERVENTIONS

Quantitative analysis demonstrated a significant difference between nurses' positive attitudinal sets and motivation to perform desired ATOD-related clinical activities, and the reported frequency at which this occurs. The preceding chapter was dedicated to a comprehensive discussion of qualitative data that assisted in understanding this difference between intention and action, *ideal* and *actual* practice, or as focused on throughout this study; *the rhetorical gap*. This was attended to by detailed analysis of self-reported factors that affected nurses' perceived ability to intervene in ATOD problems within the context of their nurse-patient relationship, as represented by two component themes; "Factors located within the nurse" and "Factors located within the patient".

This chapter explores what is happening naturalistically in the context of the work environment of the nurse, and their professional relationships, role responsibilities, structural and organisational constraints and/or supports that affect their ATOD clinical activities.

The qualitative data discussed comprised 1017 responses of registered nurses who responded to the open-ended question; "Please list the factors that affect your ability to intervene with patients who have alcohol and/or other drug-related problems". As in the previous chapter, these data were analysed by content analysis and thematic coding utilising major category and detail codes within a framework for selecting verbatim quotations that were illustrative of particular themes under consideration. In like manner, data that were convergent or divergent with the empirical findings of the study were considered. The themes below capture self-reports firstly in regard to the influence of diverse clinical settings that represent the workplace ('Factors located within the workplace'), and

secondly in regard to the influences of their relationships with co-workers ('Factors located within other health care providers'). Finally two themes that emerged in both the pilot study and state-wide survey were analysed, and are discussed below. These themes capture the broader context within which nurses practice namely; 'Factors located within the social/cultural context', and 'Comments and concerns regarding nursing practice'.

7.1 Qualitative Themes: Factors Located Within the Workplace

The first of the qualitative themes related to where, how, and with whom the nurse practiced, was "Factors located within the workplace". In Table 56 (below), the detail codes within this category code are tabled in hierarchical order, according to the proportion of respondents who wrote something pertinent to that particular detail code or qualitative sub-theme.

Table 56: Factors Located Within the Workplace – Ranked by Percentage of Responses (n=1281)

1.	Little or no exposure to these patients	¹ (16% ² [12.7%])
2.	Need in-service	(9.9% [7.9%])
3.	Lack of backup support structures	(9.8% [7.8%])
4.	Lack of time/too busy	(8.8% [7.0%])
5.	Not enough time to establish rapport/trust	(6.1% [4.8%])
6.	Not relevant/not my business	(5.0% [4.0%])
7.	Lack of clear policy	(4.6% [3.7%])
8.	Environment/lack of privacy	(4.0% [3.2%])
9.	Understaffed	(2.0% [2.2%])
10.	Inadequate nursing care plans	(1.6% [1.2%])
11.	Role confusion/role boundaries	(1.5% [1.2%])

^{1.} (%) Proportion of responses to open-ended Question, n=1017

2. [%] Proportion of responses of total sample, n=1281

7.1.1 Little or No Exposure to Patients with ATOD-Related Problems

First ranked by proportion of respondents was a large group of nurses (n=205), reporting that in their practice they had little or no exposure to patients with ATOD-related problems, and this affected their ability to intervene with patients with ATOD-related problems.

	Freq.	Percent
YES	205	16.0
NO	1076	84.0

 Table 57:
 Theme C.10 - Little or No Exposure to These Patients (n=1281)

The nature of responses gave rise to two groups of responses; those from nurses working in clinical settings where the prevalence of ATOD-related problems is likely to be low, and responses from nurses working in clinical settings in which epidemiological data demonstrates likely high prevalence. Of the former, responses from nurses working clinical settings such as; aged care (n=39), operating theatres (n=21), administration (n=17), education/research (n=15), oncology/palliative care (n=11), and also community (n=20), were the most common respondents.

"My current position is teaching, so I have minimal direct advisory contact with patients"

(Lecturer, Education, 18 years in position, Registered 30 years, Public sector, Metropolitan Area)

"Not applicable to the nursing field in which I work" (Clinical Nurse Specialist, Dev. Disability, Program officer, 8 years in position, Registered 17 years, Public sector, Metropolitan Area)

"Very rarely encounter with alcohol/drug related problems in area of work"

(Nurse Unit Manager, Oncology, Radiation, 6 years in position, Registered 17 years, Public sector, Metropolitan Area)

Responses from nurses working in clinical settings in which the prevalence of ATOD-related problems is likely to be high were fewer, but represented clinical settings such as; accident and emergency (n=12), surgical wards (n=11), rehabilitation (10), obstetric nursing (n=9). This dissonance between the given

likelihood that the nurse will encounter ATOD-related problems compared with their explicit statement that they simply do not see them in their practice, or regard them as important in clinical settings of known high prevalence, has been discussed in detail under related themes in "Factors within the nurse". These were themes that also had proportionately high response frequency; "Nurse not aware of ATOD issues" (n=139), and "Nurse lacks experience" (n=130). All of these thematic codes therefore reiterate a central concern of this investigation, which is the enduring disparity between the known prevalence of ATOD-related problems and the low frequency with which the nurses recognise them. A major barrier to this recognition is reflected in the explicit lack of awareness amongst this particular group of nurses.

> "Small number of patient presenting with type of problems" (Registered Nurse, Accident & Emergency, 6 years in position, Registered 25 years, Public sector, Metropolitan Area)

"Work in an environment where we see very little drug or alcohol abusers ... if so they are not in long enough to have withdrawals" (Registered Nurse, Surgical, 5 years in position, Registered 15 years, Private sector, Metropolitan Area)

7.1.2 Need in-Service

	Freq.	Percent
YES	101	7.9
NO	1180	92.1

 Table 58:
 Theme C.09 - Need In-Service (n=1281)

Reports of nurses that identified need for in-service as a factor affecting their ability to intervene to intervene with patients with ATOD-related problems, were clear and unequivocal. Nurses in senior leadership positions recognized the need for in-service and acknowledged its positive effects on clinical practice.

"We need more in-service programs. Drug offensive for 12/12 provided D & A education to the Nursing staff in the hospitals of this area. Until this time, it was considered 'normal' for some people (patients) to go into the DT's & not a nursing duty to take an alcohol intake history. 2 - 3 days @ our hospital, working with the staff whilst carrying out her mission of D&A education. The staff became self

confident about asking patients about their drug habits, & since that time we have not had a single patient go into alcohol withdrawal after admission" (DB# 1334)

(Deputy Director of Nursing,6 years in position, Registered 33 years, Public sector, Rural NSW)

Whilst not all responses were as full of praise, the majority was convergent with quantitative results; attendance at ATOD in-service education was associated with higher mean knowledge scores (4.3.4), and higher mean total therapeutic attitude score (with strongest effect for *Role Adequacy*) (4.6.1.2). Further, multivariate regression analysis found total therapeutic attitude score to be the strongest predictor of clinical activity and in-service education of itself predicts clinical activity (3.13 Predictors of key clinical behaviours). The nature of responses identifying the need for in-service were also highly convergent with other qualitative themes already discussed in 'Factors located within the nurse'. Notably the two top ranked themes by percentage of responses; 'Nurse lacks knowledge/education', and 'Nurse lacks skills', and the sixth ranked theme; 'Nurse lacks confidence'.

"More in-service - nurses need more counselling skills & more drug & alcohol information on the effects on patients during intake & withdrawing. These are common problems we need to know what we are doing"

(Registered Nurse, Accident & Emergency, 4 years in position, Registered 21 years, Public sector, Metropolitan Area)

"A series of lectures should be introduced into each hospital, so that R.N's & EN's would feel confident when confronted with these patients"

(Registered Nurse, General/A & E/Midwifery, 9 years in position, Registered 20 years, Public sector, Rural NSW)

The response below reflecting the perception that rural areas are not as well served by ATOD education and other support, was convergent with the quantitative finding of this study; that nurses working in metropolitan areas of New South Wales were significantly more likely to have attended ATOD specific in-service education.

> "More in-service education for staff and MORE 'country area' learning days & seminars. The problems are just as bad in the small towns - if not worse Where I work is a rural institution and we have had 1/2 hr. in-service on this topic and one person has been sent away for a further course, but I feel any nurse these days would

greatly benefit from longer in-services as whatever area you work in seems to be affected at some stage"

(Clinical Nurse Specialist, Accident & Emergency, 8 years in position, Registered 22 years, Public sector, Rural NSW)

7.1.3 Lack of Back Up Support Structures

	Freq.	Percent
YES	100	7.8
NO	1181	92.2

Table 59: Theme C.05 - Lack of Back Up Support Structures (n=1281)

Amongst the one hundred respondents who reported that a lack of back up support services was a factor affecting their ability to intervene with patients with ATODrelated problems, two major groups emerged. Firstly, respondents who reported their need for support in terms of more information to assist them in their practice, and also to assist their patients with their ATOD-related problems.

> Insufficient knowledge available if not working with D&A patients .. need for update newsletter with treatment - drugs used as is so common these days .. quick ref ..to assist on interviewing, early detection - also to help those already under influence'

(Manager, Occupational Health, 6 years in position, Registered 25 years, Private sector, Metropolitan Area)

"Lack of education. Lack of information to give patients. Information and assistance is available on request but YOU have to chase it" (Nurse Unit Manager, Surgical, 7 years in position, Registered 26 years, Public sector, Rural NSW)

A second group reported a perceived lack of support in terms of limited (or no) availability or access to ATOD support services and specialist personnel.

"No out of hours drug & alcohol worker in which to confer or to see patient. The D & A nurse already 'snowed' under during normal hours"

(Clinical Nurse Specialist, Accident & Emergency, 9 years in position, Registered 19 years, Public sector, Metropolitan Area)

"Lack of appropriate staff & immediate availability of Drug & Alcohol Resource people"

(Registered Nurse Accident & Emergency, 1.5 years in position, Registered 33 years, Public sector, Rural NSW) Lack of availability and access was of particular concern to nurses working in rural and remote areas.

"Isolation of township- inconsistency of availability of Drug counsellors ... lack of consistent follow up. Immediate support non existent for staff. After care treatment for pts. poor" (Midwife, 8 years in position, Registered 18 years, Public sector, Rural NSW)

These comments are important when reflected against the quantitative data related to the question "When you want clinical advice/information in regard to the nursing management of a patient with an alcohol or other drug-related problem, what do you usually do first?" (Q. 19, Appendix I).

Excluding respondents who reported that they never sought clinical advice (n=297), the highest frequency of response was "Contact a Clinical Nurse Consultant or Clinical Nurse Specialist in Drug & Alcohol" (n=296), followed by "Contact your local Drug & Alcohol service" (n=200). This high frequency of intention to seek clinical advice needs to be balanced against self-reports of nurses' perceptions of availability and access to ATOD specialist nurses and local ATOD services. However, although greater numbers of respondents reported consulting with nurses expert in ATOD management, or contacting a specialist ATOD service, one-way Analysis of Variance demonstrated greater effect was found for Clinical Activity amongst the fewer numbers of nurses (n = 147) who referred to the Nursing Policy Manual as their first action (5.8.2.8. Seeking Clinical Advice). The importance of nurses' reporting their need for available, accessible, current and clinically relevant guidelines and information therefore is emphasized by quantitative findings as follows.

- Regression analysis demonstrates the independent variable, "Refers to *Nursing Policy Manual* for Advice on Care of ATOD-Related Problems" was the second strongest predictor of clinical activity (Table 29. Predictors of the ATOD-Related Clinical Behaviours of practising Registered Nurses by Order of Strength of Association [n = 1281]).
- 2. The independent variable, "Works in a *Rural postcode area*" was the fourth strongest predictor of clinical activity and nurses working in rural areas had

a significantly higher frequency of referring to Nursing Policy Manual to assist in the care of patients with ATOD-related problems.

7.1.4 Lack of Time/Too Busy

Table 60: Theme C.01 - Lack of Time/Too Busy (n=1281)

	Freq.	Percent
YES	90	7.0
NO	1195	93.0

There is little contest that nursing shortages, higher levels of acuity in many care settings, high rates of bed occupancy and shorter length of hospital stay have increased the workload of nurses (Cowin & Jacobsson 2003b; McVicar 2003). Nurses are often very busy, and it was therefore anticipated by the investigator that nurses in this study would report that they were too busy to assess and offer interventions to patients with ATOD-related problems. Ninety (7%) of this large sample of registered nurses did report that lack of time or being too busy affected their ability to intervene, but the number of responses was proportionately lower than responses to the top four themes within "Factors located within the nurse" (see Table 30). This qualitative finding is convergent with that of the quantitative data; that *Role Adequacy* scores were significantly lower than *Role Legitimacy* scores. These nurses more commonly reported their perception that they lacked adequate knowledge, skills, awareness and experience to busy to do so.

Clinical settings in which workload is recognized as high, such as accident and emergency, critical care, and surgical wards, (Adeb-Saeedi 2002; McVicar 2003; Khowaja, Merchant & Hirani 2005), were reflected in the pattern of responses of nurses in this study. The most common respondent worked in a surgical setting (n=23), and of these, the nurse was more likely to be working in the private sector (n=15). Some respondents, as illustrated by this experienced clinical nurse specialist, recognized the constraints of both workload and lack of knowledge.

"Too busy in General Ward, insufficient time to spend with patients. Insufficient knowledge to help" (Clinical Nurse Specialist, Surgical, 11 years in position, Registered 23years, Public sector, Metropolitan Area)

Similar themes emerged from responses of accident and emergency nurses (n=17).

"My lack of time as an ED nurse - this is a very "time consuming" field"

(Registered Nurse, 4 years in position, Registered 13 years, Public sector, Rural NSW)

"Insufficient time – Inappropriate place - insufficient knowledge" (Registered Nurse, Accident & Emergency, 6 years in position, Registered 14 years, Public sector, Metropolitan Area)

7.1.5 Lack Time to Establish Rapport/Contact

	Freq.	Percent
YES	62	4.8
NO	1219	95.2

 Table 61: Theme C.01A - Lack Time to Establish Rapport/Contact (n=1281)

This theme emerged during content analysis from responses embedded in the theme, "Lack of time/too busy", after the decision had been made to undertake content analysis and thematic coding of all 1017 respondents (Chapter Two). What emerged was a qualitatively different group of responses reporting that it was not simply being too busy of itself that affected their ability to intervene in patients with ATOD-related problems, but that there was insufficient time to establish rapport and a quality of therapeutic contact judged necessary to intervene in a "proper" and comprehensive manner.

"Work load at Emergency Department with short staffing levels prevent "Quality Intervention" with alcohol& drug related problems. It depends on the nature of the contact with a particular client. I feel the need to build on a rapport before any in depth intervention is achieved"

> (Nurse Unit Manager, Accident & Emergency, 12 years in position, Registered 22 years, Public sector, Metropolitan Area)

To the investigator these seemed to be more encouraging perspectives and convergent with the high scores of the total sample on *Role legitimacy* and *Non-judgement* therapeutic attitude sub-scales, that is to say high level subscription to the belief that intervention for the patient with ATOD-related problems is a legitimate clinical activity, and that these patients are deserving of care. Reporting a lack of time to establish rapport and contact was a further reflection of the significantly lower scores for *Role Adequacy*. In this theme, a central concern was the nurses' perceived need to have adequate time to intervene in a manner they regarded as adequate for their patients' needs. This was well illustrated in the report of a clinical nurse consultant in diabetes care and education as reported under the theme "Nurse not aware of ATOD issues", who seemed less cognizant of the relationship between ATOD use and ATOD-related problems.

"Lack of time for thorough assessment with each patient. Despite this, Alcohol & Tobacco consumption are such an integral part of an assessment in a person with diabetes. There is limited time to fully connect and address other life issues even though they must be considered as contributing to pathology interfering with its adequate treatment/management/prevention "

> (Clinical Nurse Consultant, Diabetes Education, 11 years in position, Registered 21 years, Public sector, Metropolitan Area)

7.1.6 Not Relevant/Not my Business

Table 62: Theme C0.8 - Not Relevant/Not my Business (n=1281)

	Freq.	Percent
YES	51	4.0
NO	1230	96.0

This theme is qualitatively related to the theme "Little or no exposure to these patients" that captured a greater number of respondents. Responses coded into this latter, but related theme often contained the key word "inappropriate", or the key phrase "Not my business...". As such these reports were different from those in which nurses reported that they were not exposed to patients with ATOD-related problems; these nurses recognised that they were, but reported their

perception that to intervene with patients with ATOD-related problems was inappropriate to their practice and/or their practice setting. The low number of responses from nurses working in high ATOD prevalence settings was notable, for example, accident and emergency (n=3). Some responses (see below), reported that not only was it inappropriate to intervene in their clinical setting, but that to be sent a questionnaire in the first instance was inappropriate.

"As an OR nurse this is inappropriate. I am not qualified to answer these questions and <u>neither should I be</u> as I am never going to have the opportunity to assess or counsel patients about alcohol or drug use in the operating theatre setting. I rely on the A & E and ward staff to assess these patient issues in cooperation with the medical staff in order that we in OR can use our specific skills to care for our patients"

(Clinical Nurse Specialist, Operating Theatre -Clinical Education, 6 years in position, Registered 18 years, Public sector, Metropolitan Area)

The overall character of these responses is divergent with the high subscription to *Role Legitimacy* demonstrated by the quantitative data. A perception common to the responses of these fifty one nurses was that intervention with patients with ATOD-related problems was not 'nursing business', as stated by this director of nursing below.

"Not my business or that of my nurses to intervene. Not the nature of the clients we support. I do not feel a lot of these questions are related to a nurses care it is not always the place for the nurse to advise on alcohol and drug use"

(Director of Nursing, 8 years in position, Registered 28 years, Public sector, Rural NSW)

Other responses suggested that their ambit of care precluded intervention with patients with ATOD-related problems, therefore someone else's' "business" (responsibility).

"It's none of my business unless it affects their recovery. Our concern is more the <u>specific surgical</u> reason for admission - social, psychological is for other "Teams"

(Registered Nurse, Surgical, 6 years in position, Registered 30 years, Public sector, Metropolitan Area)

"Not my business I have other things to do. Consider the problem predominantly one of mental health"

(Assistant Director of Nursing, High Dependency, 1.5 years in position, Registered 21 years, Private sector, Metropolitan Area) A further report attributed responsibility to the patient - it is the patients' business, not the nurses'.

"It is the patients' business – not mine. Non-Interventionist attitude: I believe that people are responsible for their own behaviour & its consequences. I would only intervene if I felt harm would result to a 3rd party i.e. child, spouse, etc."

(Nurse Unit Manager, Outpatients, 2 years in position, Registered 23 years, Public sector, Metropolitan Area)

7.1.7 Lack of Clear Policy

	Freq.	Percent
YES	47	3.7
NO	1238	96.3

Table 63:	Theme	C.04 ·	- Lack	of	Clear	Policy	(n=1281)
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Among the aims of the "*The New South Wales Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs*" (NSW Department of Health, 1991), was the progressive development and implementation of policies and protocols to guide and assist nurses in screening, assessment, early recognition, and intervention for patients with ATOD-related problems. An important aim of this study, as has been discussed already, was to determine baseline usage of ATOD policies and protocols.

In particular the strength of the relationship between the independent variable, "Refers to *Nursing Policy Manual* for Advice on Care of ATOD-Related Problems" and clinical activity has been clearly determined. Nurses who refer to a NPM for assistance have higher reported levels of ATOD clinical activity. The low frequency of nurses reporting that a lack of clear policy affected nurses' ability to intervene with patients with ATOD-related problems may be considered convergent with the quantitative findings. This qualitative finding should be interpreted with some caution however, when the proportionately much higher frequency of reports in themes within "Factors located within the nurse", in particular; "Nurse Not Aware of ATOD issues" is considered. It is also noted and discussed above that a major group of self-reports found within in the theme "Lack of back up support services", came from respondents who identified their need for current and clear clinical information. As with the theme "Lack of back up support services" respondents within this theme "Lack of clear policy" were more likely to be nurses working in the private sector.

> "Patients are not routinely put on alcohol withdrawal observations unless symptoms are showing. No referral material. Protocols relating to the continued management of alcohol& drug problems lack clarity and are not well known or linked to other policies" (Nurse Unit Manager III, Surgical, 13 years in position, Registered 22 years, Private sector, Metropolitan Area)

An interesting contrast was disclosed by an intensive care nurse, now working in the private sector, and her experience when formerly working in a remote area. The difference in this nurses' perception of the influence of the support of ATOD protocols was apparent.

> "Lack of standard protocols regarding drug & alcohol related problems at the hospital where I work and I feel my patients are at risk. I have had a stint out bush working with aborigines where the rate of alcoholism is very high. The protocols for dealing with such patients were excellent and I felt secure in what I was doing"

(Registered Nurse, ICU, 0.5 years in position, Registered 20 years, Private sector, Metropolitan Area)

7.1.8 Appropriateness of Clinical Environment and Privacy

	Freq.	Percent
YES	41	3.2
NO	1240	96.8

Table 64: Theme C.03 - Environment – Privacy - Appropriateness (n=1281)

Common to this theme were responses that reported environmental factors ("located within the workplace") that affected nurses' ability to intervene with patients with ATOD-related problems. Some responses revealed central concerns about how the clinical setting; open plan, proximity of other patients, and level of activity and noise intruded on the possibilities of establishing and maintaining privacy and confidentiality.

"Environmental - I work in an emergency department. Lack of privacy due to the areas physical set out No appropriate area in the ED to address such problems confidentially"

Clinical Nurse Specialist, Accident & Emergency, 8 years in position, Registered 24 years, Public sector, Metropolitan Area)

"Having to deal with alcohol & drug problems in the middle of a busy ward. Lack of privacy in a small hospital"

(Registered Nurse, A & E/Med/Surg, 12 years in position, Registered 20 years, Public sector, Rural NSW)

Other respondents reported that either the hospital environment was not therapeutic,

"People admitted to acute hospital for detox are a waste of effort because the therapeutic environment is wrong"

(Nurse Unit Manager II, 8 years in position, Registered 27 years, Public sector, Metropolitan Area)

or that, in the more relational consideration of this mental health nurse, the presence of patients with patients with ATOD-related problems, was disruptive to the therapeutic environment (milieu).

"Clients under the influence of alcohol or drugs are so disruptive, not to mention dangerous at times. The millieu for a ward full of psychiatrically ill people can be "shot to bits" by the admission of one"

(Clinical Nurse Specialist, Mental Health, 6 years in position, Registered 33 years, Public sector, Metropolitan Area)

Difficulties in providing a low stimulus environment for the care of ATODrelated withdrawal syndromes were reported as a practical clinical concern,

> "Low stimulus environment not always possible - busy surgical ward "Nightingale ward Beds in rows - Some patients elderly confused males (ie.) an inappropriate environment for detox"

(Nurse Unit Manager II, Surgical, 4.5 years in position, Registered 31 years, Private sector, Metropolitan Area)

but also as a source of frustration and with the perception of a lack of workplace support in an acute care setting.

"Any formal advice ever sought on the issue such as D&A clinical presentations, always trotted out same old crap about reducing stimuli etc. which are fine if you're working in a unit set up for D & A but useless in an ICU with no support - I took it on board as an issue for a while and gave it up as a waste of time"

(Clinical Nurse Specialist, ICU, 9 years in position, Registered 23 years, Public sector, Rural Base Hospital)

7.1.9 Understaffed

	Freq.	Percent
YES	28	2.2
NO	1253	97.8

 Table 65:
 Theme -C.02 - Understaffed (n=1281)

Given the known shortage of nurses in the New South Wales health care system at the time of survey (Cowin & Jacobsson 2003b) it was somewhat surprising to the investigator that such a low number of nurses (n=28), explicitly reported being understaffed. It is relevant to reiterate the convergence of this with quantitative data in that *Role Legitimacy* and *Non-judgement* scores of the total sample were high. Motivation and intention to intervene with patients with ATOD-related problems was high and few nurses reported a physical lack of fellow nurses as a constraint to intervene.

> "Lack of time i.e. number of patients presenting to our unit outweigh nursing resources available"

> > (Nurse Unit Manager, Accident & Emergency, 12 years in position, Registered 21 years, Public sector, Metropolitan Area)

"Low staffing levels - drastic cutbacks in staff" (Midwife, 6 years in position, Registered 16 years, Public sector, Rural NSW)

7.1.10 Inadequate ATOD Nursing Protocols

Table 66:	Theme	C.07 -	Inadec	uate A	TOD	Nursing	Protocols	(n=1	281	I)
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	Freq.	Percent
YES	16	1.2
NO	1269	98.8

The strength of the relationship between the independent variable, "Refers to *Nursing Policy Manual* for Advice on Care of ATOD-Related Problems" and ATOD-related clinical activity has been discussed. It is further noted here; as is the close qualitative relationship this theme has with the theme, "Lack of clear policy". In this theme however respondents albeit small in number, were protagonists for ATOD nursing protocols and their clinical importance, as is well illustrated by the concerns of this deputy director of nursing.

"Nursing staff in acute setting should be made more aware of the symptoms of alcohol withdrawal and ask more details of daily intake of alcohol as this can greatly affect the outcome of medical or surgical symptoms. All patients considered drunk as under the influence of drugs should be closely checked for other possible cause of symptoms. I have seen people die due to lack of understanding of the person's possible injury or medical condition i.e. diabetes, toxic shock etc."

(Deputy Director of Nursing, 13 years in position, Registered 29 years, Public sector, Metropolitan Area)

This nurse working in aged care reported on the effects of nursing histories lacking in ATOD assessment when with patients with ATOD-related problems are transferred across care settings.

"The need for standardized D&A nursing care plans and histories when residents are send to us from specialty units e.g. Alcohol Brain Damage the transfer documents and Nursing History are generally abysmal providing no assessment info for developing appropriate nursing strategies"

(Registered Nurse, Aged Care, 9 years in position, Registered 17 years, Private sector, Metropolitan Area)

A counter view, and one that illustrates the clinical value of a pre-operative ATOD assessment protocol, was offered by this operating theatre nurse.

"In theatre we like to know if patients are substance abusers as anaesthetic can be difficult - each patient is visited pre-operatively and a D&A nursing assessment made by theatre staff"

> (Clinical Nurse Specialist, Operating Theatre, 15 years in position, Registered 27 years, Private sector, Metropolitan Area)

7.1.11 ATOD Interventions: Role Confusion/Role Boundaries

	Freq.	Percent
YES	15	1.2
NO	1266	98.8

Table 67: Theme C.06 - Role Confusion/ Role Boundaries (n=1281)

Despite the high mean score of the total sample on the measure of *Role Legitimacy*, there was some divergence between quantitative and qualitative data expressed in this theme by a small number of respondents. The issue of whether the role of the nurse extended beyond giving safe physical care, to assessing patients' behaviour (ATOD use), giving advice, counselling, and referral emerged.

"Will act in an advisory role to the staff who would inform me of a patient exhibiting signs & symptoms of presenting at hospital whilst apparently intoxicated/suffering from withdrawal. For patients I am a nurse- not an Adviser- not a qualified counsellor. My staff get tired of giving information etc. Our role is not one of education"

(Clinical Nurse Consultant, Medical (Team leader), 3 years in position, Registered 18 years, Public sector, Metropolitan Area)

The nature of responses was convergent with the quantitative finding that there was a significant difference between the self-reported frequency of psychosocial assessment and physical assessment. Nurses reported that they were significantly more likely to assess patients for physical problems related to ATOD use, than for psycho-social problems (5.5.2 Biomedical versus Psychosocial Assessment) and were significantly more likely to discuss patients with ATOD-related problems with other nurses and other co-workers, than to discuss them with the identified patient, or to offer treatment advice (5.7 Intervention Behaviours).

A related theme to be discussed below is a theme that has a much greater proportion of respondents, that of "Nurse sees ATOD Intervention as Intrusive/Invasion of Privacy" ('Factors within the social/cultural context').

7.2 Qualitative Themes: Factors Located Within Other Health Care Providers

A common aphorism found in the literature pertaining to workplace support is that actions and work practices that are designed to facilitate workers' effectiveness and wellbeing are critical elements of work performance (Rhoades and Eisenberger, 2002). It is further noted that workplace support can be provided by the organization, supervisors and managers, and co-workers. The first section of this chapter ("Factors located within the workplace") has largely been concerned with nurses' self-reports of organizational structures, processes and practices that affect their ability to intervene with patients with ATOD-related problems. This next section discusses nurses' reports of their relational experience in the workplace, and the degree to which professional relationships with co-workers affect their ability to intervene with patients with ATOD-related problems.

Rhoades and Eisenberger (2002) argue that instrumental support in the workplace involves providing practical and concrete assistance with key tasks and responsibilities, and that interactions with co-workers is critical to instrumental support. Opportunities to interact with co-workers can provide support in sharing duties and responsibilities, help and advice, appreciation and recognition and in particular, positive social interaction (praise, encouragement, caring, and respect).(Laschinger 2004) in reporting on nurses' perceptions of respect and organizational justice found that occupational stress in nurses resulted from lack of recognition and support, poor interpersonal relationships, and heavy workload. This finding resonates with early ATOD research, that of Cartwright (1980) in his construct measure of "Role Support". Cartwright's conceptualisation of role support was the degree to which health professionals, including nurses, experienced professional support and thus work satisfaction, when working with alcohol affected individuals. It was noted earlier in this thesis that the construction of the *Therapeutic Attitude Scale* in this investigation was stimulated by the Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ), developed by Cartwright.

An item within the Role Legitimacy subscale of the Therapeutic Attitude Scale; "I receive encouragement within my workplace to intervene with patients who have

alcohol and/or other drug-related problems" was designed to be expressive of the measure - "Role Support". It is therefore important to note that the quantitative analysis found significantly lower mean scores for the Role Legitimacy item (Encouragement to Intervene) than for the highest scoring of the Intervention Behaviours, as measured by response frequency to the Clinical Activity item; "Discuss these patients alcohol and/or other drug related problems with your team" (Discuss with Team). In other words, it seems that for these nurses, the intention to intervene with a patient with an identified ATOD-related problem by discussing this with their team was of significantly higher strength than their belief that they would receive encouragement to do so (5.7.3). This finding is strongly convergent with the theme, "Lack of cooperation and support", ranked second by percentage of responses in "Factors located within other health care providers" (Table 68, below). Irrespective of the hierarchical order of themes according to proportion of respondents, all themes encompass responses that report on relationships with co-workers (other health care providers) that affect nurses' ability to intervene with patients with ATOD-related problems.

 Table 68: Factors Located Within other Health Care Providers – Ranked by Percentage of Responses (n=1281)

1.	Seen as a specialist problem/refer on	¹ (15.0% ² [11.9%])
2.	Lack of cooperation and support	(8.2% [6.5%])
3.	Lack of specialist resources to refer on to	(7.7% [6.1%])
4.	Medical Officers need education	(5.0% [4.0%])
5.	Negative attitudes of others	(4.0% [3.2%])
6.	Predominance of Medical model	(3.1%[2.5%])
1.	(%) Proportion of responses to open-ended Qu	estion, n=1017

[%] Proportion of responses of total sample, n=1281

7.2.1 ATOD-Related Problems, Seen as a Specialist Problem -Refer On

Table 69: Theme D.05 - Seen As a Specialist Problem - Refer on (n=1281)

	Freq.	Percent
YES	153	11.9
NO	1128	88.1

The nature of self-reports from this large group of respondents (n=153) are in the main, positive in their outlook. Whereas there may be an issue as to whether or not intervention for patients with ATOD-related problems was a primary responsibility of the nurse or that of some other health care provider (ATOD specialist), the imperatives of at least a minimal ATOD intervention were met by nurses if ATOD-related problems were recognized and referred on for specialist help. It is encouraging also that the self-reports of nurses commonly valued the expertise of other health care providers and acknowledged their clinical support and collaboration. The type of support and collaboration received was often for short-term acute situations, as reported by these two respondents. The first was a hospital-based, assistant director of nursing, and the second, a community-based clinical nurse consultant.

"Some patients I have cared for have been referred to the Drug/Alcohol Rehabilitation Unit and we have cared for them in the initial stages of withdrawal from drugs/alcohol with the support of the D&A team – CNC, psychiatrists and/or psychologists involved"

(Assistant Director of Nursing, Med/Surg., 14 years in position, Registered 28 years, Private sector, Metropolitan Area)

"On the occasions I have encountered patients who have alcohol/drug related problems and its appropriate to seek assistance, I have always found Alcohol/Drug service helpful - especially with regards medication regimes etc."

(Clinical Nurse Specialist, Community Palliative Care, 3 years in position, Registered 15 years, Public sector, Metropolitan Area)

Other nurses also recognized the value of referring a patient for specialist help in order to establish longer-term interventions.

"Pts. can be referred to D&A workers who will have a long-term relationship- more consistency and therapeutic involvement"

(Clinical Nurse Consultant, Neurology, 8 years in position, Registered 22 years, Public sector, Metropolitan Area)

"If a customer has a dual diagnosis of M.I. [serious M.I.] and alcohol and/or other drug we have conjoint consultation so as to co-case manage with D&A staff. These problems are complex and long term" (Registered Nurse, Community M.H (crisis team), 7 years in position, Registered 12 years, Public sector, Metropolitan Area) Nurses also acknowledged the boundaries of their ATOD expertise and identified the point at which they would seek specialist support, and reported the necessity of knowing the type and scope of specialist services available.

> "Knowledge is not always current. Should a patient be admitted to my ward/unit with an obvious alcohol/drug abuse problem I wouldn't hesitate to contact the CNS or CNC from the D & A unit for professional advice" It is therefore important to know who to contact to assist as required"

(Clinical Nurse Specialist, Surgical, 7 years in position, Registered 19 years, Public sector, Metropolitan Area)

"Parents who are alcohol or drug addicts may be a danger to their children this is out of my scope but I do know my resources - children at risk referred to Child Protection Unit of Paediatrics. Heroin or methadone mothers usually on a program & are supervised by Methadone Clinic - Foetal Alcohol Syndrome children followed closely by Paediatricians"

(Registered Nurse, Accident & Emergency (Paeds.) 7 years in position, Registered 15 years, Public sector, Metropolitan Area)

7.2.2 Lack of Cooperation and Support

Table 70: Theme D.03 - Lack	of Cooperation and	l Support (n=1281) :
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	Freq.	Percent
YES	83	6.5
NO	1198	93.5

As discussed above, referral to ATOD specialists was reported as supportive of intervention, however a somewhat more critical viewpoint emerges in this theme. Whilst it is acknowledged that the number of respondents was lower, nurses reported that their expectations of the scope and utility of support offered by ATOD and other specialist services, were not always met. A sense of frustration and disappointment was apparent e.g. with this nurse who worked in a busy accident and emergency department.

"It is my experience in the A & E Department that any agencies which purport to deal with D & A matters are only available within normal business hours, and usually will have nothing to do with patients until they are no longer under the influence. We get no assistance dealing with often violent, aggressive, filthy, foul mouthed people in crisis" (Registered Nurse, Accident & Emergency, 6 years in position, Registered 12

years, Public sector, Metropolitan Area)

The majority of responses coded into this theme originated from hospital-based nurses (62%), of these more than half (38%) worked in acute care; this emphasized the importance of reports from such nurses who often felt unsupported in times of crisis.

"The biggest problem is when a patient presents to ED with a known mental illness (eg-depression-medicated) & has been drinking excessively, the crisis team refuse contact due to the alcohol - and D&A team are not psyched trained ..The result ..Pt. is treated for alcohol ingestion though not for the reasons why binged!"

> (Nurse Unit Manager III, Accident & Emergency, 5 years in position, Registered 22 years, Public sector, Metropolitan Area)

Lack of cooperation and support was of particular concern to nurses working in rural and remote areas. The complexity of relational factors was identified by this deputy director of nursing working in a large rural hospital.

> "Inadequate district support for nursing staff - D&A workers are not from nursing background .. unable to advise ward staff. DASU Mon-Fri - no support from other Hosps. Conflicting attitudes of GPs (very reluctant to change in method of drug prescriptions of such patients) and hospital Dr.s"

(Deputy Director of Nursing, 11 years in position, Registered 28 years, Public sector, Rural Base Hospital)

Other concerns that emerged were poor or no communication of ATOD histories from medical staff to nurses and the sense that this compromised nursing care and left nurses feeling unsupported.

"No information available in private sector, dealing directly with VMO's. No prior history available. When nurses identify - poor communication/understanding between nursing staff. Medical staff not listening to nursing staff – not good - both the patients and nurses caring for them are at risk"

(Clinical Nurse Specialist, Oncology, 4 years in position, Registered 18 years, Private sector, Metropolitan Area) "Often anaesthetics are not interested in taking into account a patient's alcohol and/or other drug related problem. With my limited clinical experience - apathy on the part of prescribers of medication, any problems are frequently left to the ward staff to sort out. Medical histories are often inadequate"

(Clinical Nurse Specialist, Surgical Post. OP., 6 years in position, Registered 17 years, Public sector, Metropolitan Area)

7.2.3 Lack of Specialist Referral Options

	Freq.	Percent
YES	78	6.1
NO	1203	93.9

 Table 71: Theme D.06 - Lack of Specialist Referral Options (n=1281)

The third of the three highest ranked themes was qualitatively closely related to the two that precede it. In all three themes the concerns of nurses being provided with, or having access to, services and professional relationships that support them to intervene with patients with ATOD-related problems emerged. It is of note that of the seventy-eight respondents reporting a lack of specialist referral options, the majority (62%) were working in rural settings. The nature of the reports from nurses working in rural settings (see below), are convergent with the strong quantitative finding that nurses from rural settings were significantly more likely to refer to a nursing policy manual to assist them with patients with ATODrelated problems, than their metropolitan counterparts (5.8.2.6). The notable corollary of this finding was that multivariate analysis of predictors of clinical activity found the variable; "Refers to Nursing Policy Manual for Advice on Care of ATOD-Related Problems" ranked second in order of strength in predicting clinical activity (Table 29). This finding was consistent with the finding of univariate analysis that nurses working in rural settings reported significantly higher levels of clinical activity, especially in their assessment behaviours, than nurses working in metropolitan settings. Nurses in rural settings reported a low likelihood of having 'on site' support from expert ATOD professional services. When workplace factors are considered it is contended that the higher levels of Clinical Activity, in particular those of assessment, arose out of rural nurses

having to undertake a range of ATOD-related clinical activities due to the necessity of specialist support not being immediately available.

"Difficult to access other professionals in this field due to geographic isolation. Non-availability of specialised unit - nor room in the nearest unit (200ks+) for client from country region & the lack of psychiatric counselling service in country for staff/doctors/clients. Lack of designated Dr.'s/OR nurses within the community to provide ongoing support for D&A clients – It is all left up to us"

(Deputy Director of Nursing, 10.5 years in position, Registered 25 years, Public sector, Rural Base Hospital)

"Difficulty in accessing Drug & Alcohol teams in the country areas. Those who are available are inert. No detoxification unit within the Area Health Service. Detoxification done, inappropriately in Acute Medical Ward"

(Registered Nurse, Medical Centre, 4.5 years in position, Registered 15 years, Public sector, Rural NSW)

In acute care settings common concerns emerged from both rural and metropolitan hospitals.

"There is a lack of back up & support services, especially after hours, in a country area - That goes for all counselling services (for mental health, sexual assault, etc.)"

(Clinical Nurse Specialist, High Dependency Unit, 7 years in position, Registered 20 years, Public sector, Rural NSW)

"Lack of back-up from specialists in this field. Not enough centres to refer clients to (or the ones available don't have any places available). I feel this area needs more centres to help D&A clients as the demand is on the increase"

(Clinical Nurse Specialist, Accident & Emergency, 5 years in position, Registered 18 years, Public sector, Metropolitan Area)

Psychiatric nurses who had the highest level of self-reported Clinical Activity (3.9.2 Current Clinical Area) reported their particular concerns in regard to comorbidity of patients with mental health and ATOD-related problems, in both rural and metropolitan settings.

> Lack of local area intensive D&A programs in general and- in particular - that can cater for D&A & other problems eg psychiatric" (Registered Nurse, Mental Health, 5 years in position, Registered 20 years, Public sector, Rural NSW)

"An extreme lack of any unit based facilities that will treat or even admit patients with dual diagnosis"

(Clinical Nurse Consultant, Psychiatry, 10 years in position, Registered 22 years, Public sector, Metropolitan Area)

Finally it is important to note the self-reports of nurses in specialized practice settings who identified the need for specific specialist services to support their practice.

"Lack of appropriate/acceptable services to the person - to refer to. I have worked extensively with Aboriginal people who have often commented about lack of Aboriginal people employed in detox units & other services - with appropriate skills"

> (Clinical Nurse Specialist, Community. ECHN, 6 years in position, Registered 22 years, Public sector, Metropolitan Area)

"The client has had serious sexual abuse & is unable to get specialised counselling"

(Clinical Nurse Consultant, Drug & Alcohol, 5 years in position, Registered 20 years, Public sector, Metropolitan Area)

7.2.4 Medical Officers Need Education

NO

	Freq.	Percent
YES	51	4.0

1230

Table 72: Theme D.01 - Medical Officers need Education (n=1281)

No measures of the nature and strength of nurse-doctor relationship were sought in the quantitative data collected. This notwithstanding, reports from nurses in the qualitative data placed the importance of the nurse-doctor relationship above professional relationships with other health care providers, as a factor that affected their ability to intervene with patients with ATOD-related problems.

The power gradation that is implicit, for some nurses in the nurse-doctor relationship had emerged in the theme; 'Nurse has no authority to act' and the workplace theme; 'Lack of backup support structures'. In this theme; "Medical officers need education", reports emerged that illustrated some nurses who were reliant on medical officers to initiate interventions for ATOD-related problems felt that this was constrained by the limited level of ATOD-related education and

96.0

knowledge of some medical officers. Some reports were singular and forthright, the latter of this three noting the consequences for nurses.

"Ignorance on the part of M.O" (Deputy Director of Nursing, 4 years in position, Registered 18 years, Public sector, Metropolitan Area)

"Medical officers require more knowledge in the case of patients affected by alcohol and/or drugs"

(Nurse Unit Manager, Accident & Emergency, 4 years in position, Registered 24 years, Public sector, Metropolitan Area)

"Doctors lack understanding of what they are dealing with - and therefore what WE are left to deal with"

(Clinical Nurse Specialist, Surgical, 3 years in position, Registered 16 years, Public sector, Metropolitan Area)

Analysis of quantitative data found nurses working in acute care settings demonstrated higher levels of ATOD knowledge related to nursing care of withdrawal and intoxication syndromes, than nurses working in any other clinical setting (3.3.2. *Current Clinical Area*). Convergent with this finding was the sense of frustration that emerged in the self-reports of nurses working in acute care settings in both the public and private sectors.

"Doctors know less than nursing staff and are of no help when you have a difficult patients who needs help when they are withdrawing from alcohol while in hospital"

(Registered Nurse, Recovery, 5 years in position, Registered 20 years, Public sector, Metropolitan Area)

"Ignorance and denial on part of VMO.s that some patients have an alcohol or drug problem ... Management of such patients is haphazard, ill informed & symptomatic treatment only - (IMI. Valium) ... no follow up"

(Nurse Unit Manager II, 4 years in position, Registered 20 years, Private sector, Metropolitan Area)

In other reports, rather than a lack of education the focal nature of the interventions of medical officers was of concern for some nurses.

"Lack of understanding of honorary medical officers in allowing their patients to have consultation by a specialist in the drug & alcohol field e.g. doctors seem only interested in immediate physical problems eg treat overdose & send home to same situation."

(Clinical Nurse Specialist, ICU, 1 year in position, Registered 20 years, Private sector, Metropolitan Area) "Reluctant medical staff.... RMOs in the hospital are often unwilling to order the appropriate medications for D&A withdrawals despite information being available. VMOs reluctant to discuss such problems, too busy, too difficult just want to palm the problem off onto someone else as soon as possible"

(Registered Nurse, Med/surg/High Dep., 3 years in position, Registered 15 years, Public sector, Metropolitan Area)

7.2.5 Negative Attitudes of Others

	Freq.	Percent
YES	41	3.2
NO	1240	96.8

Table 73: Theme D.02 - Negative Attitudes of Others (n=1281)

In this theme respondents reported the negative attitudes of other health care providers as a factor that affected their ability to intervene with patients with ATOD-related problems. Attributions of "therapeutic pessimism" and "therapeutic nihilism" emerged, and a common concern was that such negativity undermined any collective and collaborative team endeavour that supported intervention.

"The attitudes of other staff and administration in certain areas. ... as soon as a D&A history is documented no one wishes to know (Professionals) - community beliefs that these people are "bad" > Biased perspectives regarding treatment of D&A issues, outcome and the background of the patients"

(Clinical Nurse Specialist, Community MH.(Crisis Team), 2 years in position, Registered 12 years, Public sector, Metropolitan Area)

"Complete lack of educated & interested staff? ... because drug & alcohol problems are a dead loss & do not very often have a positive outcome"

(Registered Nurse, Accident & Emergency, 8 years in position, Registered 20 years, Public sector, Rural NSW)

Some nurses looked within their own professional ranks, others once more attributed negative attitudes to medical staff.

"Negative and judgemental attitudes of fellow nurses with regard this type of patient (its their fault)"

(Nurse Unit Manager II, Medical, 6 years in position, Registered 15 years, Public sector, Rural NSW) "Negative and hostile attitudes of medical staff and irate doctors who don't like nurses "meddling" with their patients" (DB# 0619) (Director of Nursing, 10.5 years in position, Registered 28 years, Private sector, Metropolitan Area)

7.2.6 Predominance of Medical Model

	Freq.	Percent
YES	32	2.5
NO	1249	97.5

The predominant theme that emerged from these thirty two nurses was that interventions for patients with ATOD-related problems were in the medical domain, and thus the primary responsibility of doctors, and not nurses. The nature of these self-reports, although small in number, were divergent with high mean score for *Role Legitimacy* found in quantitative analysis of the total sample of nurses in practice (n=1281). The nature of the self-reports was also related qualitatively to "Nurse has no authority to act". However in this smaller number of respondents, these nurses reported that ATOD-related interventions are rightfully medically dominant. The majority of responses originated from nurses working in the private sector.

"Do not have enough knowledge or education to allow me to do more than report my concern to doctor. I don't think we see it as a "nurses responsibility" to intervene in this medical or personal area. Even when it affects our work we await "medical action" or direction from someone who has expertise"

(Clinical Nurse Specialist, Surgical, 7 years in position, Registered 30 years, Private sector, Metropolitan Area)

"In a private hospital operating theatre we do not take part in patients on going treatment - that is for their private Doctor to do"

(Registered Nurse, Operating Theatre, 15 years in position, Registered 27 years, Private sector, Rural NSW)

7.3 Qualitative Themes: Factors Located Within the Social / Cultural Context

The category code "Factors located within the social/cultural context" captured thematic data pertaining to nurses' perceptions of the influences of the broad social/cultural milieu in which they live and work, as it impacted on their practice and worldview of the nature and consequences of ATOD-related problems.

What also emerged was the social/cultural influences within the nurses' practice areas which became apparent in their particular responses, for example; it would seem that nurses working in acute care settings have a different view of their practice world and the world in general, than nurses working in primary care settings. The hierarchical ordering of the proportion of responses by theme (Table 75), offers some understanding of the degree of importance these nurses placed on such factors as these affected their ability to intervene with patients with ATOD-related problems.

 Table 75: Factors Located Within the Social/Cultural Context – Ranked by

 Percentage of Responses (n=1281)

1. Intervention is intrusive/invasion of privacy	¹ (8.9% ² [7.1%])			
2. Cultural acceptance of ATOD use	(3.6%[2.9%])			
3. Nurses personal use	(3.0% [2.4%])			
4. Lack of support/education from family	(2.1% [1.6%])			
5. Stigma for patient	(1.7%[1.3%])			
6. Disruption to family	(0.5% [0.4%])			
^{1.} (%) Proportion of responses to open-ended Question, n=1017				

².[%] Proportion of responses of total sample, n=1281

7.3.1 Nurses See ATOD Intervention as Intrusive and an Invasion of Privacy

 Table 76: Theme E.02 - Nurses See ATOD Intervention as Intrusive/Invasion of Privacy (n=1281)

	Freq.	Percent
YES	91	7.1
NO	1190	92.9
This first ranked theme was by far the most important, not by virtue of strength of numbers alone but also by the nature of the theme itself, being antithetical to assessment and intervention. The nature of the self-reports were divergent with the high scores on *Role Legitimacy*. Of particular concern is the strength of response, both numerically and qualitatively, from nurses working in primary health care settings. Of the four compressed "clinical setting" codes used to layer responses in each theme (Chapter Six); *Education and Administration, Primary Health Care, Acute Care, and General Nursing,* thirty six percent of responses in this theme came from nurses working in primary health care settings, yet multivariate analysis found that "Works in a primary health care setting" was the only clinical setting variable that predicted ATOD clinical activity. For some primary health nurses however, invasion of privacy was reported strongly as a factor that affected their ability to intervene with patients with ATOD-related problems.

"We don't have a "RIGHT TO INTERVENE." We have a "DUTY TO PROVIDE A SERVICE." If someone comes to a health station for a specific health problem we have to be careful not to adopt Policeman attitudes. We can offer help when we see that something such as alcohol & drug abuse is interfering with someone's well being - but ultimately the choice is theirs - not ours"

(Community Dev. Disability Coordinator, 6 years in position, Registered 14 years, Public sector, Rural NSW)

Gallop (1998) comments that there are a number of activities the community health nurse may become involved with that are, "beyond the scope of practice" (p. 108), and that their delivery of care within the home already extends professional boundaries. This is a sentiment that emerged in the reports of community nurses in this study, with the related belief that enquiring about ATOD use will jeopardize the trust implicit in the relationship between nurse, patient and the patients' family.

> "Fear of breaching patient's confidence - do I need to know? Drinking is socially acceptable in Australia. I wouldn't regularly ask clients about their intake as it would be an infringement of their rights. I am a nurse not a policeman.. I go into peoples homes as a GUEST- I would consider it a rudeness. I would only warn people against smoking. In child & family services the main brief is to engage the client and family not put them offside"

(Nurse Unit Manager, Community, 8 years in position, Registered 22 years, Public sector, Metropolitan Area) Concerns about professional boundaries was not restricted to community nurses alone as the self-report made by this surgical nurse illustrated in contending that there is a particular time and clinical context for ATOD interventions.

> "Clients right to privacy must be adhered to. If you are in a detox or D&A rehab unit your patients expect you to ask relevant questions it would part of your job. It is different if someone comes in for an arthroscopy and you question them intensely on alcohol/drug matters. When a car accident occurs & the driver is brought in we do not question him about his/her driving skills, nor the obese cardiac arrest about their food addictions or the violent spouse about why he beats up his family"

(Registered Nurse, Surgical, 3 years in position, Registered 21 years, Public sector, Metropolitan Area)

For this nursing unit manager it was not only the patients' right to privacy that was of concern but also their right to "peace and quiet".

"Most patients do not take kindly to "interfering" nursing staff - D&A interrogation TOO INTRUSIVE. Post-op patients have a right to peace & quiet"

(Nurse Unit Manager (Team Leader), 5 years in position, Registered 20 years, Public sector, Metropolitan Area)

7.3.2 Cultural Acceptance of ATOD Use

Table 77:	Theme E.03 -	Cultural Acce	ptance of ATOD) Use (n=1281)
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	Freq.	Percent
YES	37	2.9
NO	1244	97.1

This theme captured nurses' perceptions that cultural acceptance of ATOD use influenced their practice in regard to patients with ATOD-related problems. The report of the assistant director of nursing below is convergent with the quantitative finding that the frequency of *Information-giving behaviour* was significantly lower than any other self-reported clinical activity (5.3.Differences in the frequencies of clinical activity).

"Societies attitude needs to change - use of alcohol & some drugs accepted by society and treated with acceptance. Makes patient education seem moralistic"

(Assistant Director of Nursing, 6 years in position, Registered 34 years, Public sector, Metropolitan Area)

Others reported their perception of the implications of cultural acceptance on therapeutic outcomes,

"Social acceptance of the habit. Easy accessibility of legal (and some illegal!) drugs at clubs/pubs. Clients need to change peer group otherwise at risk of peer pressure to resume habit. We can't do it for them"

(Nurse Unit Manager, 6 years in position, Registered 11 years, Public sector, Rural NSW)

leading to the emergence of a sense of despair and frustration in others.

"I'm very dissatisfied with the government policies of the sale and distribution of alcohol, tobacco and other related drugs - Aided and abetted by the massive media advertisements aimed at our youths with very little accountability for the damage caused – leaving us to pick up the pieces"

(Registered Nurse, Accident & Emergency, 6 years in position, Registered 23 years, Public sector, Rural NSW)

7.3.3 Nurses Personal ATOD Use/Exposure to Family and Friends with ATOD-Related Problems

 Freq.
 Percent

 YES
 31
 2.4

 NO
 1254
 97.6

 Table 78: Theme E.04 - Nurses Personal ATOD Use/Exposure to ATOD Problems (n=1281)

Respondents were asked "Are you close to anyone (e.g. family or friends) who has an alcohol or other drug related problem?" (Question 25, Appendix I). Thirty nine percent (n=493) responded "yes" to this particular question. Those respondents reporting "personal experience" had significantly higher mean scores for all dependent variables *ATOD Knowledge, Therapeutic Attitudes,* and *Clinical Activity,* than those who did not. In particular, respondents having had personal ATOD experience reported themselves as being more *Role Adequate* and had

higher scores on *Non-judgement*, in other words personal ATOD experience was associated with these respondents being less critical or judgemental towards individuals with ATOD-related problems, and had a greater sense as nurses of being able (adequate) to intervene. This high level of response is not reflected by the low level of response (n=31) in the qualitative data or by the nature of the reports which were mostly divergent with the quantitative findings. However, for some respondents personal ATOD experience led to therapeutic pessimism and reluctance to intervene.

"Personal experience - living with alcohol in family since childhood leaves a feeling that intervention is hopeless and to involve myself with such patients with leave me angry and hurt (again!) - hence reluctance to intervene"

(Nurse Unit Manager II, Med/Surg, 7 years in position, Registered 24 years, Public sector, Rural NSW)

Other respondents reported the association between their personal ATOD experience and therapeutic attitude in a singular manner,

"I have a strong dislike of alcoholics & view them as a waste of precious resources, particularly as I was married to one & was belted up years ago"

(Assistant Director of Nursing, 11 years in position, Registered 33 years, Public sector, Metropolitan Area)

while some others reflected on the effect personal experience may have on their practice.

"Personally, I get very irritated by certain behaviours of people with drug dependency problems (including alcohol) due to unresolved feelings towards close family members with this problem. Has made my management not as effective however hard I try not to let it"

(Clinical Nurse Specialist, Palliative Care, Community, 9 years in position, Registered 33 years, Public sector, Metropolitan Area)

7.3.4 Lack of Support From Family

Table 79:T	Theme E.05 - I	Lack of Support	From Fam	ily (n=1281	I)
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	Freq.	Percent
YES	21	1.6
NO	1260	98.4

The understanding that ATOD-related problems of patients can be associated with the family history by cause and/or consequence emerged in themes discussed earlier ('Factors located within the patient'). Such themes captured nurses' concern about actual and potential harm inflicted on the young and vulnerable by ATOD use in families (particularly from midwives and child and family nurses). The self-reports in this theme were focused on nurses' perceptions of the importance of family support for patients with ATOD-related problems.

> "Family support for patient to change behaviour not always forthcoming lack of willingness of families of patients to discuss problem i.e. uncooperative or unwilling for staff intervention or to confront the need for change"

(Registered Nurse, Community, 11 years in position, Registered 18 years, Public sector, Metropolitan Area)

"Relatives often unhelpful or unable to assist in encouraging patient to seek help. Patient's home environment and/or attitude of spouse/family/significant others keeps the patient drinking or drugging"

(Registered Nurse, Accident & Emergency, 8 years in position, Registered 18 years, Public sector, Rural NSW)

7.3.5 Stigma for Patient

 Table 80:
 Theme E.01 - Stigma for Patient (n=1281)

	Freq.	Percent
YES	17	1.3
NO	1264	98.7

Nursing literature of the 1980s and 1990s reported that nurses seemed to uncritically accept stereotypes of the 'alcoholic' and 'addict' with both being variously described as 'weak-willed', 'hedonistic', 'hostile', 'combative', 'uneducated' and 'difficult to nurse' (Tweed 1989; Goodin 1990; Gerace, Hughes & Spunt 1995; Sullivan 1995; Barry, Tudway & Blissett 2002). Examination of reports from nurses in this investigation, as captured in thematic analysis of "Factors located within the patient", found nurses' perceptions of patients with ATOD-related problems to be complex and diverse, but not strongly pejorative. The idea that nurses stigmatise patients with ATOD-related problems was not found within the small number of self-reports in this theme; "Stigma for patient". Rather these nurses identified stigma as damaging to the patient and a constraint for ATOD intervention.

> "There is a 'STIGMA' associated with the terminology -'ALCOHOLIC' - people would rather be classified anything but 'ALCOHOLIC'"

(Registered Nurse, Child & Family, 8 years in position, Registered 28 years, Public sector, Rural NSW)

"Still a stigma attached to admitting D & A problems for the people who do so"

(Clinical Nurse Specialist, Community, 10 years in position, Registered 20 years, Public sector, Metropolitan Area)

"The people with drug & alcohol problems are often alienated from services because society & "The System" view them more as criminals or otherwise deviant - rather than people with major health problems"

> (Clinical Nurse Specialist, Early Childhood HN, 6 years in position, Registered 22 years, Public sector, Metropolitan Area)

7.3.6 Disruption of Family

Table 81:T	Theme E.06 -	Disruption of Fai	mily (n=1281)
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	Freq.	Percent
YES	5	0.4
NO	1276	99.6

As noted in the discussion of earlier themes many nurses were aware that ATODrelated problems are often linked to family history of patients by cause and/or consequence. Of the small number of respondents reporting on disruption of the ATOD patient's problems on their family, this community nurse noted the affect that observing the impact of adverse consequences has had on her motivation to intervene.

> "Sometimes I have to muster my motivation to get involved. Often feel antagonistic towards these patients observing the disasters they cause to their families - financial, violence, psychological damage to children"

(Registered Nurse, Community, 8 years in position, Registered 18 years, Public sector, Metropolitan Area)

7.4 Qualitative Themes: Comments and Concerns Regarding Nursing Practice

This final category theme captured self-reports that were not so much direct responses to the open-ended question "Please list the factors that affect your ability to intervene with patients who have alcohol and/or other drug-related problems", but reflections nurses offered in regard of their own practice and ATOD-related problems in a broader sense. The nature of the responses reported below suggest that a state-wide survey of nurses knowledge, clinical activity, and therapeutic attitudes towards patients with ATOD-related problems, of itself, has had the effect of raising nurses' awareness and motivating change in their ATOD practice.

 Table 82: Comments and Concerns Regarding Nursing Practice – Ranked by

 Percentage of Responses (n=1281)

 Survey leads to the realization of the need/want to know mon Other responses of interest-not coded 	te ${}^{1}(11.0\% {}^{2}[8.7\%])$ (6.4%[5.1%])
3. Need for prevention 4. Legal constraints	(4.3%[3.4%]) (0.3%[0.2%])
5. Ethical constraints	(0.3%[0.2%]) (0.3%[0.2%])
 (%) Proportion of responses to open-ended Question, n=1017 [%] Proportion of responses of total sample, n=1281 	

7.4.1 Completing Survey Gave an Awareness of Low Knowledge

 Table 83: Theme F.04 - Survey Leads to The Realization of the Need/Want to Know More (n=1281)

	Freq.	Percent
YES	112	8.7
NO	1169	91.3

Foremost of the themes regarding nursing practice was the first ranked theme, "Survey leads to the realization of the need/want to know more". The importance of the nature of the reports of these one hundred and twelve respondents was the convergence demonstrated with low ATOD knowledge scores in the quantitative results of the whole sample, and recognition of the need for greater knowledge strongly reported in the first ranked theme within "Factors located within the patient". Many respondents made explicit self-reports that the knowledge questions were difficult for them to answer, some having to guess (especially in regard to Standard Drinks), leading to self-reports of feelings of "embarrassment" and "shame". More commonly, respondents reported that due to the survey their realization of low ATOD knowledge motivated them towards obtaining it.

"After doing this questionnaire, I feel I don't know very much at all. Need to do something about it –quickly!"

(Assistant Director of Nursing, Clinical Education, 8 years in position, Registered 25 years, Public sector, Metropolitan Area)

"Obviously need to upgrade my lack of knowledge completing this survey indicates my obvious ignorance"

(Nurse Unit Manager, Community, 8 years in position, Registered 27 years, Public sector, Metropolitan Area)

For some respondents their new realization went beyond a lack of ATOD knowledge with them reporting their need to reconsider their attitudes and understanding.

"This survey has caused me to reconsider and assess nurse's attitudes & understanding of Drug and alcohol related problems (including my own!)"

(Assistant Director of Nursing, 6 years in position, Registered 24 years, Public sector, Rural NSW)

This next report includes the nurse's realization of the importance of ATOD knowledge for their day to day nursing practice and identified the need for clinical guidelines.

"I feel that there is a personal need for me to seek more education/inservice about alcohol & drug related, management problems. When I trained there was not much education about the alcohol/drug dependence problems. I realize how little knowledge I have and how much it actually affects my day to day practice. I admit to thinking of it as a separate branch of nursing specialisation that really didn't involve me. This survey has made me feel that there is a definite need for me to seek out information and resources myself. It would be great if a package of information could be made available for nurses."

(Clinical Nurse Specialist, Community, 5 years in position, Registered 11 years, Public sector, Metropolitan Area) A counterview, and one that was less common, was offered by this nurse who worked in the private sector.

"As I do not work in a public hospital I find these questions irrelevant and extremely hard to answer" (Registered Nurse, Med/Surg 8 years in position, Registered 17 years, Private sector, Metropolitan Area)

As a final note, positive viewpoints (and outcomes) were reported by these nurses who worked in the private sector.

"The survey has prompted me to obtain the phone nos. for both client & professional help if required"

(Nurse Unit Manager, Private Medical Centre, 3 years in position, Registered 15 years, Private sector, Rural NSW)

"I will conduct in-service for staff - thanks for the opportunity of undertaking the survey"

(Director of Nursing, Aged Care, 10 years in position, Registered 31 years, Private sector, Metropolitan Area)

7.4.2 Other Responses of Interest

Table 84:Theme G.01	 Other Responses o 	of Interest-Not Coded (n=1281)
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	Freq.	Percent
YES	65	5.1
NO	1216	94.9

This theme contains diverse responses that were not germane to any of the coding frames of other themes, but are of interest as they reflected particular concerns that nurses had about ATOD-related issues. Of importance, these issues were not reported as direct responses to the questions, but as spontaneous expressions of concern.

Among concerns of nurses in administrative roles was the 'impaired nurse'.

"Regarding "at risk" nursing staff - prevailing attitudes in the workplace that tend to have colleagues covering for, & protecting an impaired nurse, because of the continuing perception of nurses merely being disciplined, rather than the emphasis being on rehabilitation" (Deputy Director of Nursing, 9 years in position, Registered 24 years, Private sector, Metropolitan Area) A related concern of a number of nurses was nurses' personal ATOD use presenting a negative health model to the community, implying a double standard.

"Nurses as a group probably have a bigger problem than their clients. This is not addressed usually. Nurses standing in groups outside hospitals- smoking – not a good look and WE are the health educators!!"

(Clinical Nurse Specialist, Women's Health, 3 years in position, Registered 12 years, Public sector, Metropolitan Area)

Others took the opportunity to declare their own ATOD use,

"Am a heavy smoker - resent anti-smoking propaganda & restrictions when alcohol as bad or worse - Don't get killed by smoking drivers. Don't get bashed up by smoking husbands. Smokers do not lose sense of reasoning as do drinkers. If I was told I could never drink again I wouldn't care"

(Registered Nurse, Psychiatry, 7 years in position, Registered 15 years, Private sector, Metropolitan Area)

While others declared their position in regard to ATOD intervention and rehabilitation.

"Does this survey indicate an increase in services for people within alcohol & other drug alcohol rehabilitation units OR a reduction of services. In their place will be a few beds in a General hospital, early intervention and harm reduction - not what the clients want - THEY have not been consulted. Hope the \$s spent on this survey is worth it"

(Clinical Nurse Specialist, Psychiatry/D & A Rehab, 7.5 years in position, Registered 24 years, Public sector, Rural NSW)

A number of self-reports supported this survey, with others commenting on the lack of recognition for longstanding self-help groups.

"Congratulations on setting this in motion, it seems to be very much needed in the hospital where I am presently working"

> (Registered Nurse, ICU, 1 year in position, Registered 20 years, Private sector, Metropolitan Area)

"A.A. & N.A. and such self help groups appear to be the best solution for Chronic Alcoholics & Drug abusers. Your survey makes no mention"

(Registered Nurse, Surgical, 8.5 years in position, Registered 35 years, Public sector, Rural NSW)

7.4.3 ATOD-Related Problems and the Need for Prevention

	Freq.	Percent
YES	44	3.4
NO	1237	96.6

 Table 85:
 Theme F0.1 - Need for Prevention (n=1281)

Reports captured by this theme demonstrated that some nurses recognized the value of preventive strategies. Some responses were focused on broad social, health and drug policies, but more commonly nurses commented on the value of early recognition and early intervention as an essential secondary prevention strategy.

"Early identification is essential and early intervention is a responsibility & we need to identify appropriate referral services and involve them early to prevent further harm"

(Assistant Director of Nursing, Accident & Emergency, 7 years in position, Registered 30 years, Public sector, Metropolitan Area)

The theme of early intervention and prevention emerged.

"I believe it is nurses who are best placed to have an impact on people's drug use problems and prevent further damage. We have access to clients, have their confidence and should view a D & Ahistory and minimal intervention and as an obligation to fulfil our role responsibly" (DB# 2182)

(Deputy Director of Nursing, 4 years in position, Registered 20 years, Public sector, Metropolitan Area)

The report from this clinical nurse consultant was considerably more broadly based.

"Drug & Alcohol (like Illness & Disease) is related to social conditions. Ref.> Nursing Theories Socio Economic climate - high unemployment - high social stressors, lack of time structure (a job or chance of a job) use of ETOH & THC etc. as "Medication" by disenfranchised youth. Outcome= helplessness, hopelessness, poverty - suicides. Physical and Mental Health Education should be a mandatory component of the education system Yr 6-12. Drug/Alcohol/Tobacco companies should fund Detox Centres as part of their responsibilities to the "consumer". Ditto for casino's & gambling organizations. Tobacco should be a "controlled" substance"

(Clinical Nurse Specialist, Acute Psychiatry, 6 years in position, Registered 20 years, Public sector, Metropolitan Area)

Concerns about youth and early exposure to ATOD use was a common concern as was the appeal for school based ATOD education.

"Education starts with children. It's a little late in the hospital setting - even so this topic should be compulsory & regularly updated for all health workers, parents, teachers etc. Hopefully it is part of the education service in schools"

(Registered Nurse, Acute Care/Surg, 10 years in position, Registered 24 years, Public sector, Rural NSW)

7.5 Summary

This chapter continued the discussion of convergence and divergence between quantitative and qualitative findings that emerged from the systematic application of sequential (within-method) triangulation data analysis. The aim of this chapter, as in the preceding one, was to provide a holistic and comprehensive understanding of the major empirical finding of the investigation; the significant difference between positive attitudinal sets and motivation to perform desired ATOD-related clinical activities, and the reported lower frequency at which this occurs. Understanding did emerge from a detailed exploration of nurses' perceptions of what happens naturalistically in the context of their work environment, professional relationships, role responsibilities and, structural and organisational constraints and/or supports that affected their ATOD clinical activities. The chapter therefore was concerned with elaboration and examination of self-reports of nurses within the qualitative themes and sub-themes of: 'Factors located within the workplace', 'Factors located within other health care providers', 'Factors located within the social/cultural context', and 'Comments' and concerns regarding nursing practice'.

Critical among nurses' perceptions of their "readiness" to intervene with patients with ATOD-related problems were the clear and unequivocal reports that identified their need for ATOD specific in-service education to increase their knowledge, skills and confidence. Furthermore, nurses in senior leadership positions recognized the need for in-service and acknowledged its positive effects on clinical practice. These qualitative findings were convergent with the strong association of ATOD specific in-service education with increased ATOD

knowledge, therapeutic attitudes (in particular, *Role Adequacy*) and, ATOD clinical activity.

Lack of organisational and structural support, and cooperation and support from other health care providers were commonly reported, as were excessive workload and the perception of being "too busy" to deal with the complexity of ATODrelated interventions. These nurses however, more commonly reported their perception that they lacked adequate knowledge, skills, awareness and experience to intervene with patients ATOD-related problems than that they were too busy to do so.

Concern was noted in discussion of some nurses' perceptions that ATOD intervention was overly intrusive and an invasion and/or "not nursing business". Such reports were divergent with the empirical finding of a high score for *Role Legitimacy* for the sample overall, and as noted, antagonistic to early recognition and early intervention for patients with ATOD-related problems. However encouragement was noted in discussion of nurses' reflections in the qualitative theme; 'Comments and concerns regarding nursing practice', for the expressed need for the prevention of ATOD-related problems, and that a state-wide survey of nurses knowledge, clinical activity, and therapeutic attitudes, of itself, has had the effect of raising nurses' awareness and motivating change in their ATOD practice.

CHAPTER EIGHT: CONCLUSIONS

In concluding a study of this nature it is useful to first return to the beginning point. The extant nursing literature determined an urgent need for further investigation into why nurses do not respond to patients with ATOD-related problems in the consistent and effective manner that the prevalence of these costly health problems require, or in a manner that reflects the opportunities that nurses have to offer brief and timely intervention. Review of the small numbers of published studies in this regard revealed that they were predominantly not Australian, and had focused on nurses' ATOD knowledge and/or attitudes towards ATOD-related problems (particularly alcohol) and those affected by them, or the measurement of ATOD clinical practices of nurses. What had been seriously overlooked was not only what nurses do, or do not do, about ATOD-related problems (how much and how often) but also: Why? or indeed: Why not? That is, the extent to which knowledge and attitudes, and context, predict clinical practice had been overlooked.

In the search for further understanding this study; "An investigation of factors that determine self-reported knowledge, therapeutic attitudes, and clinical behaviours of registered nurses towards people with Alcohol, Tobacco, and Other Drug-related problems", was undertaken. Within this investigation a robust statistical (multiple regression) model was developed to determine predictors of desired ATOD clinical behaviours and a multi-method research process that utilised sequential triangulation of quantitative and qualitative results, was applied to the following research questions.

Chapter Eight

Research Question 1

What explains the enduring and prevailing disparity between the high rate of clinical prevalence of alcohol and other drug problems and the low frequency of recognition and intervention by registered nurses in practice?

The major empirical finding was the significant difference between positive attitudinal sets and motivation of practising registered nurses to perform desired ATOD-related clinical activities, and the lower reported frequency at which this occurs. Of the three conceptual domains in the Combined Regression Model, and the related sets of variables entered into the equation for each domain, it was the *Readiness* domain that was the strongest predictor of ATOD clinical activities; assessment, information giving, and intervention. *Readiness* was conceived of in the most literal of ways, that is, the motivation of registered nurses and their potential to act ("Readiness"). The domain of *Readiness* was largely consistent with the univariate analysis and also logically consistent in that, to carry out ATOD clinical activity, or perhaps any activity, the nurse must firstly be ready to act.

Registered nurses with positive therapeutic attitudes, high levels of knowledge, who had attended ATOD in-service education, taken action to seek clinical advice about ATOD-related problems, recently used a Nursing Procedure Manual specific to ATOD-related problems, took professional responsibility for their own education, and had a degree in nursing; were the nurses who were ready to undertake assessment, patient education and intervention. The difference between intention, motivation, and action to assess, recognize and intervene with patients with ATOD-related problems was validly represented by significant differences between the measures of Therapeutic Attitudes and Clinical Activity.

Qualitative analysis enabled a large number of registered nurses to self-report their perceptions of their own levels of ATOD knowledge and skills and the value of this to their nursing practice. Unambiguous statements about lack of knowledge were identified as the most common qualitative response, followed by a high proportion of nurses reporting lack of skills and lack of confidence. High subscription to these qualitative themes is highly convergent with the low *Role Adequacy* scores as measured. Circularity emerges in that *Role Adequacy* was the lowest scoring of all Therapeutic Attitude factors and *Total Therapeutic Attitude* was the strongest predictor of clinical activity but despite this, nurses on average actually did more in terms of assessment and intervention for ATOD-related problems than they perceived themselves as being adequate to do, and/or were supported in their workplace to undertake.

Research Question 2

How much do registered nurses actually know; that is, what is the level of alcohol and other drug knowledge among a large cross-section (n=1281), of practising registered nurses?

On average the ATOD knowledge of the total sample was found to be low and of critical importance; responsive to ATOD specific in-service education and the utilisation of Nursing Procedure Manuals to assist in the care of patients with ATOD-related problems. Particular categories of ATOD knowledge, for example; assessment, pathology, and withdrawal management were found to be high in nurses working in particular clinical settings, for example, acute care. Knowledge which is clinically pertinent and useful and valued as significant to the nurse generates a higher level of interest (salience) and is demonstrated as a higher level of ATOD knowledge. The highly significant difference of knowledge levels for withdrawal management, standard drinks and pathological indicators of ATOD morbidity, amongst acute care nurses when compared with nurses working in other clinical settings, strengthened this contention. Thus it a realistic conclusion that clinical area/setting in which the nurse works reflects the type of patients that present and the type of clinical problems that emerge, and thus influences the type of ATOD knowledge valued and sought after by the nurses.

Nurses working in rural postcode areas of NSW demonstrated higher levels of ATOD knowledge, than their counterparts working in metropolitan postcode areas. Nurses working in the public health sector had higher levels of ATOD knowledge than nurses working in the private sector. The strength of the influence of ATOD specific in-service education was reinforced by the finding

that nurses who worked in the public sector, were significantly more likely to have attended ATOD specific in-service education.

Implications of ATOD knowledge for assessment and intervention of patients with ATOD-related problems by practising registered nurses are as follow:

- To capitalise on nurses' motivation to increase their specific clinical knowledge, particularly in response to an identified ATOD-related problems within their workplace, providing access to immediate and good quality guidelines or protocols for ATOD-related problems is an essential adjunct to knowledge and thus ATOD clinical activity. ATOD knowledge is the second only to therapeutic attitude in strength of predicting ATOD clinical activity.
- 2. The immediacy of ATOD specific in-service education in the workplace of nurses, especially in clinical settings with a high prevalence of ATOD-related problems increases ATOD knowledge, positive therapeutic attitudes, and ATOD clinical activity.
- 3. Low levels of ATOD knowledge among registered nurses in senior positions of clinical and executive leadership, and management, is of particular concern. The self-reports of many of these nurses in leadership positions that, they have never received formal education or training in ATOD issues and clearly acknowledge their need for it, provides an important opportunity for change.

Research Question 3

What are the attitudes/beliefs of practising registered nurses, towards patients with alcohol and other drug problems?

The relationship between positive therapeutic attitudes and high levels of clinical activity was established by univariate analysis and a regression model using multivariate analysis. In this predictive model, *Total Therapeutic Attitude* was found to be strongest predictor of ATOD clinical activity. *Total Therapeutic*

Attitude is a composite measure of three therapeutic attitude sub-scales. Of the three component attitudinal constructs within *Total Therapeutic Attitude*; *Role Adequacy, Role Legitimacy* and *Non-judgement*, it is *Role Adequacy* that stands out as the strongest antagonist towards assessment and intervention in ATOD problems in the clinical environment in which nurses work. Scores on *Role Adequacy* sub-scale were significantly lower than the other two measures of *Role Legitimacy* and *Non Judgemental* sub-scales.

An important conclusion therefore is that the major contributor to the therapeutic attitudes of these nurses was their perception that they were unable, or inadequately trained to give the sort of care required (*Role Adequacy*), more so than believing these patients were not worthy of their care (*Non-Judgement*), or that it was not a proper thing to do (*Role Legitimacy*). Qualitative analysis was convergent with these empirical results. Nurses' responses identified lack of knowledge, skills, experience and confidence as having greater effect on their ability to intervene patients with ATOD-related problems than factors located "within the patient". Nurses' belief in being unable or ill-prepared to intervene in ATOD-related problems was of stronger influence than the more singular, and often written about influence, of not liking patients with ATOD-related problems and making the judgement that they were less deserving of care, than other patients.

It is further concluded that therapeutic attitudes are sensitive to education and organisational support. Nurses attending ATOD specific in-service education reported higher *Total Therapeutic Attitude* scores, and of particular note, higher levels of *Role Adequacy*. There was a strong relationship between nurses' perception of receiving encouragement within the workplace to intervene with patients who have ATOD problems, and therapeutic attitudes in general, and *Role Legitimacy* in particular.

Chapter Eight

Research Question 4

Do purpose designed nursing protocols make a difference to levels of alcohol and other drug knowledge, therapeutic attitudes and the frequency of alcohol and other drug assessment and minimal intervention?

The short answer is categorically – Yes. The need for continued development and promulgation of ATOD nursing policy, manuals, protocols and procedures is confirmed by the strength of positive relationships between Nursing Procedure Manual consultation by nurses to assist them in the care of patients with ATOD-related problems and; ATOD knowledge, therapeutic attitudes and of critical importance, frequency of ATOD clinical activity. This relationship remained when analysed independent of attendance at ATOD specific in-service education and was established as the second strongest predictor of ATOD clinical activity using multivariate regression analysis

Whereas *Total Therapeutic Attitude* was the strongest predictor of ATOD clinical activity, what determines therapeutic attitudes is multidimensional and in the final analysis, open to conjecture; consultation with a Nursing Procedure Manual to assist in the care of patients with ATOD-related problems is a singular and purposeful action worthy of the highest level of organizational and governmental support.

Greater than one third of nurses (36%) had used NPMs to assist them in the care of ATOD-related problems. The suggestion arises therefore that an increase in the use of NPMs to assist in the care of people with ATOD-related problems by nurses can result in a greater frequency of desired clinical behaviour. A caveat for this is that NPMs need to contain accurate, current, and relevant clinical information and be readily accessible to the nurse in the workplace.

Conclusions from both quantitative and qualitative findings in this investigation emphasize the strategic importance of recent endeavours that have occurred since the NSW State-wide survey undertaken in this study. The development and release of "Alcohol and Other Drugs Policy for Nursing Practice in NSW: Clinical Guidelines 2000-2003" (NSW Health Department 2000) in New South Wales, and the more recent "Alcohol, Tobacco & Other Drugs: Guidelines for *Nurses and Midwives A Framework for Policy & Standards* (Flinders University 2003), in South Australia, Northern Territory and Western Australia. The widespread distribution and on-line availability of these clinical guidelines are exemplary models of the type of strategic policy and procedural support that will benefit practising nurses and thus increase the frequency of recognition and intervention for with patients with ATOD-related problems

Research Question 5

How much do registered nurses actually do; that is, what is the self-reported frequency of the desired clinical behaviours of assessment and brief intervention among a large cross-section (n=1281), of practising registered nurses?

Close to half of these practising registered nurses (45%) never, or rarely, included a comprehensive alcohol or other drug-related history, as opposed to slightly over a quarter (27%) who often, or always, included a comprehensive ATOD history in their nursing assessments. Despite this low frequency of such a critical ATOD clinical activity, registered nurses subscribe strongly to the belief that their patients should be routinely assessed for ATOD-related problems. The perplexing difference between intention, motivation and action emerges again and is robustly explained empirically by significant differences between Therapeutic Attitudes and Clinical Activity overall, and by the dramatic difference between the stated belief that a comprehensive ATOD history should be a routine part of all nursing assessment, and the self-reported frequency with which this clinical activity occurs.

Of the three composite measures of *Total Clinical Activity; Assessment Behaviour, Information-giving Behaviour,* and *Intervention Behaviour; Assessment Behaviours* are reported at significantly greater frequency than *Intervention Behaviours,* both of which are reported at significantly higher frequency than *Information-giving Behaviour.* Comments from nurses in the qualitative data, often noted competing pressures of workload, clinical priority

and an acknowledged lack of interpersonal skills and/or active encouragement for "talking" interventions were constraints to patient education (Information-giving).

Triangulation of quantitative and qualitative findings leads to the conclusion that nurses are more likely to undertake ATOD clinical activities that reflect more traditional domains of nursing practice. For example; nurses were more likely to assess for ATOD-related problems, than offer intervention, more likely to assess for physical problems related to ATOD use than psychosocial problems, and more likely to discuss their patients' ATOD-related problems with their health care team, than with the identified patient.

Some nurses are more likely to undertake ATOD clinical activity than others. Notably nurses whose practice setting was in a rural postcode area, and nurses who worked in a primary health care setting. The first of these groups - 'Works in a rural postcode area' was ranked fourth (of eight) by strength of association, in predicting ATOD clinical activity by multivariate regression analysis. The second group – 'Works in a primary health care setting was ranked sixth. Triangulation of quantitative and qualitative findings leads to the conclusion that nurses working in rural areas had less access to supportive ATOD services and this was associated with higher rates of NPM consultation and attendance at ATOD in-service education than their metropolitan counterparts. This finding reinforces the importance of these two variables. The importance of team support is demonstrated by higher ATOD clinical activity in nurses working in primary health care settings. The perceptions of these nurses differs from that of the sample overall, for whom intention to intervene with patients with ATOD-related problems was significantly higher than the belief that they would receive support to do so.

The analysis of the total sample of these 1281 practising registered nurses and the difference between "believing" and "doing", and thus the difference between ideal and actual practice, leads to the conclusion that nurses actually do more than they believe they have been educated to do . This conclusion is supported by the highly significant difference between nurses' perception of *Role Adequacy* and the frequency of *Intervention*, and *Assessment Behaviours* respectively, and common

reports of nurses not being able to offer the quality of care they wished for with patients with ATOD-related problems; because they did not know how to.

Of the question; 'how much do registered nurses actually do?'; the most telling conclusion is that it is likely that nurses would do much more, in regard to desired clinical behaviours of assessment and brief intervention for patients with ATOD-related problems, if they were in more adequately trained and educated to do so.

Research Question 6

What are the relationships between knowledge, therapeutic attitude and clinical behaviour?

Total Therapeutic Attitude score was the strongest predictor of ATOD clinical activity, the lowest contribution to this relationship was that of nurses' self-reported belief that they had adequate knowledge and skills to fulfil their role responsibility when caring for persons with ATOD-related problems (*Role Adequacy*). It was established that there was a strong correlation between *Total Therapeutic Attitude* score and *Total Knowledge* score.

The regression model using multivariate analysis determined that *Therapeutic Attitude* (ranked 1) outranked *ATOD Knowledge* (ranked 3) in relative strength of predicting the frequency of ATOD clinical activity. It is concluded that knowing more about ATOD-related problems was of less clinical significance than having positive motivation, acceptance and perceived ability or adequacy, to recognise, assess and intervene in ATOD-related problems. It is not concluded however that lack of knowledge is not a significant predictor of Clinical Activity; rather, it is less significant. Knowledge specific to ATOD-related problems is clearly an important prerequisite to assessment, intervention, and information-giving in that the nurse must firstly know, so as to act effectively. Knowledge of itself however, is not enough.

Both univariate analysis and combined regression model of predictors of Clinical Activity demonstrated that the nurse must also have the combination of belief, intention, and perceived adequacy extant in therapeutic attitudes. This considered however, the more positive the therapeutic attitude, the greater the likelihood of desired clinical behaviours being employed.

Despite the strength of therapeutic attitudes in predicting ATOD clinical activity it is acknowledged in this study that the origin of therapeutic attitudes within individual nurses cannot be definitively determined. What was determined however is the strength of relationship between therapeutic attitudes, ATOD knowledge, and ATOD clinical activity, and that these three dependent variables are interrelated. The implications of the interrelationships between therapeutic attitudes, ATOD knowledge, and ATOD clinical activity are:

- 1. The low contribution of *Role Adequacy* to *Total Therapeutic Attitude*, responds to education, training, and workplace support. That in-service education increases ATOD knowledge and the perception of being adequate significantly demonstrates that education makes a difference. Triangulation of quantitative and qualitative findings leads to the conclusion that *Role Adequacy* is increased by encouragement and structural support to assess and with intervene patients with ATOD-related problems.
- 2. Higher reported values for *Role Adequacy*, a critical attitudinal set in the workplace, is reflected in practice by a higher reported frequency of key clinical behaviours.
- 3. A continued approach aimed at increasing the ATOD knowledge and skills of nurses is essential given the strength of these existing relationships, there would be a strong likelihood of increasing rates of detection and intervention for these commonly occurring health problems.

Research Question 7

What do "they" (registered nurses) tell us in their "own voice", about their ability to intervene with patients who have alcohol or other drug-related problems?

The qualitative findings are highly convergent with the empirical ones. It is the nurse's self-identified lack of knowledge, skills, experience and confidence that were reported as having the greatest effect on their ability to intervene, and these self-reports were convergent with the low *Role Adequacy* scores as measured. The lower proportion of responses that located factors affecting intervention as being "within the patient", were convergent with the empirical finding that *Non-Judgement* mean score was significantly higher than *Role Adequacy* mean score. These findings were considered against the literature that commonly reports nurses as attributing patients with ATOD-related problems as being "combative", "disruptive" and "difficult to manage". This study has found nurses far more commonly identified factors within themselves as opposed to factors within the patient as those that affected their ability to intervene in patients with ATOD-related problems.

Of the lower proportion of nurses who reported negative, patient-centred attributions of patients with ATOD-related problems as; "uncooperative/non-compliant", "disruptive/abusive/aggressive", or demonstrating "denial/lack of acceptance of the problem" were divergent with the high scores on *Non-Judgement*, of the overall sample, but convergent with prevailing attitudes of 'therapeutic nihilism' and 'therapeutic pessimism' reported of the attitudes of health workers in general. By comparison nurses fare relatively well and this study affords challenge to some earlier and more condemnatory reports of nurses' attitudes towards ATOD issues.

More negative attitudes in this study were reported by nurses working in clinical settings of high acuity in which disturbed behaviour due to ATOD withdrawal and intoxication syndromes were a clinical reality; their clearly stated need for greater education and workplace support in this regard, calls for further response.

In general nurses were unambiguous about their lack of ATOD knowledge and skills and this was by far the most common report. Knowledge about ATOD-related problems is an important prerequisite to nurses recognising them in the first instance, and then knowing what to do about them. The nature of some reports was divergent with the high prevalence of patients with ATOD-related problems that nurses are frequently exposed to. Low levels of recognition and

awareness of the full spectrum of ATOD use and related harm prevails and this was convergent with the low levels of overall ATOD knowledge. There is still much to be done.

Nurses reports of how the context of their work environment, professional relationships, role responsibilities, structural and organisational constraints and/or supports that affect their ATOD clinical activities identified their need for ATOD specific in-service education in a clear and unequivocal manner. Nurses in senior leadership positions recognized the need for in-service and acknowledged its positive effects on clinical practice.

Practising registered nurses are busy and the reports of these nurses confirms the realities of high workload. However they more commonly reported their perception that they lacked adequate knowledge, skills, awareness and experience to intervene with patients ATOD-related problems than a perception that they were too busy to do so. Encouragingly some nurses reported that time constraints limit them in establishing the quality of therapeutic contact they perceive as necessary to provide optimum care for patients with ATOD-related problems, and it is concluded that they are motivated to do more. A related theme was the substantial numbers of nurses who reported relational or interpersonal skills as lacking, and also reported a clear desire to obtain them.

Reports also confirmed systemic inequalities in the distribution ATOD support services; both nursing and non-nursing, but not having access to, and/or not knowing about ATOD-related services and resources was far less commonly identified as a factor that affected intervention than lack of clinical knowledge, skills, experience and/or awareness.

Reflections and Recommendations

The findings of this large scale investigation reaffirm the earlier work of others, that professional education and training holds considerable promise for long term improvements in identification and early intervention for ATOD-related problems. What remains is the need to consider strategies that will increase the quality and quantity of nurses' response to patients with ATOD-related problems in a consistent and effective manner.

Chapter Eight

Limitations of this investigation

The rigour inherent in the size of this random, stratified sample of registered nurses, robust statistical approaches, and a multi-method research process determine high validity of the findings at point of survey and thus their generalisability to registered nurses in practice in Australia. As noted the sample was well matched to the demographic characteristics of the workforce of registered nurses in practice in New South Wales a decade ago. Albeit there has been little change in age and gender distribution of registered nurses currently in practice, the proportion of university prepared registered nurses in practice has increased, and in real terms, the number of ATOD clinical nurse specialists and clinical nurse consultants in NSW has also increased.

Irrespective of the timeframe, the Alcohol, Tobacco, and Other Drug-Related Knowledge Items, the Therapeutic Attitude Scale, and the Clinical Activity Scale remain useful robust research tools that could be readily applied to other populations.

Researchers of education and training outcomes for ATOD nursing practice could replicate aspects of this investigation.

The most ambitious replication would be a repeat survey of registered nurses in NSW to obtain comparative measure of the effect(s) of progressive implementation of the "*Strategic Plan for Nurse Education and Nursing Management of Alcohol and Other Drugs*" and the more recent development and release of "*Alcohol and Other Drugs Policy for Nursing Practice in NSW: Clinical Guidelines 2000-2003*" (NSW Health Department 2000), or to replicate the survey in another state.

Other research possibilities would include comparative measures of ATOD knowledge, therapeutic attitudes and clinical activity between cohorts of university prepared and hospital trained nurses currently in practice. Further, the finding that nurses in rural settings report higher levels of ATOD clinical activity and clinical confidence and greater use of purpose designed ATOD nursing protocols recommends that the ATOD nursing practice of rural and remote nurses are further investigated and compared.

Nurses are ready, willing, but not as able as they wish to be

Nurses' responses to patients with ATOD-related problems are significantly more constrained by their self-identified lack of ATOD-related knowledge and practice skills than any other factor. This finding reiterates the urgent need to review current approaches to both pre-service and in-service ATOD education and training for nurses at all levels by;

- 1. State and National review of undergraduate, graduate and postgraduate nursing curricula as to; amount, currency and relevance of ATOD-related knowledge and skills content.
- 2. Further development and dissemination of specialist ATOD graduate and postgraduate programs (both nursing and multidisciplinary)
- 3. Increased funding is recommended to support ATOD nursing research and scholarship

The ambitious nature of these recommendations are tempered by recent examples of priority funding being allocated by Commonwealth Department of Employment, Education, Training and Youth Affairs, to increase the knowledge and skills of the mental health nursing workforce for example. The human costs associated with ATOD-related problems is recognised as needing urgent remedy, nurses remain ideally situated to affect this.

4. Findings demonstrate that further basic skills training in ATOD nursing practice is needed, hence it is recommended that particular attention is given to assessment and intervention skills, especially interpersonal processes. The strength of the relationship between inservice education and increased ATOD-related clinical activity determines that clinically focused skills training in the workplace merits expansion and organisational support.

5. Nurses who do identify ATOD-related problems within their practice settings increase specific clinical knowledge and skills by access to nursing guidelines and/or nursing management protocols for ATODrelated problems. The provision and dissemination of such protocols and progressive, systematic review to ensure that they provide current, relevant, and accessible clinical information is recommended as a key strategy to increase ATOD-related clinical activity.

Whereas greater intensity in ATOD education and clinical skills training is indicated, expanding the number of teaching hours in pre-service and in-service settings of itself is probably not enough. It is recommended that other research foci are generated to better determine priority needs for ATOD nursing practice education and skills training. Findings from this investigation help determine some future directions.

- i.) Nurses working in acute care settings identify the need for increased knowledge and skills in regard to ATOD-related withdrawal and intoxication syndromes
- Nurses working in emergency departments in particular, identify the need for increased knowledge and skills in regard to management of intoxication syndromes and the de-escalation of disruptive and violent behaviour.
- iii.) Nurses working in antenatal, neonatal, and paediatric settings identify the need for increased knowledge and skills in regard to comprehensive history-taking; family assessments, risk assessment and counselling.
- iv.) Nurses working in all clinical settings identify the need for increased knowledge and skills in regard to communication and client-centred counselling. This represents a further opportunity to capitalise on the high motivation of nurses to intervene in ATOD-related problems.

- Many nurses, and nurses in rural and remote settings in **v**.) particular, identify the need for more organisational support when intervening in ATOD-related problems and for increased current knowledge of available ATOD resources patients. It is recommended for their that the liaison/consultation roles of ATOD clinical nurse specialist/clinical nurse consultants are consistently evaluated and expanded.
- vi.) The low level of current ATOD-related knowledge and skills reported by nurses in senior clinical and administrative positions recommends for a targeted approach of offering 'refresher' courses for these influential role models.

It is recommended that these current and emerging research and clinical concerns are addressed by further developing, and capitalising on collaborative networks of specialist ATOD clinical and research nurses via local, State, National and International umbrella organisations such as; ATOD clinical nurse specialist/clinical nurse consultant networks, the Drug and Alcohol Nurses Association of Australasia, and International Network of Nurses.

It is further recommended that there is a marked increase in conjoint appointments of specialist ATOD nurses to university teaching and research positions and hospital and community clinical settings, respectively.

A Final Conclusion Is...

This study supports the proposition that Australian nurses have never denied or abrogated their duty to care for patients with ATOD related-problems, but rather have been historically constrained by a lack of knowledge, skills, organisational, policy, and structural support. This situation continues. As to why nurses do not respond to patients with ATOD-related problems in a consistent and effective manner is more substantially explained by nurses being unable, or inadequately trained and supported, to give the sort of care required, than any prevailing beliefs and attitudes that these patients were not worthy of their care, or that it was outside the legitimate framework of their nursing role.

Nurses do care about patients with ATOD-related problems, and predominantly do want to care for these patients; however they want and need to know how to do this better.

APPENDICES

Appendix 1

Plea appi	Please complete the following section by filling in the blanks or ticking the appropriate box(es).				
1.	Age (years)				
2.	Gender:	Male 🔲 Female 🗌		□,	
3.	Post code of the area in which you wo	rk			
4.	Clinical area in which you currently w education, administration, research etc	ork (e.g. surgical, A & E)?	, community,	□₅□,	
5.	How long have you been employed in (years)	this particular clinical at (months)	rea?		
6.	Current position				
7.	Do you work?	Full-time Part-time Casual		 ₁₅	
8.	Is your main employer?	The public sector The private sector		1 6	
9.	Year of first registration 19			17 18	
10.	In which setting did you undertake your INITIAL nurse education/ training?	Hospital College University TAFE		 ₁₉	

	If you are college or university trained do you have			Office Use Only
	A <u>Nursing Diploma</u> ?	Yes No Not applicab	le	20
	A <u>Nursing Degree</u> ?	Yes No Not applicab	Ie I	21
11.	Are you?	An Enrolled N A Registered I	Jurse 🔲 Nurse 🔲	
12	How many years/ months have you worked as a	nurse since you	ı	
12.	registered/ enrolled? (years) (mc	onths)		
The nurs you the	registered/ enrolled? (years)(mc following questions refer to a document that is con sing procedure manual, it is a guide, generally kepi in how to perform nursing procedures. This guide nursing policy or protocol manual.	nmonly known t on the ward, t e may also be re	as the hat instructs eferred to as	
The nurs you the 13.	registered/ enrolled? (years)(model) following questions refer to a document that is con- sing procedure manual, it is a guide, generally kepi in how to perform nursing procedures. This guide nursing policy or protocol manual. Have you ever consulted a nursing procedure manual?	nmonly known t on the ward, t e may also be re Yes No	as the hat instructs eferred to as	
The nurs you the 1 13.	registered/ enrolled? (years) (module of the second secon	nmonly known t on the ward, t e may also be re Yes No Yes No	as the hat instructs eferred to as	

16.	When you have referred to a nursing procedure manual, do you thi generally speaking, it has been of help to you?	nk that,	Office Use Only
	Yes No I have never referred to a nursing procedure manual		29
17.	If, generally, you have NOT found the nursing procedure manual to help, please indicate why not. (you may tick more than one box) It hasn't contained what I need to know It was too difficult to use It was easier to ask someone than to look up the manual	• be of	□_30 □_31 □_32
18.	Do you have a nursing procedure manual in your current workplace? No Don't know		 33
19.	When you want clinical advice/ information in regard to the nursing management of a patient with an alcohol or drug-related problem, you usually do first? (tick <u>one</u> box only) Contact a Clinical Nurse Consultant or Clinical Nurse Specialist in Drug & Alcohol Contact the NSW Drug & Alcohol Specialist Advisory Services Refer to the Nursing Procedure Manual Contact your local Drug & Alcohol Service I have never sought advice on drug and alcohol problems Other (please specify)	g what do	_ 34

			_	Office Use Only
Have trainin the las	you undertaken any 1g SPECIFIC to <u>alcoh</u> st TWO (2) years?	courses or inservice <u>ol</u> and other <u>drugs</u> , in	Yes No	35
If <u>yes</u> ,	please record your a	ttendance(s) below.		
Date	Name of Course	Name of Institution Running the Course	Duration of Cou	irse
				$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
				72 73 74 76 77 77 78 80 80 81 82
				96 97 98 98 100 100 100 100 100 100 100 100 100 10

			Office Use Only
21.	Do you regularly read nursing journals? ('regularly' means at least once a month)	Yes	108
	(No	
22.	How many cigarettes a day do you smoke?	1-5 per day	109
		6-20 per day	
		More than 20 per day	
		Non-smoker	
		Ex-smoker	A second se
22	How transmity do you drink alcohol?		
23.	now nequently to you think alcohol.	Never	L ₁₁₀
		Less than once a week	
		1-2 times a week	
		3-4 times a week	
		5-6 times a week	
		Daily	
24	When drinking how much alcohol do		
21.	you usually drink?	I do not drink alcohol	L ₁₁₁
		1-2 glasses	
		3-4 glasses	
		5-6 glasses	
		7-10 glasses	
		Over 10 glasses	
25	Are you close to anyone (e.g. family or		
23.	friends) who has an alcohol or other	Yes	112
	arug relatea problem?	No	

Please read the following questions and answer them by TICKING THE BOX that best describes how you feel about each statement.					Office Use Only		
		Strongly <u>disagree</u>	Disagree	Not <u>sure</u>	Agree	Strongly agree	
26.	I have a responsibility to identify patients with alcohol and/or drug- related problems						113
27.	For the vast majority of alcoholics and addicts counselling is a waste of effort.						1 14
28.	Only those patients with a history of frequent intoxication should be asked about their drinking.						
29.	Recently detoxified patients are likely to drink and/or take drugs as soon as they are out of hospital.						
30.	Drug addicts have a weak will.						
31.	A drug and alcohol history should be a routine part of all nursing assessments.						
32.	I have a responsibility to intervene with patients who have alcohol and/or other drug-related problems.						
33.	I do not have enough clinical skills to care for intoxicated patients.						, 120
34.	I receive encouragement within my workplace to intervene with patients who have alcohol and/or other drug- related problems.						
35.	Anyone who drinks can become dependent on alcohol.						122
36.	If patients smoke cigarettes nurses have the responsibility to advise them to quit.						
37.	I do not have enough clinical skills to care for patients withdrawing from alcohol and/or other drugs.						L24
38.	I have received sufficient nursing education and training to care for persons with alcohol and/or other drug- related problems.						, ₁₂₅
		Never	<u>Rarely</u>	<u>Some-</u> <u>times</u>	Often	Always	
-----	--	-------	---------------	------------------------------	-------	--------	
39.	I include a comprehensive alcohol and/or other drug-related history in my nursing assessments.						
40.	I ask my patients questions about their alcohol intake.						
41.	I ask my patients questions about their tobacco use.						
42.	I ask my patients questions about their prescribed drug use.						
43.	I ask my patients questions about their illegal drug use.						
44.	I provide information about safe levels of alcohol consumption to patients.						
45.	I provide information about smoking cessation to patients who smoke tobacco.						
46.	I provide information about safe injecting practices and safe sex to intravenous drug users.						
47.	I assess my patients for physical problems related to their alcohol and/or other drug use.						
48.	I assess my patients for psycho-social problems related to their alcohol and/or other drug use.						

If you believe that your patients are having problems associated with their alcohol and/ or other drug use, would you ...?

		Never	<u>Rarely</u>	<u>Some-</u> <u>times</u>	<u>Often</u>	Always
49.	Encourage them to discuss their problems with you.					
50.	Engage them in a brief interview aimed at motivating them to change their behaviour.				*	
51.	Confront them with the consequences of their alcohol and/or other drug use.					
52.	Provide them with advice about specialist alcohol and other drug specialist services available.					
53.	Discuss these patients' alcohol and/or other drug-related problems with your team.					



Pleas	Office Use Only			
54.	One of the drugs of choice in the treatment of alcohol withdrawal is?	Largactil (Chlorpromazine) Methadone (Physeptone) Valium (Diazepam) Catapres (Clonidine)		141
55.	Which of the vitamin deficiencies is the MOST likely in a heavy drinker?	Niacin Riboflavin Thiamine Ascorbic acid		
56.	Which of the following withdrawal syndromes is the LEAST life threatening?	Benzodiazepine Alcohol Heroin Barbiturate		143
57.	Which of the following is a symptom of amphetamine intoxication?	Hypothermia Drowsiness Constipation Hypertension		
58.	When an obviously intoxicated pati department, the correct action is to Allow the patient to sleep it off Restrain the patient in case he/she Administer sedatives Assess for other possible causes of a	145		
59.	Hazardous drinking for MALES is More than 100gms per day Less than 30gms per day More than 60gms but less than or e More than 40gms but less than or e	an alcohol intake of? equal to 100gms per day equal to 60gms per day		

								Office Use Only
60.	Hazardous drinking for FEMALES is an alcohol intake of?							
	More than 20gms but less than or More than 80gms per day More than 40gms but less than or Less than 10gms per day	147						
61.	How many grams of alcohol are there in a standard drink? 100 grams 30 grams 10 grams							1.15
62.	What is the approximate alcohol content of the following drinks?							
		5g	10g	15g	30g	45g	60g	
	One schooner of beer (425 ml)							149
	One glass of champagne (120 ml)							150
	One nip of brandy (30 ml)							151
	One bottle of white wine (750 ml)							152
	One glass of port (60 ml)					151		153
63.	Which of the following test results is likely to indicate harmful alcohol intake? Raised GGT (gamma-glutamyl transferase) Low MCV (mean corpuscular volume) Lowered urea Raised magnesium						1 54	
64.	Women who take the Oral Contraceptive Pill and also smoke tobacco have?							
	The same risk of stroke than women who take the oral contraceptive pill and don't smoke							155
	A lower risk of stroke than women who take the oral contraceptive pill and don't smoke							
	A greatly increased risk of stroke than women who take the oral contraceptive pill and don't smoke A slight increased risk of stroke than women who take the oral contraceptive pill and don't smoke							

65.	A 46 year old patient presents with pancreatitis, facial telangiectasis, spider naevi and palmar erythema. This is likely to be due to? Glue sniffing High alcohol intake Pethidine abuse Cocaine use	Office Use Only
66.	A 28 year old businesswomen presents for minor surgery. Pre-operative investigations are within normal range but her nursing history shows that she is drinking 5 to 6 glasses of wine per day on most days of the week. What would you advise her? That she drinks at harmful levels and needs to reduce her daily consumption That she should space out her drinks to have one drink per hour That she should eat well to balance the loss of calories due to alcohol intake That she needs to enter a residential program for treatment of alcoholism	157 157
67.	Patient in severe alcohol withdrawal should be nursed in the following manner? Keep them occupied so that they stop worrying about their withdrawal Nurse them in a low stimulus environment to reduce anxiety and agitation Nurse them in a dark room so that their surroundings do not confuse them Provide constant stimulation to prevent coma	158
68.	One of the complications of high doses of Valium (Diazepam) and Hemineurin (Chlormethiazole) is ? Increased blood pressure Gastric bleeds Respiratory depression Convulsions	
69.	A female who is a regular user of heroin becomes pregnant. She should be advised to? Stop using heroin immediately and not take any other drugs Continue her heroin use right up to delivery time Continue her heroin use but also take anticonvulsants Enter a Methadone program	1.00

70.	The drug of choice for treatment of barbiturate withdrawal is?	Hemineurin (Chlormethiazole) Valium (Diazepam) Melleril (Thioridazine) Phenobarbitone		Office Use Only
71.	The leading cause of drug-related o in Australia is?	deaths Alcohol Heroin Tobacco Amphetamines		
72.	Please list the factors that affect yo have alcohol and/ or other drug-rel	ur ability to intervene with patients lated problems.	s who	
	Other Comments:			170 171 171 172 173 173 174 175 176

Thank you for your co-operation

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