The Nursing Centre Model as a Collaborative Approach to Service Learning in Community Health in Indonesia

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GLOSSARY

There are some Indonesian terms that are used within this thesis. The following are the English translation of terms that will be used in this thesis:

1. City (*Kota*): a region in the province which mostly consists of urban area.
2. District (Kecamatan): a region which is part of a city or regency.
3. Governor (*Gubernur*): Head of a Province.
4. Head of district (*Camat*): The leader in a district (Kecamatan).
5. *Puskesmas (Pusat Kesehatan Masyarakat*): Community Health Centre in Indonesia.
6. *Perkesmas* (*Perawatan Kesehatan Masyarakat*) program: Community Health Nursing (CHN) program.
7. *Posyandu (Pos Pelayanan Terpadu):* Integrated Health Post in the community that is run by community volunteer and is facilitated by the Puskesmas staff.
8. Regency (*Kabupaten*) : a region in the province which mostly consists of rural area
9. Rupiah: The name of Indonesian currency.
10. Sub-district (*Kelurahan*): a region which is part of a district.

SUMMARY

The academic Nursing Centre (NC) model is a globally-recognised integrated model of community nursing care, nursing education, and research within the community setting. The NC Indonesia was established through collaboration with nursing education institutions, health services, and the local government in West Java. Despite operating since 2002, it has been difficult to measure the effectiveness of the NC in Indonesia due to the absence of a clear method and an evaluation framework for this model. There is a global paucity of literature on a 'blueprint' and evaluation framework for the academic NC model. This research seeks to explore stakeholders' understandings of the various components of the NC as a collaborative approach to service learning in Indonesia, in order to inform the development of a 'blueprint' and an evaluation framework for the academic NC model, and to extend this globally.

This study uses a single case study design with embedded cases of three NCs attached to Community Health Centres in West Java, Indonesia, using semi-structured interviews and document analysis. Participants for the study include the founder of the NC, the coordinator of Community Health Nursing, the heads of the three CHCs, and a number of Clients, nurses, lecturers, and students. The analysis was conducted using thematic analysis and program theory.

The overall findings showed that there is inadequate functionality of the NC model in Indonesia. This finding is understood to be due to a mismatch between the original theoretical basis and the practice of the NC, multiple and competing agendas surrounding the purpose of the NC, and confusion about ownership and 'belongingness' of the NC. The key aspect for improving the functionality of the NC is the integration of health services, nursing education, and research within the NC model. There are four key indicators which determine success for the integration in the NC, the stakeholders' intention to integrate, consistent service provision, having shared common ground, and a consensus on ownership of the NC. I argue that the use of the proposed conceptual model of service learning. balancing multiple and competing agendas, and clarifying the ownership of the NC model have the potential to facilitate the integration of health services, nursing education, and research within the model.

In conclusion, stakeholders' understandings of the theoretical basis, purpose, and ownership of the NC model could be used to develop a 'blueprint' and an evaluation framework for the

NC. These would enhance the integration of health services, nursing education, and research which would improve the functionality of the NC model in Indonesia, as well as in other places around the world. The NC model provides a unique opportunity for nursing education institutions to collaborate with health service stakeholders to improve the quality of nursing education, community nursing practice, and primary healthcare. Further research is needed to test the applicability of this ‘blueprint’ and evaluation framework within the NC model.

DECLARATION

I, Neti Juniarti, certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed.....

Date.....

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CHAPTER 1 SETTING THE SCENE

1.1 Introduction

Nurses are the backbone of the healthcare system, being the key providers of primary healthcare (Kurtzman & Kizer 2005). In most countries, nurses comprise 60-80% of the total health workforce, and provide 90% of all heath care services in the primary healthcare arena (WHO 2008). This significant presence has enormous potential for improving the health status of people in the community (Kurtzman & Kizer 2005). A community health orientation means that nurses can have a positive impact on increasing the self-reliance of people in the community and empowering people to maintain their health through education and disease prevention, which then reduces morbidity and hospitalisation (Swiadek 2009).

In developed countries, increases in both the ageing population and the chronic disease burden are generating pressures on the healthcare system, while developing countries continue to suffer from an increasing burden of infectious and chronic disease (double burden of diseases) (WHO 2008). The rising costs associated with hospital and long-term care have raised awareness of the benefits of healthcare at the community level (Underwood et al. 2009). As healthcare moves from hospitals to the community, community health nursing (CHN) has become an important part of healthcare (Swiadek 2009). Community health nursing is defined as:

> *The synthesis of nursing theory and public health theory applied to promoting, preserving, and maintaining the health of the population through the delivery of personal healthcare services to individuals, families, and groups (Stanhope & Lancaster 2012, p. 16).*

Therefore, community health nurses can make a great contribution to the improvement of the overall health status of the community both in developing and developed countries.

The healthcare shift to the community requires nurses to have adequate skills and competencies to deliver healthcare services to people in the community. Thus, the incorporation of primary healthcare into nursing education through access to continuing professional development can strengthen the impact of the nursing workforce on the community (Bryar, Kendall & Mogotlane 2012; O'Brien-Pallas et al. 1997).

Academic Nursing Centres (NCs) are part of both the healthcare and the higher education systems, and seek to integrate scholarly nursing practice, education, and research in order to provide a comprehensive primary healthcare service encompassing health promotion

activities and disease prevention to individuals, families, and the community (Barkauskas et al. 2006; Boettcher 1996; Shiber & D'Lugoff 2002). In the US, American Nurses Association defined Nursing Centre as:

> *Organisations that give clients and communities direct access to professional nursing services. Professional nurses in these centres diagnose and treat human responses to actual and potential health problems, and promote health and optimal functioning among target populations and communities. The primary characteristic of the organisation is responsiveness to the health needs of populations (American Nurses' Association 1987, p.1).*

The NC model, as applied in West Java, Indonesia, was established in 2002 by Suharyati Samba from the Faculty of Nursing *Universitas Padjadjaran* (UNPAD) and the NC team, which included myself as a member of the team. In Indonesia, this has been the first collaborative project between nursing education institutions, local government, provincial health offices, community health centres, and the community. The pilot project for the NC started in 2002 in one city and two regencies (see the Glossary) respectively which was involving the Faculty of Nursing UNPAD, the West Java Provincial Health Office, three Diploma III nursing institutions, and three local governments (Samba 2007). The purpose of the NC model is to provide high quality community health services and nursing education in an effective, efficient, and integrated way (Samba 2002).

The NC model in Indonesia is defined as a nurse-led clinic which integrates healthcare services, education, and research through the optimal usage of all potential resources in the community healthcare system (Samba 2007). The NC model in West Java is unique because it is attached to the government-owned community health centres, and places an emphasis on improving the quality of CHN services, education, and health outcomes for people in the community. This emphasis is aligned with the principle of reciprocity in service learning (Schoener & Hopkins 2004). This study focuses on the NC model as a collaborative approach to service learning in West Java. This study will address the difficulty of measuring the effectiveness of the NC model due to a lack of a 'blueprint' and the absence of an evaluation framework for the NC model in Indonesia. This difficulty is also due to lack of consistency in the concepts being measured. These problems are well-documented in the literature (Levine-Brill, Lourie & Miller 2009; Stallwood & Groh 2011).

In order to set the scene for the context within which the NC model sits in Indonesia, the next two sections will provide the background that underlies the establishment of the NC in West Java and an overview of the Indonesian health system conditions as the context of the NC model.

1.2 Background of Establishment of the Indonesian Nursing Centre

The NC model was established in 2002 in the era when community health nursing (CHN) was not a compulsory program in the Indonesian community health centres and most nurses did not perform CHN activities (Samba 2002). There are three underlying reasons for establishing and integrating the NC model in Indonesia within the community health centre model including the double burden of diseases in Indonesia, poor CHN practice that lead to low contribution of community health nurses to address these double burden of diseases, and lack of CHN educational model for higher nursing education institution in Indonesia.

Firstly, there is the double burden of diseases as the prevalence of communicable and non-communicable diseases increase in Indonesian society (WHO 2012) that need to be managed by the government. In Indonesia, healthcare services in the community setting are provided through community health centres or the *Puskesmas a*s a primary level healthcare delivery facility in Indonesia. The term *Puskesmas* will be used throughout this thesis to refer to Indonesian community health centres.

According to Indonesian Ministry of Health Regulation number 75 year 2014, the *Puskesmas* is responsible for the health of a district which consists of an average of 30,000 people. The *Puskesmas* has a strategic function because it links hierarchically with higher organisational levels of the Ministry of Health at the national, provincial, and regency levels. The head of the district (*Camat*), and the heads of the *Puskesmas*, are responsible for the coordination and integration of all health programs with other related programs (e.g., nutrition, water, family planning, housing, and education) at the regency or city (*Kabupaten* or *Kota*) level. Despite efforts by the Indonesian government to improve the health status of people in the community, these double burdens continue to become major health problems for the country (Badan Penelitian dan Pengembangan Kesehatan 2010). These burdens are highly challenging and complex and should be solved through a multi-disciplinary, multi-sectoral and integrated approach involving the national healthcare system, the education system and other sectors, which are also part of the larger supra-systems within the country (WHO 2015).

Secondly, there is poor CHN practice that leads to low contribution of community health nurses to address the double burden of disease in Indonesia (Samba 2012). The nursing profession as part of a team of healthcare professionals in the community setting could have contributed to reducing the double burden of health problems (Swiadek 2009). Even though nurses comprised 60-80% of the total health workforce (WHO 2008), their contribution was ‘invisible’ throughout the health system (Drew 2011). Most nurses in Indonesia do not

perform community health nursing practice appropriately (DIKTI 2011). A survey conducted by the Indonesian Ministry of Health showed that 41.7% of nurses have low levels of knowledge about community health nursing, 87% prescribed medicines, and 70% do not receive in-service training (Kementerian Kesehatan RI 2007). Another survey in Indonesia demonstrated that 48% of nurses recognise that their competencies are not as good as they expected, while 36.2% of respondents from the community said that nurses' competencies are not as good as they expected (DIKTI 2011).

Thirdly, there is lack of CHN educational model for higher nursing education institutions in Indonesia. Indonesian government and nursing associations have made efforts to enhance the health status and poor conditions of CHN practice through improvements to nursing education. Since 1985, nursing in Indonesia has moved from vocational to professional status through the opening of the first baccalaureate degree in the University of Indonesia. After this, other universities also opened baccalaureate programs in nursing. In 2009, there were 601 nursing education institutions in Indonesia, which consisted of 288 Diploma III of nursing programs (three-year education programs), 308 bachelor of nursing programs (four-years of education and a one-year internship), three master of nursing programs, one institution that offers a specialist nursing program, and one doctorate degree in nursing (DIKTI 2011).

The curriculum of nursing education in Indonesia requires that all Diploma III and Bachelor of Nursing programs incorporate community health nursing and family nursing as compulsory topics, and that all students must undergo a community placement in the *Puskesmas* (DIKTI 2011). With nursing education program, the government expects that the improvement of level of education can contribute to the improvement of nursing practice in hospitals and the *Puskesmas*; however, the impacts of nursing education on the improvement of nursing practice in Indonesia are relatively low (Aitken 2008). This is due to a gap between CHN practice and education in Indonesia which lead to lack of a CHN educational model as the site of community placement for nursing students in Indonesia (Samba 2012).

In order to provide a CHN educational model, the NC was established in West Java. The underlying concepts of the NC model in Indonesia consist of community health nursing as a system, nursing care, adult learning, community nursing research, professional organisation, and the community as the base (Samba 2002, 2007, 2012). This shows that the CHN program in *Puskesmas* is an integral part of the NC; however, the concept of NC also includes CHN education and research components which do not exist in the CHN program. Thus, the CHN and the NC are distinct concepts in this thesis. Despite the fact that the NC model has six concepts as its theoretical basis, the only evaluation indicator for the NC is

‘Family Independence level’, which is also the main indicator for the CHN program in *Puskesmas* in Indonesia as stated in the Decree of Indonesian Ministry of Health number 279 year 2006, in relation to Community Health Nursing in *Puskesmas*. There are seven criteria in the family independency indicator, which include that the family can accept the nurses, accept the health services as planned, state the problem correctly, use health facility as recommended, perform simple care as recommended, perform prevention activities actively, perform health promotion activities actively (see Table 1 in Appendix 1, page 222). The Family Independency level criteria has not thus far been evaluated and measured for validity and reliability. Currently, the NCs in West Java are using the Family Independency Level from the Ministry of Health. This measurement can only be used to evaluate outcomes for families; however, it cannot be used to assess outcomes for nursing students, nurses, and the community. This also contributes to the difficulty of measuring the effectiveness of the NC model which has triggered curiosity from NC stakeholders who have questioned the concepts of the NC model and how they should have been evaluated (Samba 2012).

The NC model was proposed with five characteristics. The first characteristic is the integration of planning, implementation, and evaluation of nursing education, community health services, and nursing research/development, while the second is the optimal usage of all potential resources. The third characteristic is a shared understanding by, and with, all internal and external stakeholders, the fourth, for the NC to build a scientific society of community health nursing, and the final characteristic is that of collaboration with all stakeholders from various sectors in the NC (Samba 2012).

The characteristics of the NC in West Java differentiate it from other community placement or clinical placement settings for nursing students, such as the Dedicated Education Unit or other academic NCs in other counties. There are a number of articles which use the term ‘nursing centre’ but describe a slightly different model. In terms of location, academic NCs are located on campus sites (Barger & Kline 1993; Kinsey & Miller 2012; Sensenig 2007), in the community setting (Acord et al. 2010; Hildebrandt et al. 2003; Lundeen 1993, 1999; Shiber & D'Lugoff 2002), and in the senior housing arena (Lutz, Herrick & Lehman 2001; Yeh et al. 2009). In terms of human resources, most academic NCs are operated by academics only (students and faculty members) (Barger 2004), while a few are run by community health nursing faculties who have partnered with a transitional housing program to provide a health component to their services (Lundeen 1997; Shiber & D'Lugoff 2002).

The NC Indonesia is similar to other academic NCs and Dedicated Education Units (DEU) in terms of collaboration between nursing education and the institutional partner. However, there are also differences between the NC in Indonesia and the other models, particularly in

relation to location, activities, focus, and the role of the nurses. The NCs are co-located in community health centres owned by the government as a collaboration between nursing education and the provincial and city/regency health office (Samba 2012). The activities of NCs in Indonesia are not limited to only what occurs inside the building, but are also expanded to families and the wider community. The activities delivered include health promotion, disease prevention, care for current health problems, and rehabilitation (Samba 2007). The main emphasis of NCs in Indonesia is to provide reciprocal benefits for students, people in the community, nurses who work in community health centres, and for faculty members who facilitate the process (Samba 2007, 2012).

In terms of the staff nurses' role, NCs in Indonesia differ slightly from the DEU model and other NC model such as the University of Wisconsin-Milwaukee Nursing Centre (UWMNC). The central concept of the DEU is the belief that the staff nurses' educational role is vital to the development of students' professional skills and knowledge (Moscato et al. 2007). In contrast to DEU model, the UWMNC is primarily operated by academic stakeholders in collaboration with the Silver Spring Neighbourhood Centre (Lundeen 1993). In Indonesian NCs, faculty members still have the main educational role, while staff nurses and students engage in relection, reciprocal learning and sharing of their knowledge and experience of family health nursing and community health nursing practice (Samba 2012). These practices of reciprocity and reflection indicate that the NC model in Indonesia is aligned with a service learning approach.

1.3 Overview of the Indonesian Health System

The Indonesian national health system is regulated through Indonesian Presidential Regulation number 72, year 2012. According to this regulation, the Indonesian national health system consists of a range of sub-systems, including primary healthcare, community empowerment, health management, health resources, health research and development, and the health environment. The goal of the national health system is to achieve the highest level of community health. The national health system is also influenced by economics, politics and law, physical and biological forces, science and technology, and the social, religious, and cultural environments.

According to the Indonesian Presidential Regulation Number 72 Year 2012 regarding the National Health System, the Indonesian healthcare delivery system is structured hierarchically from the central government at the top, through to provincial and city/regency governments lower down (and closer to the people and the community). Due to the decentralisation process that has been occurring since 2001, provincial governments have

the autonomy to deliver healthcare services within their territories, and city/regency governments also have some level of autonomy. Therefore, there is no direct line of command between the Ministry of Health, the Provincial Health Offices, and the City/Regency Health Offices. Healthcare service facilities consist of primary, secondary, and tertiary level services which are responsible for delivering healthcare, ranging from health promotion and disease prevention, through to medication and rehabilitation performed by public and private institutions.

From 2004 until 2014, operationalisation of *Puskesmas* was regulated by the Decree of Indonesian Ministry of Health number 128 Year 2004, in relation to Basic Policy of Community Health Centre. In this policy, there were six compulsory programs or known as 'basic six programs' in the *Puskesmas,* including health promotion, environmental hygiene, mother and child health and family planning, nutrition improvement, prevention and eradication of communicable diseases, and medication. During this time, CHN program, known as *Perkesmas (Perawatan Kesehatan Masyarakat)*, were categorised as development programs meaning that they were optional in the *Puskesmas.* According to The Decree of Indonesian Ministry of Health number 279/MENKES/SK/IV/2006 regarding 'The Guide of the Operationalisaton of Community Health Nursing Practice in Puskesmas', *Perkesmas* is defined as:

> a nursing area that is integrating nursing and community health nursing using active participation of the community, with priority on continuous health promotion and disease prevention service without ignoring curative and rehabilitative service in a comprehensive and integrated manner, towards individuals, families, groups and the community, using **nursing process** to increase the function of humans life *so that they can be independent in maintaining their health (p.3, my emphasis)*

Given that there is an emphasis on nursing process in this definition, *Perkesmas* program is perceived as a separate program from other programs in *Puskesmas*. The activities of *Perkesmas* program include providing nursing care in *Puskesmas*, home care, school, and vulnerable and high risk community such as disaster area, remote area, and endemic disease area. Since there were only six compulsory programs, nurses in the *Puskesmas* focused on these particular activities over the 10 year period, while *Perkesmas* program was somewhat neglected.

In October 2014, the Indonesian Ministry of Health introduced a new regulation, number 75, Year 2014 about Community Health Centres. In this new regulation, the *Puskesmas* is defined as a healthcare facility that provides community health services and primary care for individuals, with an emphasis on promotion and prevention activities, in order to achieve the highest health status for the community. The *Puskesmas* must perform the first level of integrated community healthcare services and individual primary care on a continuous basis.

The first level of community healthcare service includes essential and developmental community healthcare activities. The difference in this new regulation compared to the previous one, is that all *Puskesmas* must perform *Puskesmas* management, pharmacy services, community health nursing services, and laboratory services. Since 2014, the community health nursing, or *Perkesmas,* program has now become a compulsory activity in Indonesia. This regulation also recognises the *Puskesmas* as a training and educational venue for students, which was not previously recognised (Kementerian Kesehatan RI 2014).

The changes in CHN policy in Indonesia has shown that the role of community health nurses was not clear in the 2004-2014 period, and that most nurses in the *Puskesmas* did not perform CHN activities. However, only recently, the Ministry of Health, Indonesia, has started to realise the importance of CHN activities and, as a consequence, changed the regulations so that CHN is now a compulsory program. Therefore, an understanding of the components of the NC, as a model to integrate CHN services, education, and research, would provide an insight into various ways of strengthening CHN practice, education, and research in the *Puskesmas* for the future application of the new regulation.

As a researcher in this study, I also need to acknowledge my personal background in relation to this research project. The following section will describe my motives for, and the acknowledgement of, my involvement in the NC model.

1.4 Motivation behind the Research

I started my academic career as an assistant lecturer in the Faculty of Nursing *Universitas Padjadjaran* (UNPAD) in 2001 and was placed as a nurse in a nursing home. In 2002, I was personally involved in the establishment of the first Nursing Centre (NC) in West Java. I did not have a major role in the first pilot project for the NC because my role at the time was primarily associated with administrative services, organizing the national seminar to launch the NC, and typing the guidelines for the NC. Since this time, I have become increasingly involved in the development and maintenance of the NC as a member of academic staff in the Community Health Nursing Department, as a clinical instructor when students undertake their placement in the NC, and also as a trainer for community health nurses who work in the Community Health Centre (*Puskesmas*).

The NC model was developed based on Indonesian perspectives and conditions using theoretical principles developed through experiences in western countries; however, there was found to be problems that are related to the operationaliaton of the NC. Equipped by learning experiences from my Master's degree in Epidemiology in Indonesia, and a Master of

Nursing in the Leadership and Management of Health in Australia, I returned to work in the Faculty of Nursing UNPAD in 2007, and then became involved in the operationalisation of the NC. Since the founder of NC Indonesia retired in 2008, I was given the responsibility of developing and maintaining the NC as one of the lecturers in the Community Health Nursing Department. From 2009 until 2011, I held the position of the head of the Department and the head of the Bachelor of Nursing Program, which meant that the development and maintenance of the NCs became my main responsibility. As a result of my deep involvement, I have realised that there are a number of problems with the NC model that need to be resolved as a result of the many complaints from organisational partners, the nurses, and the students in relation to the model. I have attempted to conduct research into the issues of concern, and have applied for a number of research grants in order to improve the NC model. However, due to limited resources, knowledge, and time, my efforts have not significantly improved the situation due to the lack of clarity of the NC model and the lack of a comprehensive evaluation framework. Finally, at the end of 2011, I decided to pursue a PhD degree at Flinders University in South Australia as an opportunity to conduct research in order to develop and improve the NC model into the future.

Based on my involvement in the establishment of the NC, I believe that this model is unique and can provide benefit not only for the students but also for the nursing profession and the wider community. I acknowledge that I am emotionally and physically engaged with the NC model and that this may result in a bias when I am analysing the research data. However, as an insider and an eyewitness to the establishment of the NC, I understand precisely the process of the development of the NC in Indonesia. Because I am so immersed in the NC, I can use my insider experiences and expertise to enrich the analysis and interpretation of the interview data. Nevertheless, as a researcher, I consider myself to be an outsider so that I am able to analyse the data from a balanced viewpoint while also taking into account the insider perspective in order to produce a research outcome that can inform policy and community health nursing practice in Indonesia.

The characteristics of NCs in Indonesia, such as integration between service and learning experience, and collaboration, have indicated that a service learning approach might be suitable for the NC model. Collaboration between nursing education and health service organisations is important because both institutions can gain mutual benefit. Through this collaboration, there is an opportunity to improve health outcomes for the community through the integrated management of the family and through community health nursing placements (Samba 2012). In the NCs, students and staff nurses provide nursing care services, both inside and outside of the facilities, for individuals, families, and the community. The NC

model has the potential to improve nursing care for the community; however, its operationalisation has resulted in a range of problems which need to be addressed through research. It has been difficult to comprehensively evaluate the outcome of the NC model over the last 13 years due to the lack of an evaluation framework for the NC model in Indonesia and in fact globally. In response to these concerns, the following section details the research problems and research questions that will be addressed in this study.

1.5 Statement of the Problem and Research Question

In this section, the research problems and gaps which lead to the formation of the research questions for this study will be presented. The NC has been accepted as a sound model for CHN practice and education in West Java, Indonesia. In 2011, the Provincial Health Office decided to adopt the NC model in 27 cities and regencies in West Java. The NC model, as a model for partnership and collaboration, contributes to improving health outcomes for the community. However, the dissemination and up-scaling of the NC model may be at risk of failure because it has been difficult to evaluate its effectiveness. One of the reasons for this, both in Indonesia and in NCs globally, is that there are no clear indicators of success and there is also a lack of a blue-print that can be used to measure the effectiveness of the model (Levine-Brill, Lourie & Miller 2009). The lack of clear measurement indicators is quite common in organisations that have a diversity of practice and a wide variety of stakeholders (Davies 2004), including in NCs in Indonesia. The only indicator that has been used up to this point in the Indonesian NCs is the family independence level which cannot evaluate the effectiveness of the NCs. Moreover, the variation of diseases treated in the NCs also makes it difficult to measure the impact of the NC model.

Since, the effectiveness of the NC model has not yet been evaluated, it is somewhat risky to replicate it in other provinces in Indonesia at this stage, because the method of operationalisation is unclear. It is also challenging to advise the central Indonesian government to implement the NC model because of the lack of strong evidence for the effectiveness of the model. Difficulties in measuring the effectiveness of the model are mainly due to the complexity and range of health problems in the community, the lack of resources for comprehensive research and evaluation, and the lack of a standardised method and immediate indicators for conducting research on the NC model. This problem is not unique only to the NC as a collaborative approach to service learning in Indonesia, but has also been experienced by other institutions worldwide that have implemented a service learning approach. A systematic review by Stallwood and Groh (2011, p. 300) demonstrated that “there are no consistencies in the measured concepts and instruments used in the implementation of service learning in nursing curricula”. Not all academic NCs across the

globe utilise the service learning approach in their model. However, the application of service learning within this model could become a powerful partnership for integrating health services and nursing education within the NC (Sensenig 2007). Therefore, more research is needed to develop standardised methods and evaluation of service learning so that students and the community can reach a better understanding of the benefits and effectiveness of service learning. Further research is also needed to increase the levels of evidence on the benefits of service learning, so that this information can be used more widely in nursing education (Stallwood & Groh 2011).

Despite the advantages of the NC, the operationalisation of this model is quite challenging. Major issues that can influence the operationalisation of a NC are limited funding, conflicting time requirements (Lundeen 1997; Resick & Leonardo 2009), integration of the centre into community services, marketing of the NC so that the people would trust and use the NC services, legal and regulatory issues regarding the student and academic staff practice in the NC, faculty issues such as funding and workload allocation, and research issues particularly for evaluating outcomes of the NC (Shiber & D'Lugoff 2002). Other issues are balancing multiple agendas and maintaining a long-term vision (Lundeen 1997). As a result, some of these centres have not been sustained and have had to be closed (Barger & Kline 1993; Bell 2008). This situation may be due to the lack of a 'blue-print' for the NC model and uncertainty about which services will and will not work in the NCs (Levine-Brill, Lourie & Miller 2009). Without a framework or 'blue-print' for NC practice, the model promoted by nursing educators and nurses in the community practice setting might prove to be a burden for both parties, and a waste of time and resources (Funnel & Rogers 2011). It may also fail to generate enough impact and benefit for all stakeholders involved in the partnership, which would make NCs unsustainable (Leffers & Mitchell 2011).

An unclear framework can produce unclear representations of what a model can do and achieve. Furthermore, this would make it difficult to determine the effectiveness and efficiencies of the model due to incomplete monitoring systems and evaluations. This could result in the staff becoming demotivated and may distract attention away from the core problem towards the implementation of only superficial activities that can be easily measured (Funnel & Rogers 2011). Therefore, the use of a framework for NCs could provide nursing educators and nurses with a model that encourages effective and sustainable partnerships (Leffers & Mitchell 2011).

One way to develop a sound framework is to use program theory (Funnel & Rogers 2011). Weiss (1998) defined program theory as a tool for analysing the process of change through "the comparison of observed events with the ways in which program actors expected change

to occur" (p. 277). Funnel and Rogers (2011) added that program theory is "an explicit theory or model of how an intervention contributes to a chain of intermediate results and finally to the intended or observed outcomes" (p. xix). Program theory can be used to develop a 'blue-print' for the NC model by identifying the mechanisms of intervention contributing to the intermediate and long-term outcomes of the model. Weiss (1998) further pointed out that program theory can be used as an analytical tool to identify the mechanism and process of change to achieve the expected outcomes, particularly by using qualitative case study. Therefore, this study will use qualitative case study design to empirically explore the various components of the NC. Program theory, which is based on empirical evidence, can provide a strong foundation for the planning, implementation, and evaluation of such an education-practice model (Funnel & Rogers 2011). This will assist in maintaining the sustainability of the NC model, producing the intended outcomes, and improving future activities (Funnel & Rogers 2011; Levine-Brill, Lourie & Miller 2009).

Based on the background of the NC model and service learning, the research question for this study is: 'How can the various components of the NC model as a collaborative approach to service learning in West Java, Indonesia, be understood to inform the development of an evaluation framework for the Nursing Centre in Indonesia and also more globally?' This research will be the first to empirically explore the various components of the NC and service learning in order to develop an evaluation framework for the NC to improve its functionality to an optimal level.

1.6 Aim and Objectives

1.6.1 Aim

This study aims to explore stakeholders' understanding of the various components of the NC as a collaborative approach to service learning in West Java, Indonesia, in order to inform the development of an evaluation framework for Nursing Centres in Indonesia and more globally. An understanding of the components of the NC model in Indonesia will provide insights into the operation and evaluation of NCs, which it is hoped will inform the application of, and research into, NCs in other countries that have a similar healthcare system to Indonesia.

1.6.2 Objectives

The objectives of this research are:

1. To explore the components of the NC model as a collaborative approach to service learning in West Java, Indonesia, that includes the following sub-objectives:
    a) To identify the theoretical basis for, and purpose of, the establishment of the NC model.
    b) To describe the policy and resource context that has influenced NCs.
    c) To describe the operationalisation of three NCs within existing community health centres in West Java.
    d) To explore stakeholders' perceptions of the outcomes of the NCs.
2. To develop an evaluation framework for the NC model as a collaborative approach to service learning in community health in Indonesia using program theory as an analytical framework.

1.7 Expected Project Outcomes and Benefits

Program theory has been used widely to evaluate health programs. However, the literature shows that this approach has not been used to evaluate nursing education programs, particularly those using a service learning approach. Program theory, and an evaluation framework for the NC model, can be further used and tested to develop a standardised method of implementation for a service learning approach, and to evaluate the implementation of such an approach to obtain strong evidence for the effectiveness of the service learning approach, and thus, allowing it to be replicated in other locations.

The expected project outcomes and benefits of this research are the improvement of the NC model as a model of collaboration between nursing education and Community Health Nursing practice for disease prevention and management in Indonesia. The NC model can be applied to address health problems in order to improve the overall health status of the community. The long-term benefits of this research could be that the effectiveness of community health nursing practice and health outcomes in the community are improved, not only in Indonesia, but also in other countries that have similar health systems as Indonesia.

1.8 Scope and Outline of the Thesis

Chapter 1 of this thesis has provided an introduction and background to the research, the motivation behind the research, the problem statement, the research questions, the aim and objectives, and the expected project outcomes and benefits. The second chapter presents the study's theoretical framework in order to elaborate upon service learning theory and the NC model from the existing literature. Chapter 3 provides the research approach and qualitative case study design for the study, as well as the method of data collection, an overview of case study analysis, and the program theory as an analytical framework. Chapter 4 describes the first part of the results and analysis of the data using the theory of change as an organisational and analytical framework, to cover a situational analysis, focusing and scoping of the NC model, and the development of an outcomes chain for the NC model. Chapter 5 describes the second part of the results and analysis of the data, using the theory of action as an organisational and analytical framework to cover success criteria of the integration in the NC, the factors that affect this integration, and to identify what the NCs can do to address these factors within the NC model. Chapter 6 is a discussion which provides a proposed conceptual model and an evaluation framework for the NC. Chapter 7 is a conclusion which provides an overview of the contribution of the thesis, the implications of the findings, and recommendations for the core components of, and an evaluation framework for, the NC model in Indonesia to inform academic NCs globally. This chapter also provides details about possibilities for research transfer, the strengths and limitations of the study, as well as a concluding section about how the study has responded to the research question.

1.9 Summary

In this introductory chapter, I have identified the gap in the knowledge that this research seeks to fill, being the lack of application of program theory and a framework for the NC model as a collaborative approach to service learning, in order to further develop a standardised method for the NC model and a service learning approach. The research problem that has been identified in this study is that there is difficulty in measuring the effectiveness of the NC model due to inconsistencies in the concepts being measured and the absence of an evaluation framework for the NC model that utilises a service learning approach (Levine-Brill, Lourie & Miller 2009; Stallwood & Groh 2011). The importance of the nursing profession as the backbone of healthcare services have also been pointed out, the conditions in which nursing education and community health nursing practice in Indonesia take place, and the use of program theory as an approach to develop an evaluation framework for the NC model. These are important grounds to support an understanding of

the reasons for the establishment of the NC model in Indonesia. The identification of this research gap was then followed by an overview of the research question, the aim and objectives of the research, the expected project benefits and outcomes, the scope of the project, and an outline of the thesis.

My involvement in the initiation of the NC model, and my further responsibility of maintaining and developing the model, has been declared. Even though my involvement as an insider may result in a bias in the data analysis, my previous experience will enrich the interpretation and analysis of the interview data as I am an eyewitness who has experienced all phases of the establishment of the NC model from conceptualisation and development, through to the replication phase.

The next chapter will present a review of the relevant literature examining service learning, the academic NC model, important aspects of a collaborative and integrated approach, and then will elucidate how the research seeks to understand the components of service learning and the academic NC model. The review will also examine the research that has been conducted to date in order to demonstrate the impact of these studies on stakeholders, and to inform the development of a ‘blue-print’ and an evaluation framework for academic nursing centres globally.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The purpose of this literature review is to elucidate the components of service learning and the Nursing Centre (NC), and the impact of these on stakeholders. As well, this review will examine the factors that affect and drive the integration of Community Health Nursing (CHN) services, education, and research in the NC model. This deeper understanding will then be used to justify the research question for this study – "How can the components of the NC model as a collaborative approach to service learning in West Java, Indonesia, be understood to inform the development of an evaluation framework for the Nursing Centre more globally?"

This chapter consists of two major sections, service learning and the academic nursing centre. The first section covers a literature review of service learning, including a synthesis of definitions, the identification of relevant components, and service learning methods, outputs and outcomes. Identifying the components of service learning will assist in developing a standard definition which can then be used to constructively design and evaluate service learning approaches in community health nursing. In addition, the implementation of service learning in Asian countries will be presented in the first section.

The second section will present a review of the literature on the academic NC model across the globe in order to identify the characteristics of the NC, the collaborative approach and integration of services, education and research in the NC, and the strategies to evaluate the NC model. The NC can be conceptualised through three different models, the comprehensive primary healthcare centre that provides traditional primary care and public health programs, wellness centres that provide public health as well as health promotion and disease prevention programs, and specialty nursing centres providing programs for specific health conditions (Allender, Rector & Warner 2010). In terms of organisational structure, there are academic nursing centres, free-standing centres, subsidiary centres which are part of the larger healthcare system such as home health agencies, and affiliated centres which have a legal partnership with healthcare or community organisations (Allender, Rector & Warner 2010). Overall, this review will focus on the NC model as a comprehensive primary healthcare and wellness centre, particularly from the academic perspective. This perspective is used because of its relevance to the service learning approach which is the focus of this study. For the purpose of the current study, I have limited the discussion of the NC model to

the nursing education perspective. The term ‘NC’ will be used throughout this section and the rest of the thesis to refer to the academic nursing centre model.

2.2 Review Process

The literature relating to the service learning approach in nursing education and the NC model has been drawn from a variety of sources and is not limited to the research and theoretical development over the past few years, although recent works have been emphasised. The papers contained in this literature review have been selected mainly from the discipline of nursing; however, the literature from a range of disciplines such as public health and evaluation has also been searched. As mentioned previously, this chapter consists of two major sections, with each section having a slightly different review process which will be described as follow.

2.2.1 Review process of Service Learning Literature

For the first section, an integrative literature review was conducted using a systematic approach in order to answer the question: “what are the definitions, components, processes, and outputs of service learning used in nursing education?” The integrative review method, developed by Whittemore and Knafl (2005), was used. Integrative reviews include both quantitative and qualitative research to enhance the rigour of the evaluation of a phenomenon of interest (Evans 2007; Whittemore & Knafl 2005). The purpose of the integrative review varies and can be used to define concepts, and to review theories, evidence, and/or methodological issues (Whittemore & Knafl 2005).

A 12-step structured approach from Kable, Pich and Maslin-Prothero (2012) was used for documenting a search strategy for publications. The structured approach includes providing a purpose statement, documenting the databases or search engines used, specifying the limits applied to the search, listing the inclusion and exclusion criteria for the search, listing the search terms used, assessing the retrieved articles for relevance through the inclusion and exclusion criteria, documenting a summary table of included articles, providing a statement specifying the number of search results, conducting a quality appraisal of the retrieved literature, conducting a critical review of the literature, and checking the reference list for accuracy. The details of the review method and the number of papers retrieved and used in the service learning review are presented in Appendix 2A.

A preliminary search in CINAHL was conducted to identify the optimal search terms in consultation with a librarian. A comprehensive database search using optimal search terms was conducted in a range of electronic databases, including CINAHL, MEDLINE, ERIC,

Scopus, and Web of Science, from the earliest retrievable records of each database to June 23, 2015. The search terms used in this service learning review were: (nursing students OR nursing education OR nursing school OR community health nursing OR community mental health nursing OR health education) AND (service learning OR community based education). For studies to be included in a review, Evans (2007) suggested that they had to meet specific inclusion and exclusion criteria. The inclusion criteria for this review were nursing students as subjects/participants, including those at the undergraduate and postgraduate levels; use of the specific term ‘service learning’; the study design to include descriptive studies, qualitative studies, and mixed-methods research papers published in peer-reviewed journals; and studies that reported qualitative and quantitative descriptions of service learning outcomes. Non-English language studies were excluded due to the difficulty and cost of translating research reports. Other exclusion criteria included the use of the terms ‘online service learning’ and ‘international service learning’, meaning that the location of the service learning was outside the country of the nursing education institution. These studies were excluded because the focus of this study is the integration of service and learning within the same area, using a face-to-face approach as the mode of collaboration.

For the first section, a total of 5,034 papers were retrieved, but only 42 that met the criteria were included in the review. All the articles were systematically analysed to identify the components of service learning. The definitions of service learning were first identified in each study, and then a concept analysis was conducted to examine the level of concept maturity. In addition, a rigorous identification of service learning was undertaken through its structural features, including a definition, characteristics, boundaries, pre-conditions, and outcomes (Morse et al. 1996).

Most of the identified articles on service learning were from the United States (US) reflecting the fact that service learning has been widely used in this region. Eight articles were from outside the US, with three from Taiwan (Hwang, Wang & Lin 2013; Hwang et al. 2014; Yeh et al. 2009), three from South Africa (du Plessis, Koen & Bester 2013; Julie, Daniels & Adonis 2005; Mthembu & Mtshali 2013); and one each from Canada (Schofield et al. 2013) and Ethiopia (Downes, Murray & Brownsberger 2007). In terms of the populations sampled in the included studies, the majority were undergraduate nursing students, although there were two studies involving postgraduate nursing students. The details of the origins of the papers and the research methods are presented in Table 2, Appendix 2A.

In this review, methodological quality (see Table 2 in Appendix 2A, page 232) was assessed using the General Critical Appraisal Tool (GCAT) suitable for assessing qualitative,

quantitative, and mixed-methods studies (Crowe & Sheppard 2011). Of the 42 studies reviewed, none of the studies had perfect methodological quality; however, twenty studies achieved high methodological quality scores above 80%, and 22 studies had moderate scores (50%-80%). Moreover, a range of different research methods were used in these studies. Of the 42 papers assessed in the review, 15 were qualitative, 5 were descriptive-quantitative, 13 were quasi-experimental studies, 5 were evaluation studies, 2 used mixed-methods, and 2 articles used case study design. The relatively high methodological quality and variance of the studies indicate that the conceptual framework of the NC in this review was developed from sound research evidence and a range of research methods. This helped to ensure that a rich description of the components of service learning could be generated from a broad research base.

2.2.2 Review Process of Academic Nursing Centre Literature

The second section of this chapter consists of the review of the relevant literature on the academic NC. The review questions in this second section are: what are the organisational characteristics (including the type of organisation, challenges, mechanisms of change, and survival strategies) of the academic NC? Which strategies have been used to evaluate NCs? The search strategy for this review used electronic databases involving a limited search of title, abstract, and text. A search of bibliographies and reference lists from the retrieved papers that were relevant to the research question was also conducted. A comprehensive database search using the optimal search terms was undertaken through CINAHL and MEDLINE databases, from the earliest retrievable records of each database up to July 6, 2015. The following key words were used to search the databases to retrieve articles related to the NC model: (nurse-conducted cent* OR nurse-managed cent* OR community nursing organisation OR nursing clinic OR nurse-led clinic OR community nursing cent*) AND (community health nursing). The inclusion criteria for this review included: studies related to academic NCs in the form of literature reviews, anecdotal literature, grey literature, descriptive studies, qualitative studies, and mixed-methods research papers published in peer-reviewed journals. Studies that reported qualitative and quantitative characteristics, evaluation strategies, and the outcomes of academic NCs were also included. Exclusion criteria were non-English language studies, editorial articles, conference abstracts, and news articles. A total of 3,192 papers were retrieved, but only 39 papers that met the criteria were included in the review. The details of the review method and the number of papers retrieved and used in the academic NC review are presented in Appendix 2B.

Most of the selected articles on the NC were from the United States (35 articles), with three from Australia (Kent & Keating 2013; Stewart, Coulon & Kavanagh 1997; Tuaoi et al. 2011)

and one from Taiwan (Yeh et al. 2009). Most of the papers are quite old, ranging from 1977 to 2013, with only 12 papers being published between 2006 and 2015. Most of the articles used a descriptive method (38 articles), while only one used an action research method (Yeh et al. 2009). This demonstrates that research in the NC field is underdeveloped, which results in there being many research opportunities to provide strong evidence for the development of the NC model.

2.3 The Service Learning Approach

The importance of linking education to service was already established by 1916 with Dewey being the first proponent of this approach in the US. Since this time, the implementation of service learning has varied in many nursing education institutions (Bailey, P., Carpenter & Harrington 2002). There are three philosophies developed by John Dewey that underlie service learning, being learning by experience, the need for reflection, and reciprocal learning (Champagne 2006). Later, Sigmon (1997) added three more principles of service learning to complement Dewey's philosophy: 1) the services provided are controlled by the community; 2) the community can improve their self-care practices after the service has been provided; and 3) learners have significant control of their learning objectives through the service experienced. The practice of service learning in all areas (not only limited to the nursing education field) has been implemented in many countries, using the principle of integrating the experience of service in the real-life setting with formal education in higher degrees (Berry & Chrisholm 1999).

According to Foss et al. (2003), there are three major approaches to service learning. These are service experience for the community, specific learning experiences for students, and service and learning for students and the community. The third approach has the potential to address the major barriers to collaboration for comprehensive community health (Foss et al. 2003). For the purpose of the current study, discussion of the service learning was limited to the third approach of service learning which put balance on service and learning for students and the community.

Higher education institutions have the resources and responsibility to contribute to society, thus students should not only learn from theories and methodologies that are taught in the classroom, but should also learn through experience in the real-life setting (Berry & Chrisholm 1999). This is particularly relevant for nursing education with clinical practice experience being very important because nursing is a profession that requires performance in clinical practice in the hospital and/or the community (Gaberson & Oermann 2010). In service learning, students are involved in an organized activity that meets community needs

after which they are required to reflect on this activity (Bentley & Ellison 2005). Nokes et al. (2005) argued that service learning combined with community-based education is a useful way to educate students in community care and for collaboration with diverse stakeholders in the community. Faculty engagement in service learning energises teaching and places greater emphasis on student-centred learning. This will build positive community relationships; enhance teaching, research, and outreach; and decrease the sense of separation that often exists between a university and the community in which it resides (Hoebeke et al. 2009).

Stallwood and Groh (2011) found that there is only limited evidence of the effectiveness of service learning for nursing students and the community. This may be due to the lack of a standardised definition and measureable outcomes of service learning. Identifying the components of service learning will assist in developing a standard definition, which can then be used to constructively design and evaluate service learning approaches in nursing education.

2.3.1 Defining Service Learning

Despite the widespread use of service learning in nursing education, it is nevertheless poorly defined as there is lack of a standardised definition of the concept in the literature (Stallwood & Groh 2011). Since definitions of service learning are so highly varied, the main components (which are also unclear) often overlap with the principles of community-based participatory research, community service, and community-based education (Hunt, J. B., Bonham & Jones 2011). These variations in the definitions of service learning can lead to variations in implementation which might then reduce the effectiveness of service learning as a teaching strategy in nursing education.

Inconsistent terminology and components of service learning also lead to inconsistent evaluation of the outcomes of service learning. Consistent definitions are needed in order to clarify and analyse the significance of the concept to improve knowledge, address issues, improve understandings, and facilitate communication among researchers (De Houwer, Barnes-Holmes & Moors 2013; Wong, Chu & Yap 2014). Murray (2013) further suggested that nurse educators who are planning to use service learning as a teaching pedagogy should develop a more rigorous method to evaluate course outcomes. Therefore, a functional definition of service learning is needed to enhance understanding and communication among researchers in order to obtain evidence of the effectiveness of service learning in nursing education.

Definitions of service learning found in the literature vary from the very broad to the highly specific. The following is an example of a broad definition of service learning:

> *Service learning is an educational experience that equally benefits the educational institution and the organization where the service is provided* (Schoener & Hopkins 2004, p. 242)

A more specific definition of service learning, which includes educational experience, reflection, and specified outcomes, was cited in three articles (Baker et al. 2004; Julie, Daniels & Adonis 2005; White et al. 1999) namely,

> *Service learning is a course-based credit-bearing educational experience in which students a) participate in an organized service activity that meets identified community needs and b) reflect on the service activity in such a way to gain further understanding of course content, a broader appreciation of the discipline and an enhanced sense of civic responsibility (Bringle & Hatcher, 1995 in White et al., 1999 p. 262).*

The research from outside of the US also contained both very broad and highly specific definitions of service learning. Downes, Murray and Brownsberger (2007) cited Seifer's (1998) definition of service learning as:

> *A structured learning experience that combines community service with explicit learning objectives, preparation and reflection. Students engaged in service-learning are expected not only to provide direct community service but also to learn about the context in which the service is provided, the connection between the service and their academic coursework, and their role as citizens* (Seifer 1998, p. 274).

Service-learning activities reported in the research from outside of the US placed greater emphasis on partnership and collaboration with national and local stakeholders, while most of the articles from the US placed an emphasis on the experiential learning of the students. Service learning in the articles from outside the US was viewed as a means to solve problems within the community, such as reducing domestic violence (Julie, Daniels & Adonis 2005), reducing morbidity and mortality in the deployment areas (Downes, Murray & Brownsberger 2007), and caring for, and interaction with, older people (Hwang et al. 2014; Yeh et al. 2009).

Based on these various definitions, service learning could be considered to be a concept that has only partially been developed because it is not well-defined and its characteristics are not clear. Therefore, within the critical analysis of the literature, it is important to compare and clarify the components of service learning.

2.3.2 Components of Service Learning

The literature was examined to identify the components of service learning based on its preconditions, characteristics, reported activities, and evaluation outcomes. The analysis of service learning was conducted by identifying the preconditions and outcomes of the service

learning concepts. The preconditions are important factors that would enable the certain behaviour to occur, while the outcomes are the results, or the implications, of performing the behavioural activities (Morse et al. 1996). A synthesis of the selected studies has shown that the components of service learning can be consistently seen in the following four major characteristics: structured intra-curricular experiential learning (40 articles), reflection (27 articles), reciprocity (22 articles), and specified outcomes and benefits (36 articles). A summary of the components and sub-components of service learning found in the selected articles is presented in Table 2 in Appendix 2A.

2.3.2.1 A Structured Form of Intra-Curricular Experiential Learning

The first identified component of service learning is a structured form of intra-curricular experiential learning. A precondition for this is the need for an educational method that enables nursing students to apply theory to a real-life setting (Voss et al. 2015). Through service learning in higher education, nursing students learn about the unique concept of service that is located within the experience of dealing with problems in the community. Many researchers have asserted that this type of experiential learning should be integrated into nursing curricula (Baker et al. 2004; Bassi 2011; Downes, Murray & Brownsberger 2007; Groh, Stallwood & Daniels 2011; Laplante 2009; Peterson & Schaffer 1999; White et al. 1999; Yeh et al. 2009). In addition, service learning is described as being structured in relation to the service learning placement mission, objectives, preparation, process, site orientation, and task supervision (Downes, Murray & Brownsberger 2007; Erickson 2004; Loewenson & Hunt 2011; Rosing et al. 2010). The main characteristics of experiential service learning, according to the selected articles, are teaching strategies about various health topics in academic coursework (40 articles), and student engagement in service learning in real-life experiences that address human and community needs (28 articles) (see Table 2 in Appendix 2A).

2.3.2.2 Reflection

The second identified component of service learning is reflection, which is referred to in 27 of the selected articles. Bassi (2011) stated that reflection is “a framework within which students process and synthesise information from their experiences” (p. 165). A precondition for reflection is the importance of creating meaning within the service learning experience (Julie, Daniels & Adonis 2005). This is an integral component of service learning (Baumberger-Henry, Krouse & Borucki 2006) in order to improve the critical thinking of nursing students (Sedlak et al. 2003) and to promote caring behaviour (Schofield et al. 2013).

Only one of the selected articles clearly delineated the characteristics of reflection which was referred to in three phases: observation, analysis, and synthesis (Bassi 2011). Firstly, observation involves the perceptions of stakeholders in relation to what they learned and achieved in the service learning activities. Secondly, the analysis of the experience is conducted through conversation and discussion, and finally, the synthesis of the learning experience can be used as the basis for future application (Bassi 2011; Laplante 2009; White et al. 1999). The above sub-components are mentioned in 27, 10, and 7 articles respectively (see Table 2 in Appendix 2A). Most of these articles used qualitative assessments of reflection to evaluate the service learning experiences of the managers and staff of the partner organisation, in addition to the students and academic staff. However, some of the studies used quantitative instruments to determine the effectiveness of service learning by measuring students' reasoning skills and evaluating the results of their reflections. This shows that the method of reflection and its evaluation vary, which can lead to difficulties in comparing the effectiveness of service learning to produce better outcomes for all stakeholders involved in such activities.

2.3.2.3 Reciprocity

The third component of service learning identified in the selected articles is reciprocity. There were 22 articles (see Table 2 in Appendix 2A) that incorporated the term 'reciprocity' into their definition of service learning; however, only one article provided a clear definition of the term. Reciprocity is defined as a process in which 'every individual, organisation, and entity involved in service learning functions as both a teacher and a learner' (Laplante 2009, p. 6). A precondition for reciprocity in service learning is an increasing awareness of the need to develop a community-academic partnership (Voss et al. 2015). This precondition is needed so that reciprocity can be achieved for the mutual benefit of all stakeholders (Baumberger-Henry, Krouse & Borucki 2006), and to transform student learning so that they can develop caring behaviours (Bentley & Ellison 2005; Chen et al. 2012; Eymard, Breaux & Dozar 2013; Hunt, R. J. & Swiggum 2007). According to Francis-Baldesari and Williamson (2008), who conducted a case study of partnership between a college of nursing and a community service organisation in John Islands, the US, the contribution of all stakeholders to develop strong community-academic partnerships enhanced the integration of nursing education, research, and practice to produce better outcomes for both organisations, as well as people in the community.

The main characteristics of reciprocity include two sub-components; first, that all stakeholders function as both teachers and learners (mentioned in 22 articles), and second, the presence of partnership and collaboration in providing community service activities

(mentioned in 14 articles) (see Table 2 in Appendix 2A). Service learning emphasises the concept of reciprocity, the integral involvement of community partners, and the addressing of community needs or concerns (Bailey, P., Carpenter & Harrington 2002).

A qualitative study by Laplante (2009) showed that attachment and a reciprocal relationship are two major attributes of service learning. The study found that students described reciprocity as a trust relationship that leads to forming a strong bond with their partners so that students can work together with community partners both as 'learners and teachers', and have the opportunity to learn about, and give back to, society at the same time (Laplante 2009). White et al. (1999) suggested that a positive indicator of partnership and citizenship is when the university moves from 'taker' to 'giver' status through providing its expertise in healthcare and student-learning activities. Students therefore need to understand the concept of service learning before they perform service learning activities (Hwang et al. 2014).

2.3.2.4 Setting Specific Outcomes and Benefits for Stakeholders

The fourth component of service learning found in the selected literature is the setting of the specific outcomes and benefits of service learning. The specific outcomes reported in the articles are students' competencies and insights into certain values (36 articles), health-related outcomes for clients and the community (14 articles), cost-effectiveness in providing services for the partner organisation (Baker et al. 2004; Kazemi, Behan & Boniauto 2011; Narvasage et al. 2002; Voss et al. 2015; White et al. 1999), and opportunities for empirical research, other forms of scholarship, and consultation (Baker et al. 2004; White et al. 1999). Some of the articles reported more than one specific outcome. These outcomes show that most service learning places a greater emphasis on outcomes for students, clients, and the community than for the partner organisation and academic staff.

Service learning is a labour-intensive teaching experience. A number of academics perceived that service learning reduces the strength of the learning experience as it takes much student time and energy without having a clear impact on the community and nursing education institutions (Cohen & Milone-Nuzzo 2001). However, this review has also found that there are potential outcomes and benefits for all stakeholders involved in service learning activities.

Most of articles mentioned a specific outcome for students. Three articles focused on the students' outcomes in order to understand the course content, to recognise the value of the nursing discipline, and to increase social responsibility (Baker et al. 2004; Julie, Daniels & Adonis 2005; White et al. 1999). Service learning was also viewed as an appropriate method

to increase caring behaviour among nursing students (du Plessis, Koen & Bester 2013; Schofield et al. 2013). Other specific outcomes of service learning for nursing students are to:

> *accomplish key developmental tasks of the college years (such as building their competence, autonomy, and integrity), while helping impart the skills and values they will need as they graduate and seek professional nursing roles (Bassi 2011).*

Apart from setting specific outcomes for students and academics in nursing education institutions, specific outcomes for clients and the community were mentioned in 14 articles, including improved health status of individuals, family and community (Downes, Murray & Brownsberger 2007; du Plessis, Koen & Bester 2013; Erickson 2004; Hwang et al. 2014; Larson et al. 2011; Voss et al. 2015), development of community awareness towards health promotion (Erickson 2004; Larson et al. 2011; Schaffer, Mather & Gustafson 2000; Sedlak et al. 2003), the use of preventive health service (Bassi 2011; Larson et al. 2011; Metcalfe & Sexton 2014; Reising, Allen & Hall 2006b), and residents' satisfaction with the service provided (Yeh et al. 2009).

Finally, service learning also provides potential outcomes and benefits for the partner organisation. Kazemi, Behan and Boniauto (2011) demonstrated that service learning is also cost-effective for the partner organisation. The literature also showed that service learning enhances the participating organisation's efficiency (Narvasage et al. 2002; White et al. 1999). Narvasage et al. (2002) reported that the service learning program helped the agency partners to accomplish their 2 to 8 year agendas, in addition to 90 to 1,200 hours of services that had been provided to their agencies. White et al. (1999) also reported that each student completed 12 hours of service learning which is beneficial of organisation partners. In order to obtain the most benefits and outcomes from service learning, it is necessary that academics from the nursing education institution, the students, and the community partner agree on the service needs of the organization (Cohen & Milone-Nuzzo 2001). In this way, the integration of nursing education, practice, and research can be achieved (Francis-Baldesari & Williamson 2008).

2.3.2.5 Conceptual Model of Service Learning

The final step in this integrative review is the development of a conceptual model of service learning (Whittemore & Knafl 2005). The conceptual model, as a product of the synthesis process, consists of four components, as described in the previous sections: experiential learning, reflection, reciprocity, and the setting of specified outcomes and benefits for stakeholders (see Figure 2.1).

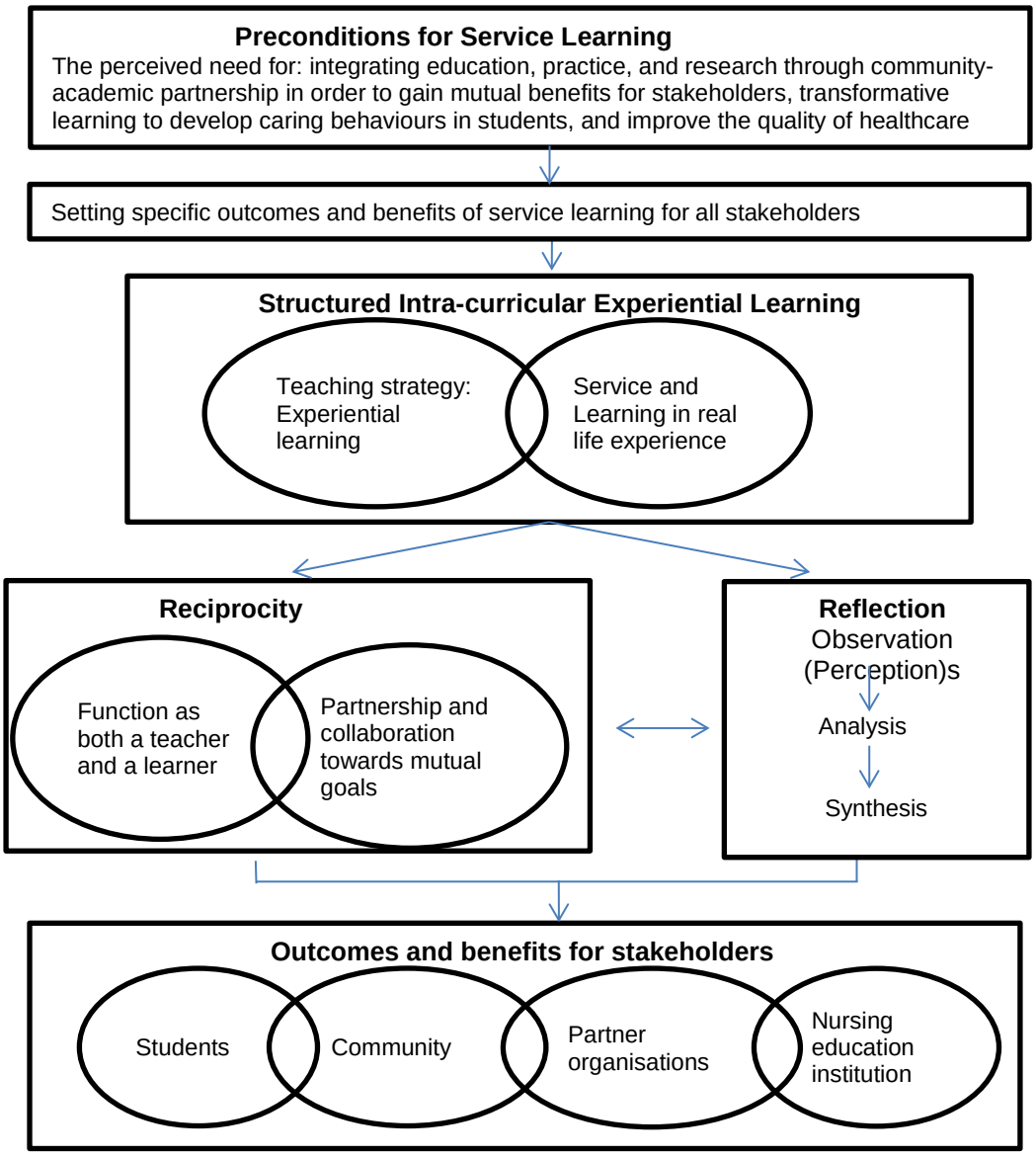


Figure 2.1 Conceptual model of service learning

In Figure 2.1, the conceptual model of service learning is underpinned by a number of preconditions. Nursing education institutions and partner organisations need to perceive and be motivated to integrate education, practice, and research through community-academic partnerships to gain mutual benefits for stakeholders. This should include transformative learning to develop caring behaviours in students and to improve the quality of healthcare for the community. After all the participating organisations have gained an awareness of these needs and have set specified outcomes, the structured intra-curricular experiential learning can take place, which is then followed by reflection and reciprocity. At the end of the service learning program, the stakeholders evaluate the specified outcomes for students, the community, partner organisations, and the nursing education institution. Identification of the

components of service learning can be used to develop agreement among diverse stakeholders, to identify gaps and opportunities for collaboration, and to develop indicators for evaluation of the program (Funnel & Rogers 2011).

Based on this review, the definition of service learning is proposed as follows:

> *a structured form of intra-curricular experiential learning that engages students in service and learning through real-life experiences, using reflection and reciprocity as tools to achieve the specified outcomes and benefits for all stakeholders.*

This synthesised definition of service learning is broader than any definition found in the literature. The definition has been modified to accommodate the broad themes and variations on the definition of service learning found in the reviewed literature. Service learning must offer students experiences that address the needs of clients and the community, as well as providing opportunities for students to reflect on these experiences. Although reflection has not yet been fully defined, students need to clarify the meaning of their experience through critical thinking and analysis as well as connecting with the community through service learning (Bailey, P., Carpenter & Harrington 2002).

In creating a composite definition of service learning, the broad term of setting specific outcomes and benefits for all stakeholders has been used. This broad term offers flexibility for nursing educators, partner organisation officials, and other stakeholders involved in the service learning process, to determine desirable and measurable outcomes. The outcomes not only assist in gaining a better understanding of the course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility, as stated by White et al. (1999), but could also incorporate outcomes for students, clients, and communities, the staff of partner organisations, and nursing academics involved in service learning. Thus, a broad sense of ‘specified outcomes’ can provide more space for further research on, and development of, the service learning approach.

2.3.3 Service Learning Methods, Outputs, and Outcomes

As there are various definitions of service learning, the service learning methods that are found in the literature are varied as well. Gupta (2006) used a simple and practical method which is the PARE (Preparation, Action, Reflection, and Evaluation) model to achieve community partnership goals. This model emphasises the preparation phase as a critical step for the success of service learning. The implementation of service learning starts with preparation, which is primarily conducted by a faculty member in the classroom with students as well as in the partner agency. The preparatory activities include setting up the learning contract with the students, assessment, planning, intervention or implementation, and

evaluation (Gupta 2006; Perry, Gabe & Metcalf 1998; Riedford 2011). Gupta (2006) asserted that there are a number of challenges in working in a group, including differing priorities and timelines between the education stakeholders and the partner organisation. Therefore, academic staff and the partner organisation need to determine a focus for the intervention based on the needs of the community (Cashman et al. 2004).

After determining the focus, the academics share this information in an on-campus orientation session about expectations, policies and procedures, and the appropriate roles and responsibilities that the students must follow (Kemsley & Riegle 2004). Following such preparation, students then undertake the service learning activities which have varied from 18 hours (Gupta 2006) to 14 weeks (Kazemi, Behan & Boniauto 2011).

Another service learning method is to use a standard nursing process as the framework for the project, consisting of community assessment, planning, intervention, and evaluation (Lemon 2001; Perry, Gabe & Metcalf 1998; Riedford 2011). A study by Hamner, Wilder and Byrd (2007) provided an example of two groups of senior students that focused on addressing the education and self-care needs of specific populations by applying case-management principles to the care of residents with chronic conditions in a clinic. The students completed a focused community assessment and identified the available resources and the gaps in those resources. The students designed and implemented a community intervention program that addressed the gaps in the resources for the residents. After performing the intervention, the students then evaluated the effectiveness of the intervention. The findings showed that there are a range of benefits of service learning and partnerships for students, academics, residents, and the university.

Foss et al. (2003) used Polvika's model to develop a service learning partnership. Polvika developed a theoretical model to guide the development of inter-agency relationships. These relationships are based on pre-partnership factors which include environmental and situational factors, and task characteristics. These inter-agency relationships produce outcomes such as the success or failure of the programs, the degree of responsiveness of the program, and the satisfaction of participating organisation members. The findings of this study showed that the partnership met the three criteria for success based on Polvikas's model which are the degree of success of program, the degree of responsiveness by partners to change the program, and the degree of satisfaction by participating organisation. The program was considered to be a success even though some of the nurses involved reported that having students with them did not save time, and actually required additional supervisory time when students were on site (Foss et al. 2003).

These various service learning methods indicate that there is a lack of a consistent service learning method in nursing curricula. This was also demonstrated in a systematic review undertaken by Stallwood and Groh (2011) who pointed out the need for a standardised methods of service learning implementation in order to evaluate the effectiveness of the service learning approach. Even though evaluation is the final part of the process, planning for evaluation before implementation can provide clearer expectations for academic staff and partner organisations (Narvasage et al. 2002). Identification of the outputs and outcomes of service learning from the literature can also assist with planning for the evaluation of service learning.

Voss et al. (2015) conducted a two phases study to identify elements of service learning evaluation framework. The first phase was development of a framework for measuring service learning benefit by three community members and two faculty members. The second phase was testing the service learning framework. The framework consisted of feasibility to collect meaningful data, access for measuring service learning benefit, metrics for measuring benefits of service learning, student and faculty consistent presence and engagement in the project. The limitation of this study is that it used a small sample (n=3) of student project, and it only involved community-academic partners in one community. This framework also did not cover comprehensive elements of service learning benefits for all stakeholders. Thus, evaluation framework of comprehensive output and outcomes of service learning for all stakeholders is needed.

In higher education in general, service learning has proved to be effective in improving student learning (Berry & Chrisholm 1999). Astin et al. (2000) reported that the Higher Education Research Institute (HERI) at the University of California conducted a study with 22,236 students in 1998 to explore the comparative effects of service learning and community service on the cognitive and affective development of college students. The study showed that course-based service (service learning) was more effective than volunteered community service for improving college students' academic performance (GPA, writing skills, critical thinking skills), with the greatest benefits being in relation to students' writing skills, values (commitment to activism and to promoting racial understanding), choice of service career, and plans to participate in service after college (Astin et al. 2000).

Reising, Allen and Hall (2006a, 2006b) evaluated the effects of service learning on students and the community using a prospective descriptive design to explore the student and community outcomes of service learning. As part of the study, 50 students participated in a service learning program at the Health and Wellness Education Centre at Indiana University (the US) which provided screening and counselling for hypertension for 51 clients made up of

university employees, students, and visitors at the University. The study findings showed that student outcomes registering the highest scores on a 5 point Likert-type questionnaire scale were ‘seeing health promotion theory in action’ and ‘experiencing a variety of community healthcare needs’ with a score of 4.4 for both outcomes. Other outcomes that scored highly were ‘development of blood pressure and heart rate assessment skills’ (4.1), ‘development of professional and civic responsibility’ (4.0), and ‘development of health counselling skills’ (3.6). Overall student satisfaction was 3.8 (Reising, Allen & Hall 2006a). Of the 51 clients who received counselling, 39% had lowered their blood pressure or their risk of high blood pressure. A few clients provided both positive and negative feedback about crowding at the location site, and the skills and performance of some of their student colleagues (Reising, Allen & Hall 2006b).

Loewenson and Hunt (2011) conducted a pre- and post-test intervention study to evaluate nursing students’ attitudes towards homelessness after three months in a structured clinical service learning rotation with individuals and families who were currently experiencing homelessness. The results of the attitudes inventory for 23 students showed that the students’ total mean scores on the ‘attitudes toward homelessness index’ improved significantly from the beginning to the end of the semester ($p < 0.001$), suggesting more positive and non-stigmatising global attitudes towards homeless individuals at the completion of their studies.

Narvasage et al. (2002) conducted a pre- and post-test quantitative evaluation of service learning for students, which included knowledge of the type of community resources and health service system, understanding of the responsibilities of other members of the healthcare team, understanding the barriers to healthcare in the community, understanding the social and economic influences on health, and knowing how to work with a range of clients. The study found that 72.5% students thought they had gained unique knowledge through the service learning experience, 71.5% felt they met the goals of learning, 86% students perceived that the service goal was achieved by providing a needed education and health service in the community. These elements are very important for every nursing education institution to generate high quality nurses in the future.

Most of the outputs and outcomes of service learning were focused on the students, while outputs for the partner organisation, or the community partner, and faculty members were rarely reported (Reising et al. 2008). In fact, apart from producing positive outcomes for students, an appropriate approach to service learning would also provide benefits for clients. A variety of outputs and outcomes of service learning for clients were also reported in the literature, including improvements in the health of low-income elders in senior public housing

(Erickson 2004), and increased access and utilisation of health promotion and screening services for a vulnerable community in an urban setting (Dunlap et al. 2011). Increased access and utilisation of health promotion and screening was also experienced by residents living in a low-income public housing community (Hamner, Wilder & Byrd 2007). Other outputs for the community included increases in the number of clients being screened for depression (Cashman et al. 2004; Warren, Donaldson & Whaley 2005) and tuberculosis (Schoener & Hopkins 2004). Clients also showed improved knowledge of risk factors, signs of disease, and symptoms of hypertension and diabetes (Reising et al. 2008; Sensenig 2007). Warren, Donaldson and Whaley (2005) reported that service learning in a depression screening program screened 62 participants, 13 of who were found to have depression symptoms. These participants were then referred for further assessment and counselling. In terms of client satisfaction, Yeh et al. (2009) conducted a satisfaction survey for senior residents and found that 92% of the 113 respondents were either very satisfied or satisfied with the services provided by the centre.

These studies indicate that service learning is not only an effective way to improve student learning outcomes, but also to produce outcomes for clients and people in the community. However, most of these studies have not demonstrated the effectiveness of service learning for partner organisations, and particularly for nurses who work in these partner organisations. A few outputs and outcomes of service learning for parter organisation were reported in the literature Partner agencies expressed a range of positive benefits of having nursing students in the organisation (Cohen & Milone-Nuzzo 2001; Levy & Lehna 2002), including an increase in the services provided (Shiber & D'Lugoff 2002); the implementation of a program (Baker et al. 2004); and the increased capacity of staff (Gupta 2006). The outputs and outcomes of inter-organisational collaboration in service learning are measured by the amount and quality of services that clients receive; the degree to which organisations meet their own goals; the degree of responsiveness of the programs to changing needs; and the satisfaction of the participating organisations (Foss et al. 2003). Despite the claim that service learning produces positive outcomes for partner organisation, these papers did not provide detailed information about the measurement of these outcomes.

Only a few studies reported the outputs and outcomes of service learning for nurses. According to Hoebeke et al. (2009), service learning directly benefits the nursing staff if they initially identify the ideas, needs, and priorities so that they do not feel burdened with the added responsibility of guiding students in the clinical setting. They believed that collaborating with students would have a positive impact on their daily work. Kazemi, Behan and Boniauto (2011), in a study of School Health Nurse (SHN) preceptors, stated that 70.8%

of the preceptors did not find having nursing students detrimental to their work. However, 33% stated that having students was “more trouble than it was worth.” Approximately 7.8 mean hours were saved by the students completing routine tasks for the SHN. Similarly, the nursing students saved the preceptors 8.5 mean hours by doing extra tasks that the SHN preceptors did not have the time to complete. Even though this study did not provide information about the actual cost, service learning considered to be highly cost-effective because the student activities can help to save the nurses’ time. However, it was also recognised that there is a possibility that nurses and organisations would not receive sufficient benefit from service learning if the process was not well-prepared (Narvasage et al. 2002).

In terms of outputs of partnership for nursing academics, Baker et al. (2004) reported on a positive output of service learning for academics in which one of them was invited to become a consultant for the partner organisation. However, Cohen and Milone-Nuzzo (2001) stated that professional development for academics had mixed results and there were a number of unresolved issues in relation to the service learning experience because it is such a labour-intensive teaching experience. Academic staff may use the experience as a service learning facilitator to improve the progression of their own scholarship, because involvement with a partner organisation may help to identify opportunities for empirical research, other forms of scholarship, or consultation. Cohen and Milone-Nuzzo (2001) further suggested that academics need to create a synergy between their teaching and their professional development to get the best return for their own careers.

2.3.4 Barriers to Service Learning

Despite the reported benefits of service learning, previous studies have reported that academics, students, and partner organisations may experience difficulties in the implementation phase of the service-learning approach (Blouin & Perry 2009; Narvasage et al. 2002; Rosing et al. 2010). The challenge for nursing academics is to arrange experiences for student learning without ignoring the needs of the community partner. The major dilemma is to determine the level of supervision provided for students at each stage of a project. Although students often express frustration over the lack of clarity and specification of their project, it is difficult to determine the level of tasks that can help students to learn what they need to, but also to encourage professional nursing practice (Peterson & Schaffer 1999). The process of selecting a target population and a clinical site for the students was another challenging task because the community health rotation is a new experience for staff and students. As well, partner organisations were unaccustomed to providing students with opportunities in their settings (Hudson, Gaillard & Duffy 2011).

One of the perceived barriers associated with the students is that they often exhibit a lack of clinical competence and professionalism. A study by Blouin and Perry (2009), who conducted in-depth interviews with 13 executive directors, four volunteer coordinators, and three program directors of various local community-based organisations that have worked with students from Indiana University, demonstrated that students are lack a sense of professionalism, are unwilling to work hard, are unable to take the initiative, appear to be unconcerned about producing quality outcomes, and are lacking in professional communication skills. All of these issues represent major barriers to successful service learning. Another challenge is the difference between the learning goals of the students and the needs of the partner organisation. When service learning goals do not meet the expectations of the organisation, then the investment of time and energy are unlikely to produce mutual benefit for all stakeholders (Blouin & Perry 2009).

There are also a number of barriers that the students face in the implementation phase of service learning. Narvasage et al. (2002) found that 25% of students reported having difficulty completing the service learning project because their contact person left the organisation, the person assigned as the project liaison was unsupportive, or they used students as free labour for other projects rather than for the agreed-upon service. Students also perceived barriers to the service learning approach because of the need to plan their own activities (Bassi 2011; Richards, Novak & Davis 2009). Students were concerned about their placement in the community for example the placement sites were not well-prepared, the university's choice of sites may have been ill-considered, and that there were problems with time and scheduling (Rosing et al. 2010).

As well, some students were not able to see the reciprocal benefits of service learning as clearly as the providers did (Richards, Novak & Davis 2009). Similar findings were also reported by Rash (2005) who found that most students were unfamiliar with service learning concepts and many were anxious about their interactions with the community partners. Students felt stressed about organising the placement, being too busy, and they also felt confused about how the placement activities were set-up (Reising et al. 2008).

Other issues found to be related to service learning were the costs and challenges for the community partners. The costs often took the form of risks to the organisation, such as unreliable students, or students not complying with the organisation's policies, and the draining of organisational resources, such as time, energy, and other resources that were perceived as not providing significant benefit (Blouin & Perry 2009). According to Foss et al. (2003), there are other issues in service learning, such as the structure of the partnership, control of access to resources, contributions of agency staff, and the pattern and flow of

relationships. Foss et al. (2003) further suggested that these issues need to be negotiated and decided upon during the development of the partnership.

2.3.5 Strategies to Overcome Barriers to Service Learning

To overcome issues and barriers to service learning, the experience and support of academics is critical (Gupta 2006; Narvasage et al. 2002). Academics can maintain contact with the community, review course objectives, develop the design of, and communication process for, the rotation (Hudson, Gaillard & Duffy 2011), explore the needs of the clients, and consider various ways in which services could be added or improved through student involvement (Dunlap et al. 2011; Perry, Gabe & Metcalf 1998; Riedford 2011).

William-Barnard et al. (2006) conducted a comparative study of two groups to identify the factors that contribute to a successful learning partnership between nursing students and practicing nurses engaged in a clinical specialty partnership program within an acute psychiatric-mental health setting. The convenience sample consisted of 33 undergraduate students and 18 practicing nurses using a Learning Partnership Survey to allow a comparison of the factors considered important to the partnership. The findings showed that students and nurse partners were quite similar in the rankings, with students and practicing nurses ranking communication skills and attitudes towards teaching/learning as factors that influence a successful learning partnership. Clear, open and accessible communication among partners also becomes a bridge towards a collaborative campus-community partnership (Foss et al. 2003).

Continuity of service and the building of trust are also considered as important bridges towards service learning (Blouin & Perry 2009). Hamner, Wilder and Byrd (2007) reported the process and lessons learned from a 2-year period of partnership between the Auburn University School of Nursing and the Auburn Housing Authority (AHA) to establish nursing clinics in five AHA apartment sites. Junior and senior students rotated in these nursing clinics to provide the service learning activities such as early detection, health teaching, and case management to provide healthcare for residents with chronic conditions. Based on this 2-year period of partnership, Hamner, Wilder and Byrd (2007) further asserted that there were three major lessons for building trust in a community partnership. The first and major lesson was the need for a single member of academic staff to present at all clinic activities. The second lesson in building trust involved providing a regular and routine service in the clinic. Third, the continuation of a community-based partnership required persistence and perseverance by all the parties involved. Therefore, academics need to provide information for the students and the partner organisation about the purpose, context, and process of

service learning to maintain the continuity of service and build trusting relationship with clients (Peterson & Schaffer 1999).

In summary, there are various service learning methods reported in the literature which also produce various outputs and outcomes for students, clients, and partner organisations. These outputs and outcomes also influenced by a number of barriers that needed to be addressed using various strategies. Service learning has been widely used in the US, and is now spreading to other countries, including in the Asian region. The next section will describe the implementation of service learning in Asian countries.

2.3.6 Service Learning Implementation in Asian Countries

Service learning as an instructional philosophy and pedagogy has been used in various educational settings in a number of Asian countries. Xing and Ma (2010) reported that service learning approaches have been implemented in China, India, Japan, the Philippines, Taiwan, and Thailand. Many universities in Asia have established service learning centres or programs, including *Lingnan University* as the first to set up an Office of Service Learning on campus. In Taiwan, service learning has been implemented in over half of the country's universities and colleges across various disciplines (Xing & Ma 2010). This shows that service learning has been adopted as a learning strategy in many Asian universities and colleges. Despite the adoption of service learning in various Asian countries, there has been little scholarly publication on its implementation in nursing education. There are only five publications which refer to this issue for nursing education in Asia, Hwang et al. (2014), Kwong, Wong and Wu (2007), Tam (2013), Hwang, Wang and Lin (2013), and Yeh et al. (2009).

A study from Hwang et al. (2014) examined reciprocity in service learning among students and paired residents in long-term care facilities in Taiwan. This study employed a mixed-methods design to report on the development of an intergenerational service learning project which included 12 hours of service over 6 weeks to test its effects both on nursing students paired with residents, and the residents of the facilities themselves. The findings showed that the residents' perceptions of care significantly differed between the control group and intervention group ($F=8.99$; $p=.004$). The residents also reported that they were happy with the presence of the young students and appreciated their service, although some of them also complained about 'excessively noisy gatherings' of students in their long-term care facilities. A paired *t* test analysis of the nursing students also showed significant increases in both caring and attitude scores after the project ($t=8.56$; $p=.000$; $t=6.35$; $p=.000$). The students reported that they had cultivated their caring and communication skills through their interaction with the elderly. Despite this positive response from the students, they also

commented that the time allotted for providing the service was too short for any meaningful interaction to take place. Hwang et al. (2014) further suggested that a 40 hour intervention over a 15-week period would likely produce better outcomes. In the end, the author concluded that sufficient training, clear expectations, and a well-designed intergenerational service learning project can improve students' caring behaviours by enhancing intergenerational interactions and meeting the residents' needs for caring and human contact.

The implementation of another service learning program in Guangzhou, China, was assessed by Kwong, Wong and Wu (2007), who conducted a collaborative endeavour to develop a prevention-focused community nursing education program. The aims of this collaboration were to increase the ability and confidence of Guangzhou nurses in performing community healthcare roles and to train local community health nursing trainers in two community health stations in Guangzhou. This collaboration was started with the program development where the school of nursing established a working group in Hong Kong and assessed the need of community healthcare in Guangzhou. The next step was planning where the teaching team was created and the community health nursing was endorsed in the curriculum. Next step is adoption of service learning across the curriculum. The outcome oriented assessments were designed to achieve the intended outcomes. After the program, the students had gained greater confidence and ability in community nursing practice, and the health school was able to offer community health nursing education independently.

Another example of the development, implementation, and evaluation of a service learning course in Hong Kong was reported by Tam (2013). This small-scale evaluative study examined the effects of intergenerational service learning on students and older people who participated in the community service project. Both students and the older people were given two different questionnaires which consist of 20 questions in each questionnaire. Twenty two students and 25 older people completed questionnaires regarding their interest to participate in the service learning, satisfaction, and overall evaluation of the service provided. The findings from the quantitative and qualitative data showed that students and elders benefited by participating in service learning experiences. Students reported that they gained a better understanding of the older generation, enjoyed interacting with the elders, and they agreed that these learning outcomes were achieved as a result of the service learning experience. The elders who were involved reported their enjoyment of learning from the young students which helped them to broaden their knowledge, and to stay connected, and up-to-date, with society. Similar to the findings of Hwang et al. (2014), Tam (2013) also found that the 27 hours of the service period was too short and that the students suggested that a longer

service period would be beneficial. It was also found that there was a need for more conducive facilities and support for effective teaching and learning.

The difference of students' outcomes in three different facilities were examined by Hwang, Wang and Lin (2013) who conducted a quasi-experimental study, using a convenience sample of 126 students divided into three groups (assisted living facilities=43 students, nursing homes=43 students, veterans' home=40 students). The findings demonstrated that all three groups showed significantly higher caring scores after the intervention. The long-term outcomes of 16 months of the intervention showed that students' caring attitudes and behaviours towards elderly people were significantly higher in the assisted living facilities than in the veterans' home because the elderly in the assisted living were more cooperative and had more free time to interact with students. The study shows that different placement sites may have different effects on nursing students (Hwang, Wang & Lin 2013). This indicates that the site of service learning which is cooperative and interactive for students can contribute to the increase of caring attitude and behaviour among students.

The importance of a service learning sites that is cooperative and interactive for students has also been demonstrated by Yeh et al. (2009) who studied a service learning program designed to provide care to senior residents in an apartment complex in Taiwan. Using an action research approach, Yeh et al. (2009) developed a new prototype for an educational partnership in nursing though the integration of service learning and care to senior residents in an apartment complex and a nursing educational program. The new prototype was an-academic-based, nurse-managed community centre for senior residents in Taiwan. The results showed that the major concerns of the senior residents were healthcare service (25.9%), visitation (24.5%), and telephone visits (20.2%). Most of residents (92%) said that they were very satisfied or satisfied with the services provided. This study has shown an example of nurse-managed community service centres using a service learning approach for senior residents that produced positive outcomes for stakeholders. This study, however, focused on evaluation of outcomes for senior residents, students, and teachers' practical experience. There were no reported outcomes of organisation partners and nurses who involved in the integration. Moreover, the evaluation did not include the measurement of the integration of service learning and care in the centre.

Despite the research evidence showing the benefits of service learning, there are a number of misconceptions about service learning by educators and students, some of who perceive service learning as 'charity work' or a "distraction from core disciplinary competencies" (Xing & Ma 2010, p. 6). Moreover, poor implementation of service learning may aggravate social inequality and power imbalances in the community (Kusujiarti 2011). To demystify such

issues, Xing and Ma (2010) suggested that scholars and practitioners need to advocate for social change and to provide examples about how educators and students can get involved in community engagement. Moreover, educators need to explain and address issues related to power, capacity, equity, and the sustainability of service learning to students (Xing & Ma 2010). In this way, students would recognise the misconceptions about service learning so that they could understand the relationship between social structure and social inequality prior to undertaking service learning activities (Kusujiarti 2011).

In Asian region, the prevalence of both infectious and non-communicable diseases is high, and resources are limited which then contribute to health inequality within the community (WHO 2008). The finding of a web-based survey indicated that it is important to reduce inequality of opportunity such as access to education and health (Kanbur, Rhee & Zhuang 2014). Thus, the service learning approach delivered by the university has the potential to help the community. Therefore, further comprehensive research to learn about the elements of service learning for students, partner organisations, families, and the community in addressing health problems in developing countries is very important.

In this section, the service learning as a teaching strategy that can link student learning and healthcare service has been defined. This definition consists of four major components which include structured intra-curricular experiential learning, reflection, reciprocity, and setting specific outcomes and benefits for all stakeholders. These components are used to develop the conceptual model of service learning (Figure 2.1) that could be used to assist the implementation and evaluation of service learning in nursing education. Since there is only one published study on the integration of service and education in a NC in Asia, there is a need for a better and meaningful evaluation of the nursing centres that takes into account of the integration of services, education, and research. The following section will present a literature review of the characteristic of the NC model, collaborative approach and integration of services, education, and research in the NC model, and strategies to evaluate the NC model.

2.4 The Academic Nursing Centre Model

As discussed earlier, integration of service learning into healthcare services provide a unique opportunity to improve the outcomes for students, clients, and lecturers. However, there are only limited studies that reported the use of service learning approach in the NC (Connolly, C. et al. 2004; Lough 1999; Lutz, Herrick & Lehman 2001; Marek, Rantz & Porter 2004; Yeh et al. 2009). Therefore, this section aim to identify evidence relating to the purpose of establishment of the NC, characteristics, models or approaches to the NC, the collaborative

approach, the integration of service, education, and research in the NC, and strategies for evaluating the NC.

Schools of nursing establish academic NCs to address the gap between education and practice in nursing (King 2008). In terms of the missions of the schools, the majority of respondents reported that these included education, research, and clinical practice (Pohl et al. 2007). Therefore, the NC has a three-fold mission based on the education of nurses, the provision of healthcare services, and research that advances healthcare (Humphreys et al. 2004). Schools in either a medical centre setting or a research-intensive/extensive setting were more likely to have developed NCs (Pohl et al. 2007). Academic NCs also have the purpose of providing educational experiences for students, being a practice site for lecturers and other members of faculty, providing nursing services to the community, and acting as a research site for students and lecturers (Pohl et al. 2007).

Despite the similarity in the purpose of the NCs establishment, the characteristics and emphasis of the operation of these centres is somewhat varied (Barger 2004). The variety of characteristics and approaches used in NCs may be influenced by the differing organisational characteristics of the particular School of Nursing (SON) operating these centres. Pohl et al. (2007) surveyed the characteristics of the SONs operating NCs in the USA. They found that 92 out of 565 SONs indicated that they had one or more NCs. Of the 92 SONs, 59 responded to the survey. The findings showed that the overall proportion of SONs operating NCs was very low (16%). The survey results also outlined the characteristics of the NCs. As well, many NCs serve as educational and clinical sites for nursing students at the baccalaureate, masters, and doctoral levels. The number of nursing academics practicing in these centres ranged from one to ten academics. In terms of funding, most of the centres identified that grants and SONs are the most common sources of funding for the NCs (Pohl et al. 2007). In terms of location, the most common was space in another agency (38.8%), followed by location in a free-standing building (21.4%), while only 12% were located within SONs. In terms of the number of years the NCs have been open ranged from two to 35 years, with an average of nine years whereas only four centres had been open for more than 20 years. This evidence has clearly shown that some of the NCs survived and others did not (Pohl et al. 2007) because many NCs have experienced management challenges and sustainability issues (King 2008; Tuaoi et al. 2011). Therefore, in order to be able to establish and maintain the NC, nursing education institutions need to recognise the challenges, the mechanisms of change, and the survival strategies for development, administration, collaboration, and funding for the NC model (Henry 1997; King 2008).

There are a number of variables that need to be considered in order to establish and maintain nursing centre activities, consisting of the organisational (both school of nursing and health centre) coordination and integration of all stakeholder needs, priorities, and goals (Shiber & D'Lugoff 2002). However, these variables have not been fully articulated in the literature. Therefore, the following three sections will identify the models or approaches to the NC (including the type of organisation, the challenges, and the strategies for maintaining the sustainability of the NC), the collaborative approach and the integration of service, education, and research in the NCs, and finally, the strategies to evaluate the achievement of these outcomes.

2.4.1 Models or Approaches to the Nursing Centre

The literature reports on the wide variety of models or approaches to the NC, starting with community-based services (Lundeen 1993), the Lundeen community nursing centre (Lundeen 1999), the Betty Neuman model (Newman 2005), primary healthcare (Neff et al. 2003) and the evidence-based model (Oros et al. 2001), community as client (Glick 1999), through to the business plan model (Branstetter & Holman 1997; Miller et al. 2004).One of the earliest NCs in the US was established in 1979 at the University of Wisconsin-Milwaukee (Lundeen 1993). In this centre, Lundeen (1993) used the following four elements: 1) community-based services located in the community using a small humanistic organisational structure to provide a sense of familiarity; 2) a comprehensive range of services that focus on the multiple risk factors that influence families; 3) collaborative relationships with various health disciplines, agencies, and multiple funders; and 4) coordination of services for families to reduce overlaps in service provision.

In addition to this model, Lundeen (1999) published a study on the application of the Lundeen Community Nursing Centre Model. This is a model that uses a collaborative and multidisciplinary approach with organisational partners in the public health and social service sectors and community residents in order to provide health promotion and primary prevention as key components of nursing roles. The Lundeen Community Nursing Centre Model is based on the principle of integration and collaboration between nursing, public health, social services, and community-based organisations. The services provided in these centres comprise assessment and screening, health education, counselling, community outreach, case management, community assessment and development, and clinic-based primary care (Lundeen 1999). This model emphasis on the collaboration and integration of multiple discipline, professional education, and research activities, however, there was no specific information of how this integration was conducted and measured.

In the subsequent publication of the NC Wisconsin, Hong and Lundeen (2009) reported that the Automated Community Health Information System (ACHIS) was used to code client problems and nursing interventions based on the Omaha system (Hong & Lundeen 2009). They further found that the majority of nursing diagnoses in this centre were coded as actual problems, but 38% of client problems were documented as potential problems and health promotion issues. The actual nursing interventions provided in this centre were health teaching, guidance, and counselling (38.9%) and case management (25.8%). This study showed the contribution of the NC towards health promotion for vulnerable populations, and that ACHIS could be used as a clinical information system in the NC. However, there was no information in the paper in relation to evaluation of education and research within the NC. As well, there was no information regarding the numbers of the NC that used the Lundeen's model and the sustainability of this NC up to now because the latest publication was in 2009.

A different model of the NC was reported by Oros et al. (2001) who looked at the Open Gates Health Centre in inner city Baltimore which was established by the University Of Maryland School Of Nursing in 1993. The mission of this centre is to provide quality healthcare to individuals and families who are uninsured, underinsured, or who are having difficulty accessing the traditional healthcare system. The centre was established by a non-profit organisation, Open Gates, Inc., with board representation from the community, a religious organisation, and the school of nursing. The Open Gates received an initial grant from the Middendorf Foundation and a special project grant from the Division of Nursing, U.S Department of Health and Human Services. This centre used the Evidence-Based Clinical Practice Model, which applied "system theory to define the set of relationships between community and student needs, the clinical practice program, and student and community outcomes" (Oros at al. 2001, p. 280). The Evidence-Based Clinical Practice model started with the understanding the needs of student and the community as the foundation for the development a clinical practice program that include primary healthcare, health education and promotion, and community outreach strategy. Clinical education of students and research were integral components of the entire care delivery approach (Oros et al. 2001). Despite the authors' claim of integration of primary healthcare, education, and research in the Open Gate Health Centre, there was no reported evaluation of this integration in the paper.

The Open Gate model was the prototype of nurse-managed community-based model which was used by other centres, such as five mobile treatment units, 15 school-based health centres, a nursing centre for frail seniors, a teen parent education and support centre, a large interdisciplinary paediatric ambulatory practice, and a state-wide consultation and training

program for child care providers. The interventions in such centres consist of primary healthcare, health education and promotion programs, and community outreach provided by students and advanced-practice nursing academics (Oros et al. 2001). The NCs demonstrated that they provide comprehensive quality healthcare in an efficient and effective way. However, this NC model faced challenges in relation to balancing conflicting community needs and accountability of public health practices. These are including practice management/clinical operations, community, and research challenges (Oros et al. 2001). The major challenge in practice management is the staffing of the centre because this centre mainly runs by faculty members who also have other commitments to teach and conduct research. In term of community challenges, the priority of community needs often in conflict with academic interests which sometimes reduce the community trust towards a university. In terms of research, the main challenge is to integrate and balance the competing demands of practice, education and research in order to achieve mutual goals of community health and academic (Oros et al. 2001). Even though the author claimed that the Open Gate NC has survived for more than seven years, there was no subsequent publication that indicated this model was still in operation after 2001.

Another NC model is that described by Newman (2005) using the Betty Neuman systems model which views the client as a system in interaction with environmental stressors that may have either positive or negative impacts on the client. This centre was established in 1997 in Chester, Pennsylvania to meet the health promotion needs of underserved senior citizens. This centre was funded by the Independence Foundation of Philadelphia as the result of collaboration between the Health Advisory Committee of Chester, Neumann College Division of Nursing and Health Sciences, and Widener University School of Nursing. The centre was located in two different sites to accommodate students and faculty practice from these two nursing education institutions. The goal of the centre was to “establish a nurse-managed centre to provide health promotion activities, research, and placement of nursing students to focus on the health of elderly men and women” (Newman 2005, p. 222). Nursing interventions in such NCs were characterised by prevention strategies in order to change the interaction between the client and the environmental stressor. The author reported that a total of 400 clients were seen in the NC between 1997 and 2001. However, there were no reported operational challenges to the continuity of this model in the paper to indicate the sustainability of this NC model.

Miller et al. (2004) proposed the use of a business plan as a blueprint for the NC should be used to determine the feasibility of clinical services, faculty development requirements, and expected returns on investment of time and resources. This business plan would include the

mission and goals of the centre, strategic and business planning processes, marketing, recruitment, and the development of incentives to reward professional employees. Miller et al. (2004) further described the dimensions of academic practice within the NC, including direct care where the nurse practitioners deliver primary care services to clients at a particular site, the opportunity to use nurse academics to develop a consulting practice in the clinical, administrative, and research areas, and a new educational development approach to institutions and individual patient consumers.

A similar approach was also reported by Branstetter and Holman (1997) for a NC that was established in 1977 by academics from the Arizona State University College of Nursing. This centre used a model based on the primary care role of the nurse focusing on the provision of healthcare for people in the community. After 11 years of operation, this centre was threatened with closure due to financial constraints. In response, the centre employed six strategies to maintain viability. These strategies were to: initiate a policy of direct, full pay for services at the time of the visit; develop a realistic business management plan; aggressive use of planned marketing strategies; obtain contracts and agreements with other community agencies; cooperate with other agencies to address specific local health needs; and to solicit obtaining provider status with selected health maintenance organisations. In this way, the NC at Arizona State University has survived as a freestanding nursing clinic (Branstetter & Holman 1997).

Persily (2004) reported a different approach on academic practice within the West Virginia Rural Health Education Partnerships (WVRHEP) program to address the problem of critically limited levels of primary healthcare in rural and medically underserved areas in the US. This program has integrated academic nursing practice, student learning, and research. The results showed that women used the WVRHEP services for prenatal care as well also for the continuing care of their families. Nursing education was also integrated into the practice, as this centre also served as a laboratory to provide deeper understandings to nursing students of rural nursing practice. In terms of research, this centre has received research grants, and has also disseminated their research findings in the form of publications and presentations (Persily 2004). This paper, however, did not describe the model or framework used for the implementation of the WVRHEP program in detail.

The positive impact of integrating education with research in the NC was also reported by Marek, Rantz and Porter (2004) who described the establishment of Senior Care, a practice based in the University of Missouri-Sinclair School of Nursing (MUSSON), which has an emphasis on the combination of research, education, and practice. This program generated more than US$1.25 million of service revenue in 2003, with more than 300 students using

Senior Care as a clinical or service learning site, and has received more than US$3 million in research funding. The Senior Care program used the principles of Ageing in Place which promotes independence, dignity, and health (Marek, Rantz & Porter 2004).

Apart from the wide use of NCs model in the US, this model has also been adopted in other countries. Yeh et al. (2009) reported that a new academic-based, nurse-managed community centre program was established and implemented in Taiwan over more than two years. The findings demonstrated that teachers, students, and residents in the apartment complex perceived high levels of satisfaction with this model. Yeh et al. (2009) concluded that the academic-based, nurse-managed community centre could be sustained using a systematic integrated educational partnership with stable resources sourced through industrial, government, academic, and private institutions.

Another study by Stewart, Coulon and Kavanagh (1997), who examined the feasibility of establishing a NC at the Australian Catholic University's North Sydney campus, has shown that there was strong support for the idea. A range of participants (students, lecturers, residents, leaders, and health practitioners) in the study recommended for health education, counselling, and health assessment with an emphasis on the health of women, children, and adolescents as well as aged health services and support for carers to be included as services to be provided by the NC. Stewart, Coulon and Kavanagh (1997) concluded that the NC would be feasible and welcomed the idea as a unique opportunity for nursing academics to engage in clinical practice, for student learning, and for research in collaboration with health professionals in the local community (Stewart, Coulon & Kavanagh 1997). Despite the support for the establishing a NC at the Australian Catholic University, there was no subsequent publication that demonstrated the establishment and implementation of this NC after this feasibility study.

A review of these studies has shown that various models and approaches have been used by NCs in some countries. Most of the papers in this review claimed that the NC is integrating health services, education, and research. However, most of these publications reported on the service aspect of the NC while there is little information regarding the specific educational approach as well as the evaluation of framework of the integration that are reported in these papers. Pohl et al. (2007) suggested that NC teams need to document extensive data relating to best practice and outcomes of care, and to identify the important factors in establishing and maintaining a NC so that the SON can gain the benefit of the services, education, and research in the NC. This shows that there is a need for a research that examines the specific educational approach that would enable the integration of

services, education, and research in the NC and for these to be evaluated in a meaningful way.

In terms of the educational approach that was used in the NC model, this review also show that five papers (Connolly, C. et al. 2004; Lough 1999; Lutz, Herrick & Lehman 2001; Marek, Rantz & Porter 2004; Yeh et al. 2009) reported service learning as a specific approach for student education in the NC alongside service provision for clients and research within the NC. This shows that service learning has a potential to be used as an educational approach in the NC that provide a better link between health service and education through a collaboration and partnership with health service and education institutions. Most of the papers (32 articles) in this review mentioned the integration of services, education, and research in the NC using a collaborative approach and partnerships as the key characteristics of the NC model. Therefore, the following section will cover these points.

2.4.2 Collaborative Approach and Integration of Services, Education, and Research in the Nursing Centre

The NC has been recognised as an innovative model that integrates nursing services, education, and research (Humphreys et al. 2004; Krothe et al. 2000; Lundeen 1999; Pohl et al. 2007; Stewart, Coulon & Kavanagh 1997; Zachariah & Lundeen 1997). As academic NCs evolve, ongoing clinical and health services research and development are necessary to identify the strengths and weaknesses of NCs, and to document their implications and disseminate these research findings in order to inform other nursing academics, healthcare providers, consumers, and policy-makers (Lundeen 1999).

Collaboration and partnership between academics and the community are needed in order to maintain the sustainability of NCs (Krothe et al. 2000). Heath, Wise and Reynolds (2013) defined collaboration as the ways in which various resources, such as health professionals, are brought together, while integration is defined as the ways in which services are delivered and practices are organised and managed. Therefore collaboration and integration in the NC can be defined as the ways in which students, lecturers, nurses, and other health professionals are brought together in order to organise and manage health services, education, and research in an integrated way. Collaboration and partnership in initial planning of the NC is particularly important for those that have partnerships with the community or with other healthcare organisations in order to determine the compatibility of mission and mutual goals of the organisations (Lundeen 1999).

Organisations that are involved in the NCs need to clarify the philosophy and goals of their collaboration with the NCs so that the vision and mission of each organisation can be aligned

to the purpose of the NC, and they need to review these missions and goals on a regular basis (Lundeen 1999). As NCs offer holistic care and patient-centred health promotion and disease prevention (Humphreys et al. 2004), partnerships between academics and the community, or the healthcare organisation, serve to increase trust from people in the community towards NCs, and thus, increase the chances of integration of health promotion activities into the daily activities of members of the community (Lundeen 1999). A study by Lundeen (1999) demonstrated that the Lundeen Community NC model supported nursing practice that was oriented toward the promotion of health as the key element that differentiated the NC from other health delivery models.

The strength of the NC is that it combines nursing expertise with other disciplines such as medicine, public health, mental health and social work, and community development (Krothe et al. 2000; Lundeen 1999), as the traditional primary medical service alone is insufficient to address the integrated and holistic care needs of people in the community (Humphreys et al. 2004; Lundeen 1999). The WHO (2015) outlined the definition of an integrated health service as follows:

> *Health services that are managed and delivered in a way that ensures people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation, and palliative care services, at the different levels and sites of care within the health system, and according to their needs throughout their life course (WHO 2015, p. 11).*

Even though nursing education institutions do not have direct connections with healthcare service organisations, the World Health Organisation (WHO) acknowledges a need for *inter-sectoral* and close collaboration between health, social care, education, and other sectors in the community in order to achieve better health goals for individuals, families, and the community. Collaboration and partnerships in the NCs enables the fulfilment of a greater number of community needs, as long as each organisation allocates sufficient time to develop trust and to understand each other's needs and goals (Aponte & Egues 2010).

In order to improve the integration of NCs, five strategies for a people-centred and integrated health services approach, developed by the WHO (2015), could be implemented by NCs. These strategies include "empowering and engaging people, strengthening governance and accountability, reorienting the model of care, coordinating services, creating an enabling environment" (WHO 2015, p. 20). In terms of empowering and engaging people, people as resources need to be empowered, engaged, and involved in the production of healthcare in equal and reciprocal relationships between health professionals and people who use the service (WHO 2015). In addition to empowering people, health providers could strengthen governance and accountability by involving people in the community to develop a population-

oriented health policy (WHO 2015). The NC can become a way of re-orienting the model of care in order to provide efficient and effective healthcare services through balancing the service needs of the clients and the academic needs of the nursing programs using the primary and community care services (Barger 2004).

The WHO (2015) further emphasises the importance of shifting the medical model to a more holistic form of care which includes health promotion and illness prevention strategies. Strategies for coordinating services focus on ways of reducing the fragmentation of care delivery through improving continuity of care and relationships with people and different healthcare providers, and creating effective networks between health and other sectors (WHO 2015). Finally, the WHO (2015) strategy of people-centred and integrated healthcare seeks to create an environment that enables stakeholders to become involved in the process of transformation towards people-centred and integrated health services. Even though these strategies provide a general direction for an integrated healthcare approach at the national and international levels, they can also be applied to the NC through involving stakeholders in the process of integration.

Despite the potential benefit of integration of nursing services, education, and research, there are some challenges for this integration in the NC model. Zachariah and Lundeen (1997) asserted that the successful integration of research in the NC is also influenced by the lack of community trust, as there is some scepticism and suspicion by people in the community towards academic institutions (King 2008). NCs also face challenges from the community particularly in terms of marketing (Shiber & D'Lugoff 2002), and gaining community support in order to maintain a client base that utilises the NC service (King 2008). To overcome such challenges, NCs in Philadelphia, the USA, started to involve influential community leaders in a range of activities such as advisory boards and health fairs, and also began to participate in community events such as an art program or teen groups in order to increase the visibility of the NC in the community (King 2008). Research agendas in the NCs need to be aligned with the needs of people in the community using participatory recruitment strategies and multiple data collection methods to build reciprocity and maintain trusting relationships with the community (Zachariah & Lundeen 1997). Such trusting relationships need to be maintained over the long-term to ensure the sustainability of the NC (King 2008).

NCs also need to address issues related to quality improvement in order to balance client service and nursing education needs (Barger 2004). Balancing these needs can be achieved by creating a research agenda that is driven by community input, health service, and academic needs (Lundeen 1999). Through strong connections and stakeholder involvement in nursing practice, education, and research in the NCs, nurses can contribute to the

generation of new knowledge for a variety of community interests, professional nursing practice, and education through research and development based on an innovative model of care (Lundeen 1999; Miller et al. 2004).

Apart from such quality improvement issues, academic NCs also face a number of critical challenges, including unstable funding regimes, multiple agendas, and difficulties in maintaining a long-term vision (Lundeen 1999). In order to overcome these challenges, Lundeen (1999) further suggested that NCs should not rely on a single source of funding so that they can access stable and continuous funding for the operational costs of the NC. In terms of balancing multiple agendas to integrate practice, teaching, and research, Lundeen (1999) also noted that the NC team would need to build a working environment that enables mutual satisfaction for all members of the NC. Finally, a clear vision of the overall mission of the NC is needed by the NC team and its leaders to overcome the centres' problems (Lundeen 1999). Effective leadership support from nursing professional organisations towards academics NCs is also important in order to enhance communication among nurses, inform decision-makers about nursing workforce issues, and to increase innovative partnerships and collaboration in the community (Acord et al. 2010).

Another study involving a 10-year review of ten academic nurse-managed health centres in Philadelphia, the US, by King (2008) found that NCs faced challenges stemming from the socio-political environment, including unfavourable health policies towards the NCs, lack of knowledge about the NCs by health policy makers, and financing issues. Similar findings were stated by Shiber and D'Lugoff (2002) that legal and regulatory issues were major challenges for the NC. They further suggested that the NC managers used advocacy as a strategy to obtain favourable health policies and support from the government. King (2008) reported that a National Nursing Centres Consortium has introduced and advocated the favourable policies for NCs in the Philadelphia area which helped the NCs to obtain federally qualified health centres status so that these centres could receive cost-based reimbursement. This shows that advocacy to health policy makers is crucial in order to provide a favourable health policy towards the sustainable NCs. Therefore, King (2008) further asserted that the future of the NC depends upon the documentation of the effectiveness of NCs to convince decision-makers to produce favourable health policies. The NC team needs to develop a mechanism to document both the process and the outcomes of nursing practices in the NC to evaluate the effectiveness of the NC model (Hong & Lundeen 2009; Lundeen 1997). Therefore, the following section will describe the strategies that have been used to evaluate the NC model.

2.4.3 Strategies to Evaluate the Nursing Centre

Monitoring and evaluation are other important steps in implementing people-centred and integrated health services because such initiatives are highly complex and involve a wide range of stakeholders and *inter-sectoral* collaboration (WHO 2015). The WHO (2015) further suggests a need for an evaluation framework to measure specific objectives for the ongoing monitoring and evaluation of the integration progress. An evaluation framework is also needed to assess the effectiveness of the integration of health services, education, and research within NCs. However, most of evaluation strategies reported in literature focus on the evaluation of services, as reported in some studies (Andresen & McDermott 1992; Barkauskas et al. 2006; Hildebrandt et al. 2003; Hong & Lundeen 2009; Kent & Keating 2013; Lundeen 1999; Pohl et al. 2006; Resick et al. 2011), four studies evaluated student outcomes (Aponte & Egues 2010; Connolly, P. M. 1991; Thompson & Feeney 2004; Van Zandt, Sloand & Wilkins 2008), while only three studies evaluated both service and student outcomes (Lough 1999; Lutz, Herrick & Lehman 2001; Yeh et al. 2009). Of the 39 papers included in this review, there was no reported evaluation framework to measure the level of integration in the NCs as well as a comprehensive evaluation of outcomes for all stakeholders that were involved in the NCs.

A cross-sectional study by Barkauskas et al. (2006) collected data from 64 NCs and found that the number of patients and the volume of services in these centres were relatively small. There were variations in the types of clients and services provided in the NCs which reflected the relative needs of the population and the communities within the coverage area of each individual NC. Nearly half of the NCs in this study served clients of all ages, with the types of service including health maintenance and management as well as community nursing care. These centres mainly used the standardised International Classification of Diseases to document the types of patients that used the NCs services; however, the use of standardised nursing language was low. Barkauskas et al. (2006) further indicated a need to improve the documentation process of the NCs to provide aggregated reporting for policy and research purposes.

In relation to documentation of the NC data, Pohl et al. (2006) reported on the US national consensus from the National Network for Nurse Managed Health Centres on the critical data elements for evaluation of these centres. These national critical data elements could be used as the national database in order to inform policy and to promote financial sustainability of the centres. The US data elements consist of the essential clinical data and financial and business elements. The clinical data consist of the centre demographics, patient demographics, medical diagnoses, nursing diagnoses, and the services offered such as

immunizations, cancer screening, mental health, chronic disease management, health teaching, guidance and counselling, case management, and surveillance. Essential financial and business data elements include the centre's revenue and expenses. However, Pohl et al. (2006) also reported that consensus was not reached around some clinical, including other enabling services, aggregated data versus patient-level data, nursing interventions, and nursing outcomes that could best represent nurse-managed health centres (Pohl et al. 2006).

A study by Resick et al. (2011) that evaluated the trends, themes, and outcomes of interventions at two NC sites of Duquesne University School of Nursing (DUSON) from January 2004 to May 2008, found that clients' data that were recorded at the NC could be used for objective measurement of outcomes of the health promotion, health maintenance, and risk reduction. Evaluations of outcomes in this study consist of clients' knowledge, behaviour and status using three 5-point Likert-type scales. The results of this study showed that there was an increase of service user visits at both sites over the period, and that most users had one health problem per visit. The most common health problems were cardiovascular issues and health-related behaviours such as weight control and issues in medication therapies. Most interventions were also related to cardiac care, nutrition, and teaching, and medication using teaching, guidance, and counselling and surveillance activities. In terms of the outcomes of the interventions, it was reported that the knowledge, behaviour, and health status of residents were statistically higher at both sites (Resick et al. 2011). Resick et al. (2011) further suggested that health promotion and disease prevention services in a NC have potential to reduce health disparities in the community.

Other various outcomes of the NC and evaluation strategies for academic NCs have been reported in the literature. Kent and Keating (2013) evaluated a student-led inter-professional clinic by asking users about their perceptions of the services provided using a 7-scale Likert-type patient experience questionnaire. The patients placed a high value on health promotion as they felt that they could manage their health issues differently after the student consultations. The patients also reported that they were able to make health decisions based on the knowledge they had received during the student consultations. Similar to Kent and Keating (2013) study, Andresen and McDermott (1992) also reported high client satisfaction with student care in a NC, who also conveyed that their questions were addressed satisfactorily and that the health education provided was understandable.

In contrast to evaluation strategies which focus on the evaluation of services, this review has identified four studies that evaluated students' outcomes in the NC. Aponte and Egues (2010) evaluated a 7-week clinical sessions where nursing students provided holistic nursing

care for the community through screenings, health promotion activities, and educational meetings in a wellness centre. The school of nursing evaluated students' activities using a general clinical evaluation tool which consisted of close ended and open ended questions to provide feedback to the students about their clinical performance and achievement of course objectives. In addition to general clinical evaluation tool, the authors also used 'student clinical experience evaluation instrument' which consisted of an open-ended evaluation to assess nursing students' perceptions of the clinical experience. The verbal feedback from the centre staff throughout the semester and at the end of each clinical rotation was also sought (Aponte & Egues 2010).

Similar to the study by Aponte and Egues (2010), Connolly, P. M. (1991) used student data collected through a course evaluation tool. The data for the entire group (N=89) were examined, as well as among semester groups to establish similarities and differences. The findings demonstrated that 100% of the students agreed that the clinical supervision group increased the students' understandings of theory and practice. Thompson and Feeney (2004) and Connolly, C. et al. (2004) used student reflections as a way of evaluating the implementation of a NC. These studies have shown that there is a lack of comprehensive evaluation strategy of the NC model because most of evaluation relying on subjective and self-reporting outcomes. Indeed, outcomes evaluations of the NCs were challenging in community setting because the baseline data were usually self-reported (Resick et al. 2011).

This literature review has identified various characteristics of the NC model and its evaluation strategies to measure the outcomes of the model. Despite the wide variations, there is one issue that all these papers have in common, that is none of the papers presented any strategies for evaluating the integration of service, education, and research in the NC model. This gap needs to be addressed because the NC model is seen an innovative model that integrates a tripartite mission of nursing education, practice, and research (Henry 1997; Pohl et al. 2007; Tuaoi et al. 2011). Even though the outcomes and impacts of the NCs are difficult to measure, a new and better ways to evaluate these outcomes and impacts are needed in order to enhance the services within the NCs (Resick et al. 2011). This issue warrants further research in order to improve the quality of the NC model because evaluations are necessary for strategic planning and decision making to ensure the sustainability of the NC.

Apart from lack of strategies to evaluate the integration of service, education, and research in the NC literature, there are a number of evaluation frameworks for integration that have been developed in the people-centred and integrated health services literature. Heath, Wise and Reynolds (2013) proposed a standard framework for a range of levels of integrated

healthcare. This framework consists of three main categories including coordinated, co-located, and integrated care. Coordinated care means that collaborating organisations work in separate facilities and have separate systems; however, these organisations communicate when there are specific issues that need to be discussed. Co-located care means that organisations engage in basic collaboration onsite as they are co-located in the same facility, but they use separate, or some shared, systems, and how these organisations work together is not clearly defined. Integrated care means that organisations are working together in close collaboration as a single health system treating the whole person. This framework can be used to evaluate the degree of integration and to identify areas for improvement of integration (Heath, Wise & Reynolds 2013). This framework could also assist in identifying the level of optimal integration for the NC that is co-located in the partner organisation site.

A systematic review conducted by Strandberg-Larsen and Krasnik (2009) showed that there were 24 methods available for measuring integrated healthcare delivery; however, there was no single measure that suits any particular purpose. The authors proposed three criteria for the development of existing and new methods of measurement, being measurement of the structural, cultural, and process aspects of measurement, in addition to measures of intermediate and ultimate outcomes. Structural measurement is to indicate the depth of integration structure within or between organisations of integration, including patient referrals, clinical guidelines, chains of care, network managers, and pooled resources (Ahgren & Axelsson 2005; Browne 2005). Cultural measurement is related to the willingness to take part in the integration of healthcare delivery and education, and process evaluation is an assessment of the actual coordination activities within the model (Strandberg-Larsen & Krasnik 2009). In addition to these three characteristics, Browne (2005) also suggested measuring actual and optimal integration that is perceived by stakeholders. Strandberg-Larsen and Krasnik (2009) further recommended the need for further research to develop practical and relatively simple measures underpinned by both quantitative and qualitative methods.

2.5 Summary

This literature review has presented the basic foundations of service learning and the NC approach, including a definition, the components, methods and outputs, and the strategies to evaluate these. In the first part of this chapter, the problems of a lack of a standardised definition and the difficulty of measuring the effectiveness of service learning due to its multiple definitions and the lack of consistent methods and evaluation were identified. Thus, a concept analysis of service learning was conducted to clarify the definition and to identify its components. There are four major components of service learning, structured intra-

curricular experiential learning, reflection, reciprocity, and the setting of specified outcomes and benefits for all stakeholders. These components are an important basis upon which to develop a standardised method of service learning, which has also become one of the bases for the NC model. Since there was only one study that demonstrated integration of service learning into an academic NC in Asia, this current study of NCs in West Java Indonesia as a collaborative approach to service learning can contribute to a deeper understanding of service learning implementation within the NC model in the Asian region

The second part of this review covered the organisational characteristic of NCs, the collaborative approach, the integration of services, education, and research, and strategies for evaluating the NC. This review has identified that one of the key strengths of the NC model is the integration of service, education, and research. However, a 'blueprint' for such integration in academic nursing centres is lacking, as most of the research emphasises service provision methods in the NC model, with only a few describing the learning method within the NC which, as a result, diminishes the strength of the NC model. As a consequence, it is difficult to measure the effectiveness of the integration of service, education, and research within academic NCs due to the lack of an evaluation framework, which then affects the sustainability of these centres due to difficulties in gaining support from policy-makers and funders to maintain their survival. Therefore, there is a need for a better and meaningful evaluation of the NCs that takes into account of the integration of service, education, and research to produce positive outcomes for all stakeholders in the NCs.

In the following methodology chapter, I will describe the study paradigm, the ontology and epistemology of the research, the case study design and methods used to gather and analyse the data, and finally, an overview of the rigour and ethical considerations of the study.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

In the previous chapter, the relevant literature was reviewed in order to provide background information about service learning and the academic nursing centre model. The focus of the overall study is to understand the components of the Nursing Centre (NC) model as a collaborative approach to service learning in West Java, Indonesia, to inform the development of an evaluation framework for academic NCs globally.

In this chapter, the research paradigm, which is broadly qualitative, is outlined and justified. The research methodology of qualitative case study is described and justified, including a case study protocol which guided the researcher through the data collection process (Yin 2014). The chapter outlines and explains the research methods of semi-structured interviews and document analysis. The data will be analysed using program theory as an analytical framework, thematic analysis and case study analysis. The rigour and ethical considerations of the study will be discussed in the final section.

3.2 The Research Paradigm

The philosophical worldview that underpins a study influences the practice of research and informs the researcher about legitimate, reasonable, and normative ways of conducting the research (Creswell 2009; Patton 2002). This worldview is also known as a paradigm which is "a way of thinking about and making sense of the complexities of the real world" (Patton 2002, p. 69).

A qualitative paradigm is employed for this research as the study intends to understand the components of the NC as a collaborative approach to service learning based on the perceptions and views of the stakeholders for this model in West Java, Indonesia. Qualitative research "operates within a naturalistic, interpretive domain, guided by standards and principles of a relativist orientation, a constructivist ontology, and an interpretivist epistemology" (Sarantakos 2013, p. 36). A naturalistic domain means that the research seeks people's understandings of the world in which they live and work (Creswell 2009). The interpretive domain relies on naturalistic understandings in order to collaboratively construct a meaningful reality (Lincoln, Lynham & Guba 2011). Thus, constructivists see that there are multiple subjective meanings and understandings about certain objects or things in a certain social context of the world in which humans live (Cresswell 2009). These multiple meanings

are interpreted using an interpretivist epistemology which then facilitates the construction and reconstruction of knowledge (Sarantakos 2013).

Qualitative research carries with it an assumption that individuals seek an understanding of the world in which they live, and then develop subjective meanings from their own experiences (Creswell 2009). In the NC model, various participants and stakeholders are involved in the implementation of this model. They have different roles, backgrounds, positions, and experiences regarding the implementation of the NC model which do not lend themselves to the use of quantitative measurement. Moreover, these different actors have a wide range of perspectives about which little is known and which may be valuable to capture using a qualitative methodology. Qualitative methodology is applied in this research because this is the first study that has explored the components of the NC model as a collaborative approach to service learning in West Java, Indonesia, in order to inform the development of an evaluation framework for academic NCs across the globe.

A qualitative paradigm is also used in this study as a comprehensive approach to describe and interpret complex phenomena related to the nursing discipline because nursing practice often encounters questions related to complex phenomena that are shared by people in similar situations, as well as the particular lived experiences of individuals (Anthony & Jack 2009; Thorne, Kirkham & MacDonald-Emes 1997). Many healthcare and education problems are more likely to be complex, frequently involving behaviour change (Muncey 2009). The NC model can be considered as a complex model because it addresses problems of complex and poorly-evaluated sets of relationships between community health nursing practice and education involving a wide variety of stakeholders. Hence, a qualitative methodology is used in this study to discover and explore the perceived patterns of the NC model.

There are three basic tenets of a paradigm, ontology, epistemology, and methodology, which guide action, provide a clear view about the rigour of research, and serve as theoretical constructs of the nature of reality (Denzin & Lincoln 2011; Patton 2002).

3.2.1 Ontology

Ontology encompasses the worldview, beliefs, and assumptions of the researcher in relation to the nature of reality in order to generate knowledge (Creswell 2009; Lincoln, Lynham & Guba 2011; Patton 2002). As described in the previous section, this study uses a broadly qualitative paradigm, which suggests that reality is “subjective, constructed, multiple, and diverse” (Sarantakos 2013, p. 41). In its social context, reality exists when people who are experiencing that reality give meaning to it (Neuman 2011). There are subjective and multiple

realities in understanding the meaning of the NC from various stakeholders' perspectives. From a qualitative perspective, there are multiple realities and truths in understanding the meaning of the NC as perceived by different stakeholders of the NC, including lecturers, students, nurses, heads of *Puskesmas*, and clients. Each stakeholder has had a different experience and holds different views about the NC which should be appreciated and considered as a reality. These multiple realities are constructed based on the social and historical construction of community health nursing practice and education in Indonesia (Sciortino 1999). As stated by Crossan (2003, p. 52), "reality does not exist within a vacuum; its composition is influenced by its context […], the intricate relationship between individual behaviour, attitudes, external structures, and socio-cultural issues". The world of human perception is relative to each individual or group, and knowledge of reality is generated through interpretation and social construction (Patton 2002). These constructions generate a theory of the NC model.

3.2.2 Epistemology

Epistemology is "the theory of knowledge embedded in the theoretical perspective, and thereby, in the methodology" (Crotty 1998, p. 8). Epistemology is also defined as the philosophical study of the nature of knowledge in which the researcher can distinguish between knowledge that can be considered to be scientifically valid, and information that is not valid and/or reliable and where knowledge is to be sought (Lincoln, Lynham & Guba 2011; Sarantakos 2013).

The epistemology that underpins this qualitative study is interpretivism in which the researcher and the participants engage in meaningful dialogues and reflections using interpretation as the key process that facilitates the construction and reconstruction of knowledge (Mertens & Wilson 2012; Sarantakos 2013). The interpretivist epistemology is used in this study because the researcher and the participants are co-creating an understanding of the NC model through meaningful dialogue in the natural world of community health nursing (CHN) practice and education in order to understand the components of the NC model. These understandings will inform the development of an evaluation framework for the NC model. These ontologies and epistemologies underpin the methodological approaches taken in this study, which are described in the following section.

3.3 Research Design

A methodology is a strategy for conducting research based on ontological and epistemological principles (Sarantakos 2013). Guided by a constructivist ontology and an interpretivist epistemology, this study used an embedded single case study design as the strategy to conduct the research (Yin 2014). There are a number of definitions of case study research. A case study can be defined as "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident"(Yin 2014, p. 18). Creswell (2009, p. 16) outlined the case study as "a strategy of inquiry in which the researcher explores in-depth a program, event, activity, process, or one or more individuals". Mills, Durepos and Wiebe (2010) suggested that the case study approach is a research strategy that focuses on the inter-relationship and analysis of a specific entity within its context in order to generate theory and/or contribute to extant theory. This study uses a case study design to investigate the activities and processes of, and the inter-relationships between, the stakeholders in the NC model within its real-life context in Community Health Centres *(Puskesmas)* in West Java, Indonesia. The findings of this study will inform the process of developing a theory to underpin the NC model.

The single case study method is appropriate when a case is critical, unusual/unique, common, revelatory, or longitudinal (Gomm, Hammersley & Foster 2000; Yin 2014). The NC model in West Java, Indonesia, is viewed as a single case in this research because it is an unusual and unique CHN educational model representing a collaborative approach to community health in the Indonesian setting. To my knowledge, this is the only model in Indonesia that has been widely adopted by health policy-makers at the provincial level as well as at the institutional level (in the *Puskesmas* and in the nursing education institution). The findings from this single case study of the NC may provide an understanding of the processes of the NC that may be applicable beyond this specific case (Yin 2014). Even though the case study findings cannot be used for empirical generalisation, the wider relevance of the findings may be conceptualised as a basis of transferability to other settings (Gomm, Hammersley & Foster 2000).

Even though the NC is viewed as a single case, this study actually involved three NC sites in West Java as embedded sub-units of analysis of the NC model. These sub-units have been used as tools for focusing the case study inquiry in order to obtain sufficient and specific data about the NC model as the larger unit of analysis (Yin 2014). In this study, three NCs were chosen consisting of three *Puskesmas* and three nursing education institutions. However, the unit of analysis for the cases was neither the *Puskesmas* nor the nursing education

institution. Rather, each case focused on the NC as the unit of analysis. The three NCs were chosen because these are among the oldest existing NCs in West Java, Indonesia.

The unit of analysis in case study research is the actual source of the information being analysed, which can include individuals, organisational documents, and physical or cultural artefacts such as a technological device, a tool or instrument, or a work of art (Yin 2014). This study used individuals, organisational documents, and government policies as sources of evidence to gather comprehensive data about the NC model. Evidence from individuals was gathered from interviews with the NC stakeholders. There are various stakeholders in the NC model from a range of different organisations, such as the health services, nursing education, local community organisations, and other organisations that are not directly related to the NC. However, due to limited time and resources, not all the stakeholders were interviewed for this study. Only seven stakeholder groups who were actually involved in the implementation of the NC were selected for the interviews consisting of clients, lecturers, nursing students, heads of community health centres, nurses, the founder of the NC, and the coordinator of Community Health Nursing program at the Provincial Health Office. The last two stakeholders are important for providing data on the reasons for the establishment of the NCs, and for understanding policies related to NCs at the provincial level. The founder of the NC and the coordinator of Community Health Nursing in the Provincial Health Office do not have direct relationships with other stakeholders and they did not have direct involvement in the implementation of the NC; however, they have significant levels of influence in directing the implementation of the NC further across regencies and cities in West Java. The embedded single case study design and its unit of analysis for this study are presented in Figure 3.1 below.

The organisational documents were taken from a publication written by the founder of the NC model, as well as various documents from each NC, such as their yearly reports, staff schedules, and the organisational structure. Government policies were also used such as Health Law, Nursing Law, the Regulation of the Indonesian Ministry of Health regarding the Community Health Centre, and the Indonesian Ministry of Health Decree about the community health nursing *(Perkesmas)* program.

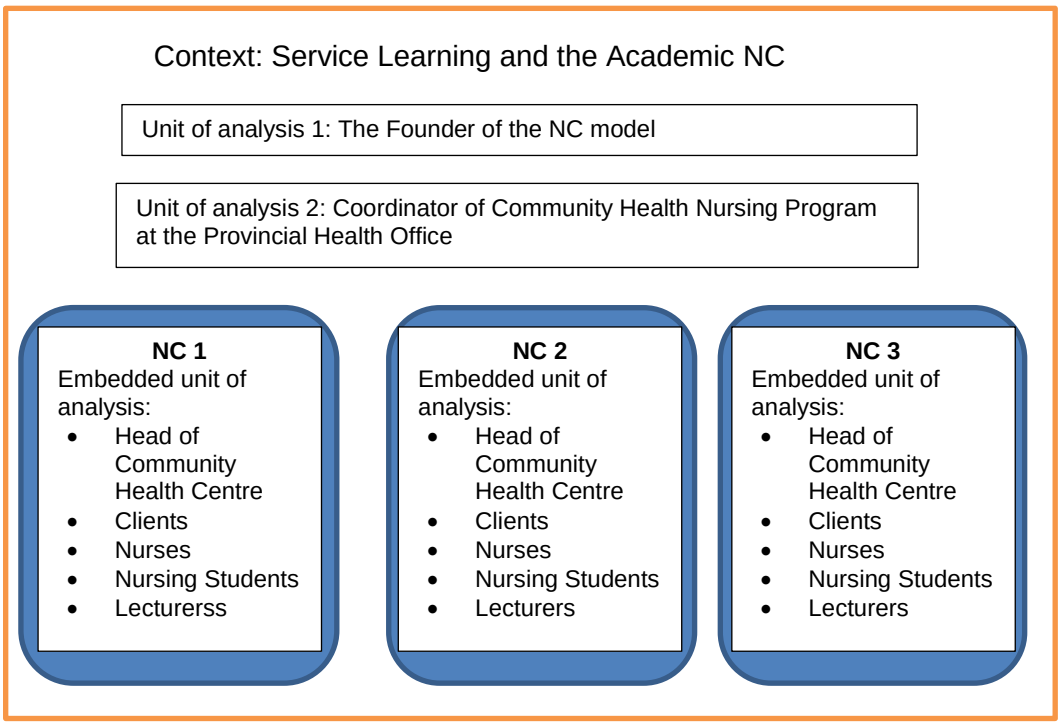


Figure 3.1 Single case with embedded case study design

The case study method can be incorporated into different epistemological orientations which have 'why' and/or 'how' research questions (Yin 2014). Therefore, the case study method is also in line with the broadly qualitative paradigm. Case studies have increasingly been used in nursing research. An integrative review of qualitative case study methodology in nursing research by Anthony and Jack (2009) showed that there were 42 studies which had used the case study method in their research. Among these studies, six used the case study method for nursing education research. Education research is "a critical enquiry aimed at informing educational judgements and decisions in order to improve educational action" (Bassey 1999, p. 39). Since the NC model integrates community health nursing education and practice, enquiry into the NC model can be included as an educational form of research. Burgess (2011) asserts that case study is most commonly used in educational research. Bassey (1999, p. 57) also argued that case study could become a "prime strategy for developing educational theory which illuminates educational policy and enhances educational practice".

Anthony and Jack (2009) pointed out that case studies in nursing practice and education are utilised primarily to explore, understand, and evaluate phenomena of interest to nursing as a profession of caring, which involves the experiences and perceptions of individuals or groups in their real-life contexts. The case study is used in this research to understand the components and implementation of nursing education programs in the NC. The NC sites under investigation in this study are venues for collaboration between nursing education

institutions and community health centres as community health nursing placement sites for nursing students. Furthermore, the case study method offers “a flexible, pragmatic yet rigorous approach to research that is practical and suitable for nursing research” (Luck, Jackson & Usher 2006, p. 108). Therefore, case study is an appropriate design to explore and understand the components of the NC in a flexible, pragmatic and rigorous approach in order to inform the development of an evaluation framework of the NC model.

3.4 Analytical Framework

The central analytical framework for this study is ‘Program Theory’ from Funnel and Rogers (2011) which is defined as “an explicit theory or model of how an intervention […] contributes to a chain of intermediate results and finally to the intended or observed outcomes” (Funnel & Rogers 2011, p. xix). Program theory is used to “explain the mechanism believed to influence the achievement of the desired program outcomes” (Mertens & Wilson 2012, p. 34). The application of program theory as an analytical tool depends on the intended users because “different types of program theory are needed for different uses” (Funnel & Rogers 2011, p. 55). Program theory that is used in a research project, or a pilot project, focuses on identifying the components and relationships of the overall system and their outcomes; therefore, for these purposes, program theory should be brief and clear (Funnel & Rogers 2011). In this study, components of program theory as an analytical framework will be adapted for the purpose of research project as a basis for identifying the components and outcomes of the overall NC model. Thus, in this study, the program theory for the NC is relatively brief in order to assist in explaining the mechanism and components of the NC model that are believed to influence the outcomes of the NC. Understanding the components of the NC using program theory will also further inform the development of an evaluation framework for the NC as an example of a collaborative approach to service learning in West Java, Indonesia.

Program theory is used to present a flowchart of the logical steps in a sequence, starting from complex and causal relationships between resources, implementation, and outputs, through to outcomes (Cooksy, Gill & Kelly 2001; Funnel & Rogers 2011). Researchers, and some program funders, encourage the development of program theory in conceptualising intended program outcomes and causal pathways as a tool for program planning and evaluation (Crane 2010). A good program theory can help to develop agreement among diverse stakeholders, identify gaps and opportunities for collaboration, and develop indicators for evaluation of the program. A program theory that is not done well can lead to misinterpretation of the intervention, inaccurate evaluation, and reduced motivation of the stakeholders to implement the program (Funnel & Rogers 2011).

Program theory using logic analysis has been increasingly used as an approach to develop an evaluation framework (Brousselle & Champagne 2011). There are various terms that have been used to describe a model for how a program is assumed to work, including program theory, program logic, logic model, intervention logic, and intervention theory. These terms are often used interchangeably and, at times, have been distinguished from each other (Funnel & Rogers 2011). Program theory has been recognised as a tool for improving evaluation, planning and developing an evaluation model through the analysis of the mechanism that influences the achievement of the desired outcomes (Mertens & Wilson 2012). The program theory could be developed using a research approach (Funnel & Rogers 2011). Throughout this research, the term 'program theory' has been used because the program theory produced in this thesis has been developed through a formal research-base about how the NC will achieve its intended outcomes. However, the term logic model is also used interchageably with the program theory.

In order to obtain evidence about what does and does not work in the NC, it is important to distinguish the simple, complicated, and complex aspects of the intervention in the program theory. Therefore, distinctions between simple, complicated, and complex ways of thinking about the program provide insights and understandings to strengthen the program theory (Patton 2011). The NC interventions can be categorised into complex aspects because there are multiple components implemented by at least three organisations, the nursing education institution, the public health centre, and local government, with each having emergent and unpredicatable roles.

Using and adapting Patricia Rogers' framework, Patton (2011) also outlined three key issues to determine the complexities of a program, governance, causal modelling, and outcome specification. Based on these key issues, the NC can be categorised as a complex model because it involves a loosely connected network of different players and organisations that are self-organizing. The NC can also be considered to be complex because it has non-linear relationship between the intervention and its results due to multiple factors that influencing the results (Funnel & Rogers 2011), and several causal paths leading to multiple outcomes (Patton 2011) which are related to students, lecturers, nurses, and clients who use the NC. These conditions make it difficult to conduct pre- and post-test comparisons of NC outcomes against baselines.

The complexities of the NC cannot be addressed by linear logic models that link input and activities to outputs and outcomes. Instead, this requires system diagrams and maps to show the relationships among the parts. Complex systems are appropriate for developmental evaluation (Patton 2011). A well-developed program theory will be useful for defining the

boundaries, highlighting the important parts, and illustrating the relationships and causal connections between the parts of the system (Kellogg Foundation 2004). The program theory that is developed for the NC is a tool to support the conceptualisation of the NC for both measurement and evaluation of outcomes. The theory assists with communicating the intent and purpose of the establishment of the NC. The application of program theory as an evaluative tool identifies the components that can be further developed (Funnel & Rogers 2011).

Program theory consists of two components, a theory of change and a theory of action (Funnel & Rogers 2011). Funnel and Rogers (2011, p. xix) defined a theory of change as "the central processes or drivers by which change comes about for individuals, groups, or communities". A theory of change attempts to identify the basic problem to be addressed in a clear and succinct manner in order to achieve certain outputs, outcomes, and impacts (Kellogg Foundation 2004). A theory of action is defined as the explanation of "how programs or other interventions are constructed to activate these theories of change" (Funnel & Rogers 2011, p. xix). A theory of action shows the complexities of the causal linkages of various components of the program and other factors that contribute to the achievement of outcomes, such as context, process, and properties (Hallinan 2010). By using these theories, a program can be evaluated properly to understand which parts of the program do and do not work well; and identify the intermediate outcomes of the program in order to differentiate between implementation failure and theory failure (Funnel & Rogers 2011).

Program theory is also useful for recognising the main components and their relationships within the program (Cooksy, Gill & Kelly 2001), and can be considered as a suitable framework for categorizing data for the purpose of developing an evaluation framework (Funnel & Rogers 2011). Weiss (1998) pointed out that program theory can be used as an analytical tool to identify the mechanism and process of change to achieve expected outcomes, particularly by using a qualitative case study approach. This analysis identifies why the program works, looks at other mechanisms that can influence change, and explains why program outcomes have or have not been achieved. Therefore, qualitative research has a better chance of capturing these mechanisms than does quantitative research (Weiss 1998).

In using program theory as an analytical tool, there are also potential weaknesses (Weiss 1998), including a lack of attention on the social and behavioural dynamics involved in the processes of articulation and evaluation of the theories, a cumbersome and time-consuming process, and the lack of attention paid to differences in the power positions of the stakeholders (Leeuw 2003). Other weaknesses are that there is no straightforward answer

for the best mechanism of change, a need to undertake careful judgement to support the theory, and whether any plausible theory will fit the program or not (Weiss 1998).

As this research aims to build a program theory for the NC model, the weaknesses of program theory as an analytical tool also need to be addressed. Funnel and Rogers (2011) suggested combining deductive approaches, articulating stakeholders' understanding of the model working mechanisms in a workshop, and inductive approaches to build a program theory in order to reduce the downsides of the program theory. In order to pay attention to the social and behavioural dynamics involved in the processes of the articulation and evaluation of the theories, both deductive and inductive approaches were used. A deductive approach was undertaken through an extensive and comprehensive literature review of service learning and the academic nursing centre as a way to guide judgement to support the theory for the NC model. An inductive approach was used through interviews with a range of key stakeholders of the NC, in addition to a document analysis, to build the program theory. The approach of articulating the stakeholders understanding about the NC model through a workshop was not used in this study due to the time and resource limitations of holding a workshop and engaging a range of stakeholders in the development of the program theory. However, from the interview data, I considered the stakeholders' views and relationships in the data analysis to inform the development of the program theory.

Despite the weaknesses of program theory as an analytical tool, it will provide very useful information about the mechanisms of change from multiple perspectives (Weiss 1998). In the end, the components of the program theory that are identified in this study will be useful as recommendations for the development of an evaluation framework for academic NCs that will enable the comprehensive evaluation of the NC as a model of service learning in community health across the globe. The steps of developing a theory of change and a theory of action for this study were guided by the features of program theory from Funnel and Rogers (2011) as an iterative process for identifying the key elements of a program theory, which will be presented in the following two sections.

3.4.1 Theory of Change

There are three features of a theory of change that need to be addressed, situation analysis, focusing and scoping, and an outcomes chain. These features will show how the program's intended outcomes chain is expected to contribute to solving the problem, while simultaneously clarifying the program's focus and scope and recognising other influential factors (Funnel & Rogers 2011). The first step in developing an appropriate theory of change is to conduct a situation analysis to identify the main problems within the program (Kellogg Foundation 2004). A situation analysis consists of understanding the main problem;

identifying the causes, contributing factors, and opportunities; and identifying the consequences of the problem (Funnel & Rogers 2011).

The situation analysis can be done through an inductive approach, such as through interviews with stakeholders, and a deductive approach through a literature review and document analysis (Funnel & Rogers 2011). This study used both inductive and deductive approaches. The inductive approach used semi-structured interviews, while the deductive approach used a literature review and document analysis to analyse the situation and main problems of the NC model. The situation analysis also assessed the complexity of the problem for NCs. The steps in the situation analysis were to identify the causes of the problem, the contributing factors to the problem, and the opportunities that might arise through the NC model. The consequences of the problem and its contributing factors are then identified as the last step in the situation analysis. In analysing the situation, a number of questions were used to guide the analysis, such as: “Why should this be considered a problem?’; “What are the consequences of this problem for all stakeholders? “; “What opportunities might benefit the stakeholders?” And “Why is this opportunity worth pursuing?” Guided by these questions, a diagram of causal relationship between the problems and their consequences was developed at the end of the situation analysis. In the situation analysis, the main problem of the NC model was identified which is caused by a number of contributing factors that lead to negative consequences for nursing students, nurses, and clients.

The second feature of a theory of change is focusing and scoping the program to set the boundaries of the NC model. The focusing process is conducted based on the causes and consequences that have been identified in the situation analysis, and then determining the focus by identifying the main strategies or policy tools. This is followed by determining the scope by identifying the outcomes or desired conditions (Funnel & Rogers 2011). The focus of the NC model was determined by identifying the main strategies and existing policies that might help to overcome the causes of the problems in the NC model. The scope of the NC is determined based on the outcomes or desired condition within the NC; in this case, the scope of the NC is to integrate the CHN services, education, and research. In order to achieve this integration, the activities and the actors in the NC model that are expected to contribute to the outcomes are identified.

The final stage of a theory of change is to identify the outcomes chain as the heart of the program theory because it links the theory of change with the theory of action (Funnel & Rogers 2011). Funnel and Rogers (2011, p. 177) further defined the outcomes chain as “the assumed or hypothesised cause-and-effect or contingency relationships between immediate

and intermediate outcomes and ultimate outcomes or impacts (both short- and long-term)". The outcomes chain can be used to analyse the series of steps that are necessary to achieve the optimal functioning of the NC model. In order to identify the contingency relationships between the immediate, intermediate, and ultimate outcomes of the NC, a few steps need to be undertaken, including the creation of a list of possible outcomes based on the problems, and the contributing factors and consequences that have been identified in the situation analysis. This list of outcomes are then clustered and given a working label and written onto cards. The next step is to arrange these outcome cards using 'if-then' statements, identify any inter-connection between outcomes, and validate the outcomes while checking for a coherent overall story. In this study, this was not a straightforward process as the configurations of the outcomes were changed many times in order to reach the coherent contingency relationships of the outcomes in the NC model. Figure 3.2 shows some examples of the process for developing the outcomes chain for the NC.

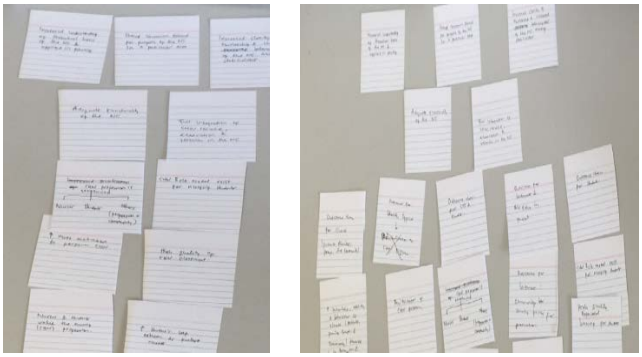


Figure 3.2 Examples of the process for developing the outcomes chain for the NC model

3.4.2 Theory of Action

After completing each of the steps in the analysis to identify a theory of change, the next step was to identifying a theory of action as the second component of the program theory. A theory of action is about "what the program does or expects to do in order to activate the change theory" (Funnel & Rogers 2011, p. 199). A theory of action consists of identifying the relevant success criteria of the intended outcomes, internal and external factors that affect the outcomes, as well as identifying what the program can do to address these internal and external factors (Funnel & Rogers 2011). In this study, the theory of action for the NC is focused on identifying key indicators of or success criteria, internal and external factors, and what the NC does or expects to do, in order to achieve the integration of services, education, and research at an optimal level. This integration is not an ultimate outcome for the NC, but rather a process in order to improve the functionality of the NC model at an optimal level.

The first step in developing a theory of action is to determine the relevant indicators of the integration in the NC using 'what, who, when, where, how, and why' questions which identify the features of integration from the literature and the interview data, and consider whether these features are realistic or not.

The second step in developing a theory of action is to identify the internal and external factors which may affect the outcomes (Funnel & Rogers 2011). The internal program factors include resources, program delivery, management activities, and processes, while the non-program factors are made up of government policies and regulation, competing, parallel, or interdependent programs, drivers of change, and other factors that influence action for change (Funnel & Rogers 2011). In this study, the internal and external factors that were identified focused on the factors that influence the integration of services, education, and research within the NC model.

The third step is to identify what the program does or is expected to do to address the internal and external factors, including identifying planned resources, activities, and outputs, what the program actually does (implementation) or fails to do, and identifying the connection/link (or lack thereof) between activities and particular outcomes, program support and management, output and throughput, principles for service delivery, and activities to manage the risks (Funnel & Rogers 2011). In this study, identification of what the program does is based on the interview data and a document analysis which focus on analysing the main activities that the NC fails to do, and identifying the lack of connection between activities and particular outcomes and the output and throughput of the NC. This information is particularly needed as a basis for developing a program theory for the NC to inform the development of evaluation framework of the NC model.

3.5 Methods

This study uses two data collection methods: semi-structured interviews and evidentiary materials from relevant policy documents including laws and regulations, guide books from the NC, and documents related to NC activities from the *Puskesmas*.

3.5.1 Phases of Data Collection

As this study is the first to explore the NC model in Indonesia in a comprehensive way, there was very limited information about this model in the literature. Yin (2014) emphasised that the main advantages of the case study approach is that there is an opportunity to apply many different sources of evidence. Therefore, the process of data collection was conducted in three phases in order to obtain comprehensive data using multiple sources of evidence.

The first phase consisted of interviews with 3 clients, 4 nurses, and 10 nursing students from NC 1. The purpose of this phase was to gather comprehensive data about the NC model from the perspective of those stakeholders who were directly involved in service provision and learning in the NC. The response rate for clients was relatively low. From 20 invitations that were sent to clients, only three clients agreed to participate. Six nurses were approached, however one nurse refused to participate and one nurse expressed her interest to be involved but she refused for the interview to be recorded using digital recorder, thus only four nurses were interviewed. Student's participations were high during the first phase of data collection. This first phase was considered to be a pilot case study to help with refining the "data collection plans with respect to both the content of the data and the procedures to be followed" (Yin 2014, p. 96).

These data from the first phase were then analysed in the second phase in order to identify any other stakeholders that may have influenced the operationalisation of the NC model. This is important in order to obtain comprehensive and converging evidence about the NC model, as the converged findings increase confidence that the case study captured the phenomenon comprehensively (Yin 2014). Therefore, there was a need to gather more data from various stakeholders that were not involved directly in service provision, but who had a major influence on the NC, namely the founder of the NC model in Indonesia, the provincial coordinator of the CHN who regulates CHN practice in the *Puskesmas*, the head of the *Puskesmas* where the NC is located, and lecturers from the nursing education institution that collaborates with the *Puskesmas* in the NC model. Furthermore, two additional NC sites and document analyses were needed in order to add to the richness of the case study data. These data were collected in the third data collection phase.

3.5.2 Data Collection

The data collection process for this study involved semi-structured interviews and evidentiary materials as part of case study data collection (Yin 2014).

3.5.2.1 Semi-Structured Interviews

The primary data for this study comes from interviews with the stakeholders of the NC. According to Neuman (2011), interviews are one of the most important sources of data in qualitative research because this method gives the researcher a way of gaining information through a guided conversation with the participants. According to Yin (2014), interviews are the most important sources of case study data because the interview provides a way of obtaining the answer to the research question(s) through a friendly guided conversation with the participants.

This study used semi-structured interviews with open-ended questions designed to explore the participants' views about the NC model. The interviews aimed to understand stakeholders' perceptions about the components of the NC model as a collaborative approach to service learning in West Java. Semi-structured interviews are a suitable method for this study because the focus of the research is on the interviewees' personal views and actions (Yin 2014). Open-ended questions are used in this study through which the participants are encouraged to express their own perceptions about the NC in a conversational manner, while closely maintaining the case study line of inquiry (Yin 2014). The interview times for this study ranged from 30 minutes to 1.5 hours.

During the period of my PhD study, I was not attached to any of the NCs being studied; therefore, I did not have a leadership or structural role during the interviews. I acknowledge that I personally know some of the participants in these three NCs due to my previous collaborations and interactions with them. However, in the letter of introduction and the information sheet for this study, which every participant received, I explained that my position is that of a full-time student at Flinders University South Australia, and I also emphasised that the participants' voluntary involvement and confidentiality in this study would be maintained. However, the confidentiality was not applied for the founder of the NC model as she wished her name to be included in the thesis and other publications arising from the thesis.

3.5.2.1.1 Development of Interview Questions

The questions asked of the students and nurses were informed by a study conducted by Laplante (2009) which investigated the meaning of reciprocity in service learning, and also through the Kellogg logic model which consists of examining context, implementation, and outcomes (Kellogg Foundation 2004). However, participants were not directly asked about service learning as this may have been seen as leading them towards a particular response; instead, participants were asked about the learning method that has been implemented in the NC model.

The logic model has been shown to be an effective planning and evaluation tool that greatly increases the probability of the achievement of goals because it can be used to describe the relationships between context, resources, activities/implementation, and outcomes/results in relation to a specific program (Cooksy, Gill & Kelly 2001; Dykeman et al. 2003; Hayes, H., Parchman & Howard 2011; Kellogg Foundation 2004). The logic model is also viewed as an efficient tool to provide details about the connections between resources and activities, and outcomes, to describe how a program works and to what ends, which can then inform the development of a theory of change, a theory of action, and strategic planning for a particular

program (Hayes, H., Parchman & Howard 2011; Kellogg Foundation 2004). Therefore, the interview schedule was developed based on the context of the NC model, the activities and implementation of this model, and the perceived outcomes of the NC.

In terms of the context of the NC, the questions included the participants' understandings of the theoretical basis and the purpose of establishment of the NC; the policy and resource context that influences the establishment and implementation of the NC. Questions about the implementation aspect are related to the extent of activities in the NC, the activities performed by the nursing students and the nurses and the output of their activities, and the functionality of three NCs within existing community health centres in West Java. In terms of outcomes, the questions were about the perceived outcomes and progress being made by multiple stakeholders involved in the NC model. The details of the interview matrix and schedules for all stakeholders are presented in Appendix 3A and 3B.

3.5.2.1.2 Recruitment

The participants were recruited purposively in this study in order to select cases and stakeholders with rich information for the in-depth study of the participants' opinions, interpretations, and perspectives (Liamputtong & Ezzy 2005). This information was about the experiences of clients, the nurses, nursing students and lecturers that have been using the Nursing Centre model, as well as the head of the community health centre. As suggested by Guest, Bunce and Johnson (2006), twelve interviews would be sufficient for a study that aims to understand common perceptions and experiences. Based on the first phase of data collection, it was considered that three participants were sufficient for each stakeholder group (clients, the nurses, nursing students, and lecturers) in each NC sites. In this study, the total number of participants recruited from each NC site was 13. In addition, the founder of the NC and the Provincial Coordinator of CHN program were included as the key participants in this case study. Thus, the total number of participants recruited in this study was 41 participants.

The inclusion criteria for the participants were as follows:

1. Inclusion criteria for clients: clients who have received care in one of the three *Puskesmas* and/or the NC sites in this study.
2. Inclusion criteria for nurses: nurses who work in one of the three *Puskesmas* and/or the NC sites, and who have been involved in community health nursing activities.
3. Inclusion criteria for nursing students: nursing students who have undertaken and completed a clinical placement in the community in one of the three *Puskesmas* and/or the NC sites.

4. Inclusion criteria for lecturers: lecturers who have been involved in the supervision of students in the NC.
5. There were no inclusion criteria for the founder of the NC, the Provincial Coordinator of the CHN, and the head of the Community Health Centre (*Puskesmas*).

A list of possible participants (clients, nurses, students and lecturers) were obtained from the Nursing Centre record list, the *Puskesmas*, and nursing education institutions who were involved in the NC. The potential participants were given the information sheet and consent form. Participants were advised that their participation was entirely voluntary and that they were free to refuse to be involved in the project. If participants agreed to be involved, a time and place for the interview was discussed and agreed to with participants. The heads of Puskesmas, the Provincial Coordinator of CHN Program, and the founder of the NC were approached directly and were given the information sheet and consent form. They were also advised of the voluntary nature of their involvement. Upon their agreement to participate, a time and place for the interview was discussed and agreed to with the participants.

Table 3.1 displays the participants' characteristics in this study.

Table 3.1 Participants' Characteristics

Characteristics of Participants		NC 1	NC 2	NC 3	Total
Type	Students	3	3	3	9
	Lecturers	3	3	3	9
	Nurses	3	3	3	9
	Clients	3	3	3	9
	Head of *Puskesmas* who is also a physician		1	1	2
	Head of Puskesmas who is not a physician	1	-	-	1
	The founder of the NC in West Java	-	-	-	1
	Provincial coordinator of CHN program	-	-	-	1
Sex	Male	3	1	3	7
	Female	10	12	10	32

In Chapters 4 and 5, the participants are identified by their various positions, such as clients, nursing students, nurses, heads of community health centres, and lecturers, and also by numbers associated with each quotation. Numbers were also used to identify the participants based on the location of the NC. Numbering is also used for the NCs to differentiate the participants from each of the three NCs. This numbering, however, is not applied to the founders of the NC model or the coordinator of the public health nursing program in the Provincial Health Office.

3.5.2.2 Evidentiary Materials

The second source of data for the study was gathered from documentary evidence that related to the NC model. By examining these documents, the current situation of community health nursing practice and education in Indonesia could be understood and analysed, in order to develop a program theory for the NC. Evidentiary materials were collected from relevant policy documents, including laws, regulations, the published books related to the NC model, instruction books for the NC, and documents related to NC activities from the *Puskesmas*. Most of the documents relating to policy and regulation used in this study are readily available from the Indonesian government website. The documents relating to the NC, from its first publication in 2002 until 2012, are already in my possession as I am the person responsible for preserving the NC documents. Therefore, there was no ethics procedure required for accessing these documents. Nevertheless, permission to include the use of evidentiary materials to conduct this study was obtained from the government.

Documents should be chosen based on their apparent centrality to the case under investigation, in order to understand the culture of the organisation, the values underlying the policies, and the beliefs and attitudes of the document author(s) (Simons 2009; Yin 2014). In this study, documents have been used to identify the original NC model, and the policies surrounding the community health centre and the community health nursing programs that influence the establishment and implementation of the NC model (see Table 3.2). The analysis of these documents is elaborated upon in the results and analysis chapters (Chapter 4 and 5).

Table 3.2 Summary of documents used in the data analysis

Documents	Usage in data analysis
First publication of the NC model launched at the National Seminar of the Nursing Centre in Bandung, West Java, on 21st March 2002 (Samba 2002).	This document was used to identify the original NC model when it was launched in 2002. This document was then compared to other published books about the NC model from the founder of the NC.
Two books about the NC that are published by the founder of the NC (Samba 2007, 2012).	Following the identification of the original model, the two books about the NC published in 2007 and 2012 were further analysed to identify the development of the NC model.
Six guide books about the NC in the *Puskesmas* (community health centre) published by the West Java Provincial Health Office in 2003.	These guide books about the NC from the Provincial Health Office (2003) were used to identify the specific activities expected to be conducted by the NC.
Indonesian President Regulation number 72, year 2012 about the National Health System (*Perpres No. 72 tahun 2012 tentang Sistem Kesehatan Nasional*).	This document was used to identify the Indonesian national health system as the overall context for community health nursing practice in Indonesia.
Regulation of Ministry of Health Indonesia Number 75 year 2014 about Community Health Centres *(Pusat Kesehatan Masyarakat)*.	This document was used to identify the most recent functions and programs of community health centres in Indonesia, in relation to the nursing activities in the community health centres.
The Decree of the Ministry of Health RI Number 128/Menkes/SK/II/Year 2004 about the Basic Policy of Community Health Centres (*Keputusan Menteri Kesehatan RI Nomor 128/Menkes/ SK/II/Tahun 2004*	This document was used to identify the history of policy for community health nursing practice in Indonesia.

tentang Kebijakan Dasar Pusat Kesehatan Masyarakat).	
Decree of the Ministry of Health Republic Indonesia Number 585/MENKES/SK/V/2007 about Guidance of Health Promotion Implementation in *Puskesmas (Pedoman Penyelenggaraan Promosi Kesehatan di Puskesmas).*	This document was used to identify the fragmented nature of health promotion implementation in Indonesia
The regulation from the Ministry of National Apparatus and Biro-Crate Reform number 17 year 2013 about Lecturer Functional PositionS and Their Credit Points (*Jabatan Fungsional Dosen dan Angka Kreditnya*).	This document was used to identify lecturers' roles and functions in order to understand the underlying reasons for collaboration between nursing education institutions and community health centres.
Diploma 3 and Bachelor of Nursing curriculums in Indonesia	These documents were used to identify the topics and competences around CHN in Indonesia.

3.5.3 Data Transcription and Translation Procedures

The first step in qualitative data analysis is to transcribe the interview data through repeated careful listening of the recorded data (Bailey, J. 2008). The recordings of the interviews in this study were transcribed into written form so that they could be studied in detail, linked with the field notes, and coded. Written interview transcriptions have some benefits as they are easier to understand and can maintain the accuracy of the quotations in print form (Shopes 2011).

All the interviews were conducted in the Indonesian language and recorded using a digital audio recorder. I am a native Indonesian language speaker, so there was no language barrier during the interview and transcription processes. The audio recordings of the interviews were transcribed, forward-translated into English, and then back-translated into Indonesian to ensure the rigour of the qualitative data. Forward-translation is translation of a document from the original source language into the target language, while back-translation is translation of the target language version back into the original language (Wild et al. 2005). In this study, the original source is in the Indonesian language while the target language is English. Due to time and funding constraints, three interview transcription samples were translated into English representing client, nurse, and student participants.

I translated the interview transcripts literally from Indonesian into English, while a professional translator based in Indonesia performed the back-translation from English back into Indonesian. After finishing the back-translation, another translator compared the original Indonesian transcript to the back-translation transcript to identify any discrepancies in the meanings as a result of the translation process. Based on the assessment of the independent translator, it was shown that there were no significant discrepancies in meaning between the originals and the back-translations of the transcript. Therefore, as a researcher, I was able to undertake the forward-translation of the interview data from Indonesian into English.

In the forward-translation process, I used 'word-to-word' translation which means that I initially translated the transcript word by word from the Indonesian language into English without changing the structure of the original sentence. The back-translation was also conducted in a word by word manner. However, in the process of writing up the thesis, the English 'word-to-word' translation did not provide enough clear information and meaning due to differences in Indonesian and English grammar. Researchers prefer to use meaning-based translations because not all words are directly translatable (Esposito 2001). Esposito (2001) further stated that the translator is:

> *"actually an interpreter who, when faced with a communication task such as a statement or conversation, processes the vocabulary and grammatical structure of the words while considering the individual situation and the overall cultural context of the source language" (Esposito 2001, p. 570).*

In this study, I not only translated the language, but also interpreted the participants' statement while considering the situation and cultural context of the Indonesian language. Therefore, at the thesis write-up stage, I further refined the participants' statements in a manner that is understandable in English, while retaining the original meaning in Indonesian. The overall process of the translation is summarised in Figure 3.3.

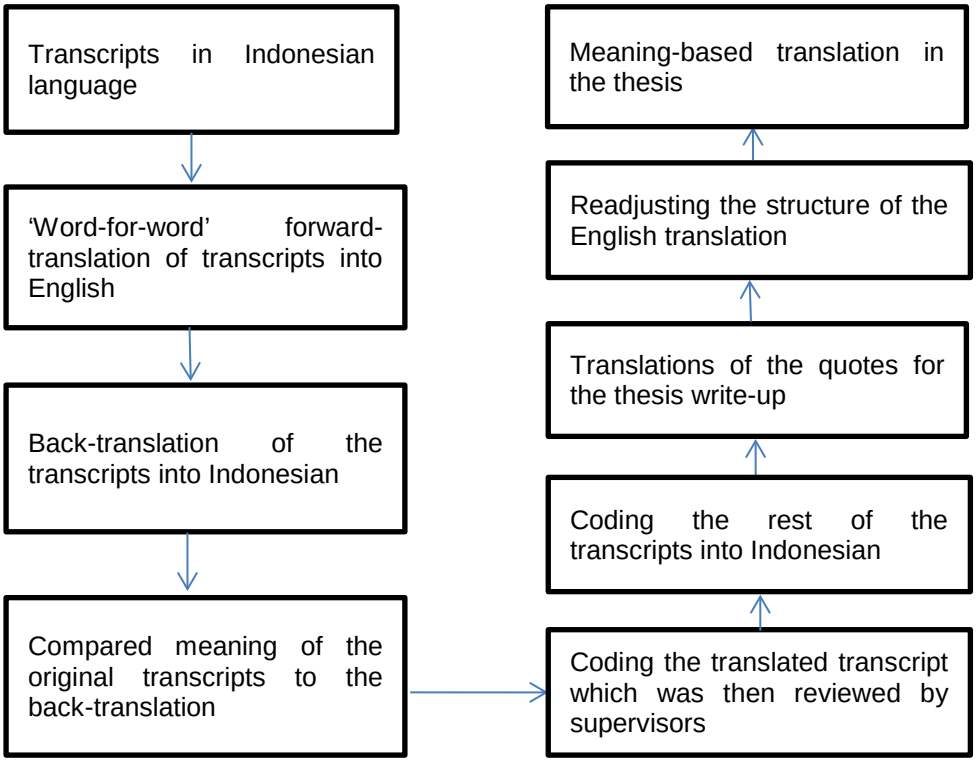


Figure 3.3 Translation and Back-Translation Process in the Study

3.6 Data analysis

The data analysis process for this study involved a thematic analysis (Braun & Clarke 2006) and a case study analysis (Yin 2014). These data analysis will be presented in the following sections.

3.6.1 Thematic Analysis

Thematic analysis is a "method for identifying analysis and reporting patterns (themes) within data" (Braun & Clarke 2006, p.79). These themes then become the categories used for the analysis of the patterns found in the data (Fereday & Muir-Cochrane 2008). There are two types of thematic analysis, inductive or bottom-up analysis and deductive or top-down analysis (Braun & Clarke 2006). This study employs an inductive thematic analysis using NVIVO 10 software to store and code the data.

A theme is defined as "something important about the data in relation to the research questions, and represents some level of patterned response or meaning within the data set" (Braun & Clarke 2006, p. 82). The themes identified in this study were driven by the primary research question, which is: 'how can components of the NC as a collaborative approach to service learning in West Java, Indonesia, be understood to inform the development of an evaluation framework for the academic nursing centre at the global level?' According to Braun and Clarke (2006), the process of conducting a thematic analysis consists of the following six phases: becoming familiar with the data, generating the initial codes, searching for themes, reviewing the themes, defining and naming the themes, and producing the report.

During the data analysis stage of this study, the following analytical phases were implemented:

Phase 1 – All the participants' data were organised into NVIVO 10. The data were read and re-read to familiarise myself with it, and then searched for patterns of meaning before making notes of general ideas for coding for the second phase.

Phase 2 – In this phase, the overall data were read to identify as many codes as possible without using specific research and analysis questions. In total, 285 nodes or codes were created in this phase, although there were some individual codes that were referenced into two different themes; for example, the 'learning experience' code was referenced in both the 'outcomes' and the 'service learning' theme. As well, there was more than one statement or

reference related to a theme from one individual participant. The following are examples of data extracts from NVIVO 10 under the node ‘Health education provision by students’

<Internals\\Student 3 NC1> - § 4 references coded [0.17% Coverage]

> *I came to her house to give her health education about Tuberculosis (TB), the need for good nutrition, and spiritual support, so that she would not have low self- esteem. I also provided some health education to prevent TB spreading to other people.*

<Internals\\Student 3 NC2 > - § 1 reference coded [0.09% Coverage]

> *As community nurses, we can ask the doctor, nurses, or midwives to refer patients to the NC, and then we record what we have done; for example, health education, and the implementation.*

<Internals\\Student1 NC1> - § 14 references coded [0.36% Coverage]

> *She already feels better and kept the same feeling, just starting to give health education. When the client has a positive response, I feel good for providing health education.*

Phase 3 – In this phase, the search for themes was started from the long list of different nodes. The analysis was re-focused at the broader level of themes by sorting and grouping similar nodes into potential themes, and collating all the relevant nodes within the identified themes.

Phase 4 – This is the phase when a set of possible themes was identified. As well, the themes started to become more refined, and the sub-themes that supported the larger themes were identified as well as collapsing some of the similar themes. After refinement, each theme was checked as to whether it appeared to form a coherent pattern; if the sub-theme did not fit into the main theme, it was reorganised into a new theme or discarded. The next step in this phase was to check whether the themes were coherent with the overall research objectives and the research question from the data set as a whole, and to identify any contradictions between the themes and the sub-themes in the entire data set.

Phase 5 – In this phase, through working with my supervisors, the themes were ‘defined and refined’ in order to identify the ‘essence’ of what each theme was about and to determine which aspects of the data were captured by each theme. My supervisors audited three samples of the interview transcripts in NVIVO to ensure that the coding process was conducted properly. After defining the themes, the themes and sub-themes were refined and named so that, at the end of this phase, the scope and content of each theme including the sub-themes that supported them could be described.

Phase 6 – In this final phase of the thematic analysis, a report was produced. In this thesis, the write-up of the findings of the thematic analysis as well as the case study analysis are presented in Chapters 4 and 5.

3.6.2 Case Study Data Analysis

The analysis of a case study should demonstrate that it has relied on all the relevant evidence, dealt with all major rival interpretations, discussed the most significant issues associated with the study, and brought expert prior knowledge into the study (Yin 2014). In this study, the data analysis for the case study was conducted after the inductive thematic analysis of the interview transcripts has been undertaken. The analysis of the embedded cases which included multiple stakeholders in three different NC sites was conducted in order to understand the broad components of the NC model and to develop an evaluation framework that would be applicable beyond the three NC sites. The researcher needs to analyse the consistent patterns of evidence across the units, but also within each case (Yin 2014).

There are two general analytical strategies which involve relying on a theoretical proposition where the researcher uses it as an orientation to focus attention on certain parts of the data and to ignore other parts, and developing a case description which is a descriptive framework for organizing a case study. In this study, a case description was used which was organised through a program theory. There are also five techniques outlined by Yin (2014) that can be used as part of the general strategy for case study analysis: pattern matching, explanation building (mainly explanatory), time series analysis, a logic model, and cross-case synthesis. In this study, three techniques were used, pattern matching, cross-case synthesis, and logic model which will be described in the following sections.

3.6.2.1 Pattern Matching

In case study research, meaning is identified in the form of patterns and consistency within certain conditions (Stake 1995). The identification of patterns and consistency in the case study approach is known as pattern matching, which is the most desirable technique for case study researchers because the pattern that has been identified can show how the various parts of the findings fit together (Thomas 2011). The researcher compares the pattern of the data empirically based on the expected pattern of outcomes (Yin 2014).

The search for meaning often involves a search for patterns that can be determined in advance or that will emerge from the data analysis (Stake 1995). Gomm, Hammersley and Foster (2000) explained that pattern matching is a form of analytical induction as a research

procedure which starts from a definition of the phenomenon, the formulation of a possible explanation, and then comparing if the data fits with the possible explanation or not. If the empirical pattern and the possible explanation seem to be congruent, the findings can strengthen the credibility of the study (Yin 2014). In this study, the data that have been collected from different stakeholders have been triangulated, after which the pattern of relationships found in the data from the three NCs are compared to the pattern of possible explanations using the components of adult learning, active learning, and service learning theories, as these are the concepts that are closely related to the NC model in Indonesia. In this way, the findings of this study will reflect the most suitable educational method to be used in, and to improve, the NC model.

3.6.2.2 Cross-Case Synthesis

Cross-case synthesis analysis can be used to support broad patterns of conclusions to compare and contrast the cases (Yin 2014). Cross-case synthesis analysis is used in this study to compare and contrast the three NC cases in order to draw a broad conclusion of the ideal NC model. The themes found in the thematic analysis were then grouped to identify the similarities and differences in the situation analysis, implementation and outcomes of the NC across the three sites.

3.6.2.3 Logic Model

A logic model is an analytical technique originally used to depict a theory of change (Funnel & Rogers 2011), but which can also be used as a strategy for analysis in case study research in order to specify a complex outcomes in sequential stages (Yin 2014). The logic model is a means of representing knowledge visually and to show the links, interrelationships, and patterns between concepts to understand meaning within the data (Simons 2009). In this study, the logic models was used to depict the three main problems of the NC, including the mismatch between the theoretical basis and the practice of the NC, the multiple and competing agendas surrounding the purpose of the NC, and confusion about the ownership of the NC. These issues influence the inputs that are needed to overcome the problems, including human resources, funding, and infrastructure input; processes to overcome the problems which include the preparation, orientation, working, pre-termination, termination, and adoption phases; and the output of these phases that contribute to the integration of CHN services, education, and research. In the end, these logic models will be used to identify the evaluation framework for the NC model.

3.7 Rigour of the Study and Ethical Considerations

"Truth and knowledge can be defined in a variety of ways – as the end product of rational processes, as the result of experiential sensing, as the result of empirical observation, and others" (Lincoln, Lynham & Guba 2011, p. 119). Thus, the rigour of quantitative studies is different with qualitative studies. In the following two sections, the rigour of the study and principles of ethical conduct in human research during the research process will be discussed and addressed.

3.7.1 The Rigour of Qualitative Research

To be considered as evidence, a qualitative narrative should consider the participants, audiences, contexts, assumptions, and a claim about a relationship between the research phenomena using reflexive screens (Altheide & Johnson 2011; Patton 2002). Patton (2002) further suggested that the rigour or trustworthiness of the interpretive perspective can be determined based on its credibility, transferability, confirmability, and dependability. Credibility means the congruence between the explanation and the trusted description of a claim (Olesen 2008; Tobin & Begley 2004) to maintain the accuracy of the findings (Creswell 2009). Transferability in qualitative research refers to the 'case-to-case transfer' of the research findings (Tobin & Begley 2004), while dependability is achieved through a process of auditing in which the researcher needs to ensure that "the process of research is logical, traceable, and clearly documented" (Tobin & Begley 2004, p. 392). Finally, confirmability means that the interpretation of the finding are clearly derived from the data rather than from personal figments (Tobin & Begley 2004).

In this study, the NC model is viewed as the social world that is constructed socially, politically, and psychologically by the stakeholders (Patton 2002). Therefore, Creswell (2009) suggested the use of triangulation as one way to maintain the credibility and accuracy of the findings. In this study, triangulation was conducted using multiple perspectives from a wide range of stakeholders and two data collection techniques. As Neuman (2011, p. 164) asserted, triangulation is "the idea that looking at something from multiple points of view improves accuracy". Using multiple stakeholders' perspectives, the accuracy of evidence can be enhanced to a greater extent than simply relying on a single stakeholders' perspective (Neuman 2011). Triangulation can be achieved by "using different data sources of information to build a coherent justification for themes" (Cresswell 2009, p. 212). In this study, methodological triangulation was employed by using more than one data collection technique, semi-structured interviews and document analysis. Data triangulation was achieved by using multiple data sources from seven NC stakeholders. Documents were also

used as additional sources of evidence. These documents consist of the original documents about the NC model, two published books about NCs, and policies related to nursing education, community health nursing practice, and community health centres in Indonesia.

In terms of transferability, qualitative research seeks to understand, in an in-depth manner, a specific case within a particular context, rather than to generalise the findings to a wider population (Sarantakos 2013). Qualitative findings provide an overview of the range of different views of the stakeholders, rather than aiming at a singular truth or a linear prediction (Patton 2002). In this study, the NC stakeholders have differing views which need to be explored in order to deeply understand them. Even though these views could not be generalised, the lessons learned from a deep understanding of the stakeholders' views can be used to inform other models beyond the case study site of investigation (Yin 2014). Therefore, the findings of this study may have applicability in other NC sites.

To ensure the dependability of this research, I used NVIVO 10 to assist with storing and coding of the data. In addition, I also documented as many steps of the procedures as possible in this methodology chapter, starting from the paradigm used to inform the research questions, in addition to the methodology, methods, data collection procedures, and data analysis procedures. In this way, the dependability of the study was maintained (Creswell 2009; Yin 2014).

As stated in Chapter 1, I declared my position as both an 'insider' and an 'outsider' in this research. The acknowledgement of the researcher's position is important in maintaining the credibility of qualitative research (Unluer 2012). I am an insider to the NC model because I am a lecturer at a university that has established an NC and have been part of its establishment and development from 2002 up to the present time. Thus, I am familiar with the problematic issues surrounding the establishment, implementation, and evaluation of the NC model. As an insider researcher, I have a number of advantages because I have a greater understanding of the culture of nursing education and community health nursing practice in Indonesia. Hence, I was easily able to establish a natural social interaction and relationship with the participants. I also have an advantage as an insider which allows me to understand the politics surrounding the NC and how the NC really works (Unluer 2012). Moreover, Yin (2014) pointed out that the researcher should use their prior and expert knowledge in case study analysis as this knowledge is valuable in providing an understanding of the current ideas and discussions about the NC model which can improve the case study analysis. Despite the benefits of the insider role, there are also disadvantages, such as reducing objectivity and making false assumptions about the topic of research (DeLyser 2001). However, as a researcher in this study, I am also an 'outsider' as I

used three NC sites as the case study. As an outsider to the three NCs, I can view the NC model from a balanced perspective (Allen et al. 2001). Through my dual roles in this research, I can use my own experience in the analysis of the participant data in order to maximise the usefulness of the research findings for informing policy and practice.

In terms of confirmability, I am constantly aware of the possibility of bias in the data collection and analysis processes; therefore, I used a reflective approach to clarify my thoughts throughout the research process. The reflexive consciousness (Patton 2002) is used in this study which means that, as the researcher, I acknowledged my involvement in the establishment and development of the NC; thus, I am aware of my own perspective and background as an insider to the NC model which might affect my understanding and interpretation of the data. Therefore, I am consciously and continuously asking questions of myself when analysing the data about what shapes and has shaped my perspective, the voice through which I share my perspective, and what I do with what I have found. This reflexive approach proved to be very difficult at the beginning of the data analysis process because the NC model has been part of my life for more than 14 years. However, through working closely with my supervisors who have constantly reminded me about the effects of my positioning on my interpretation of the data, I worked within the reflexive approach constantly in order to consciously separate my personal background from the data, and to analyse the data using an 'outsider' perspective. In this way, my personal bias was kept to a minimal level.

3.7.2 Ethical Considerations

The National Statement on Ethical Conduct in Human Research was applied to this study based on the principle that respect is the central value in the ethics of human research. Respecting participants in human research means that every individual has the right to determine their own participation, and that the people who are involved in the research are empowered, protected, and helped (The National Health and Medical Research Council, The Australian Research Council & The Australian Vice-Chancellors' Committee 2014). The researcher also has an obligation to respect the participant's desire to be involved in the study. Although researching the NC model is intended to generate knowledge about the collaborative approach between nursing education institutions and healthcare service organisations, and as such having a low potential for physical harm, it does carry potential psycho-social risks, such as the potential damage to the reputation of the organisations in which the participants work. Informed consent was used in this study as an approach to respect the autonomy of the research participants in determining their participation; however,

this does not mean that this voluntarily agreed-upon document will guarantee that the participants will be free from risk.

There are three principles underpinning universally acceptable ethical conduct: 'respect for persons' by means of justifying participants' autonomy, anonymity, and confidentiality; 'justice' which concerns equal opportunity for the participants; and 'beneficence and non-maleficence' through maximising benefits and minimising potential disadvantages (Dresser 2012). The project was approved by the Social and Behavioural Research Ethics Committee (SBREC) of Flinders University, project number 5887, to ensure that the study met the most rigorous ethical, health, and safety requirements of the University (see Appendix 4 for the Ethic Approval). In this study, the participants were provided with an information sheet and an informed consent form (see Appendix 5A and 5B for example of information sheets and informed consents in English and Indonesian language) which included statements of the three ethical principles.

In order to satisfy the West Java Provincial Government procedures for conducting research, a letter of permission was obtained from the institutions at the research sites (see Appendix 7). The research proposal was assessed and approved by the Office of Community Empowerment and Protection Bandung, Health Office Bandung, West Java, Indonesia, and the Deans or Heads of Schools of Nursing involved in the project. All the participants in this study had the research process and intent explained to them by the researcher. Explanations about the purpose of the research, and the processes involved, were given in the information sheet and also when the potential participants asked for further information. Consent for participation was obtained from the students, but was neither a condition of enrolment nor a factor in their course grades. I ensured that this research would not interfere with the evaluation and grading for the students undertaking their placements.

The confidentiality of the responses was carefully protected throughout the research process for most of the participants except the founder of the NC. She wanted her name to be used in the thesis and in other related publications. Some of the information disclosed by the participants in this research is quite sensitive, because it discloses the conflicts that exist between some of the organisations involved in the NC, thus revealing the potential weaknesses of all the organisations involved. In order to maintain the confidentiality of the participating organisations, I used a number for the participants and for the organisations without referring to either by their real names. I also used an initial for the organisation names in case the organisation's identity was disclosed by participants in the interviews.

3.8 Summary

This chapter has reviewed the qualitative research paradigm, including its ontology and epistemology, as well as discussing the case study approach as the research methodology using program theory (Funnel & Rogers 2011) as an analytical framework. The data were analysed using a thematic analysis and a case study analysis (including a discussion of pattern matching, cross-case synthesis, and the logic model). This chapter also presented the research methods for the semi-structured interviews and the document analysis. The participant recruitment and data collection procedures were outlined and the procedures used to ensure the rigour of the study, and the ethics processes, were described.

The next chapter will present the results and analysis of the research, and will argue how the components of the NC in West Java can be understood to inform the development of an evaluation framework for academic nursing centres more globally. The themes produced from the thematic analysis are presented in two separate chapters. Chapter 4 presents themes including the inadequate functionality of the NC model in West Java, Indonesia, and the partial integration of community health nursing (CHN) services, education, and research. Multiple themes of outcomes are then identified to develop an outcomes chain of the NC at the end of Chapter 4. The outcomes chain will be used to determine the series of necessary steps in order to achieve the NC's fullest potential. From these steps, the integration of CHN service, education, and research is chosen as the priority outcome that will be discussed in chapter 5.

Chapter 5 presents themes for the key indicators of or the success criteria for the integration in the NC at an optimal level; factors affecting the integration within the NC including human resources capacity, time management, infrastructure and funding, comprehensive and effective recording and reporting, and a comprehensive evaluation plan. The final section of Chapter 5 presents the themes related to the identification of what the NC model can do to address these factors that can affect the integration of CHN services, education, and research in the NC.

CHAPTER 4 INADEQUATE FUNCTIONALITY AND PARTIAL INTEGRATION OF THE NURSING CENTRE

4.1 Introduction

Chapter 4 presents the case study analysis for the Nursing Centre (NC) model in West Java, Indonesia, using the theory of change as an organisational and analytical framework. The theory of change is a mechanism that attempts to identify the basic problem to be addressed clearly and succinctly in order to achieve certain outcomes and impacts for individuals, groups, and communities (Funnel & Rogers 2011; Kellogg Foundation 2004). As described in Chapter 3, a theory of change consists of three features, a situation analysis, the focus and scope, and an outcomes chain (Funnel & Rogers 2011).

The focus of this chapter is to analyse the situation of three NCs in West Java as embedded cases in order to clarify the NC's focus and scope to achieve outcomes for all stakeholders of the NCs. A situation analysis will be presented in the first section of this chapter, exploring the problem, the factors that contribute to the problem, and the consequences of the problem. From the situation analysis, it was found that the problem of the NC model in West Java, Indonesia, is that of the inadequate functionality of this model across the three NC sites. In the second section, partial integration of the NC model is identified as the major theme that will become the focus and scope that need to be changed for the NC model in West Java, Indonesia. Following the analysis of the focus and scope of the NC, the third section will present an analysis of the current outcomes of the Indonesian NC which will then be used to develop an ideal outcomes chain for the NC. The graphical representation of the outcomes chain will then become the theory of change for the NC as the final product of this chapter.

4.2 Inadequate Functionality of the Nursing Centre: A Situation Analysis

Overall, the situation analysis from the three NCs demonstrates that there is inadequate functionality of the NCs, because the components of the NC model have been understood differently by the stakeholders. Each of these centres has a different focus, with NC 1 focusing on students' placement for community health nursing and family nursing, NC 2 focusing on lecturer's community service activities, and NC 3 focusing more on community health practice for nurses. The following three embedded NC cases describe the inadequate

functionality of the overall NC model as a single case of a collaborative approach to service learning in West Java, Indonesia. The description of each of these centres will be structured based on its location and establishment, the leadership of the Community Health Centre (*Puskesmas)*, medical staffing, the nurse's role, integration within the NC, and the functionality of the NC. This descriptive insight will be used to identify an overall pattern of complexity (Yin 2014) that will then be used to explain why inadequate functionality has occurred in these NCs. Additional information regarding the three NCs as embedded cases is presented in Appendix 6.

4.2.1 Embedded Case Nursing Centre 1

NC 1 is co-located in *Puskesmas* 1 which is located in the centre of the city. The NC in this *Puskesmas* was established in 2008 in collaboration with Bachelor of Nursing education institution 1. During the data collection process in NC 1, there were no students undergoing a placement in the NC.

In terms of leadership, at the time of the data collection, this *Puskesmas* had not had a leader for more than 3 months. The NC coordinator was in charge of nursing activities while there was no leader, and was appointed as the acting Head of the *Puskesmas* for the interview. The Head of the *Puskesmas* plays an important role in relation to the NC as a collaborative approach because only she/he has the authority to collaborate with a nursing education institution. Without a definite head, the *Puskesmas* would not be able to collaborate with other institutions, including nursing education institutions. The acting Head of *Puskesmas* 1 stated:

> *The Head of the Puskesmas has the responsibility for collaborations with outside organisations, such as nursing education. We don't have a Head of the Puskesmas at the moment, so we cannot start a collaboration with a nursing education institution because it is only within the authority of the Head of the Puskesmas (Acting Head of Puskesmas 1).*

Indeed, according to the regulation of the Ministry of Health Republic Indonesia (number 75 year 2014) about Community Health Centres, the Head of a *Puskesmas* has responsibility for all the activities within the *Puskesmas*. This shows that the Head of a *Puskesmas* is the key person for facilitating nursing activities in the NC.

In terms of medical staff, *Puskesmas* 1 has a general and five specialist doctors to meet their patients' needs. This means that the nurses in this *Puskesmas* should be able to perform community health nursing activities. Despite the availability of general and specialist doctors, the nurse's role as the medical assistant is still prominent. The nurses in this *Puskesmas* are required to undertake medical assistant work for specialist doctors in the *Puskesmas* clinics. Because of this, the nurses cannot undertake community health nursing (*Perkesmas*)

activities. All the nurses are given schedules for assisting the specialist doctors in the clinics. Even though the nurses in this *Puskesmas* have the motivation to implement NC and CHN activities, they cannot escape their duty to assist the specialist doctors, as stated by one of the nurses:

> *Nurses here have a strong motivation towards Perkesmas activities; however, we also have a duty to assist the specialist doctors in the Puskesmas clinics. As a coordinator of the Perkesmas [community health nursing] program, I also have a schedule to help in the dermatology specialist clinic. Sometimes, I give counselling to the patients in the specialist clinic because I do not have time to do it in the NC (Nurse 2 NC1).*

Despite Nurse 2s willingness to provide health counselling as part of CHN activities for patients in the dermatology specialist clinic, the counselling was conducted in an erratic manner which reduced the quality of the counselling.

In terms of the integration of services, education, and research in NC 1, the NC was viewed as a separate program from the *Perkesmas* by the acting Head of the *Puskesmas* and the nurses in this centre:

> *I think the NC and the Perkesmas [Community Health Nursing] program are different because the NC is focused on collaboration with nursing education institutions in the Puskesmas, while the Perkesmas is focused on the nurses' activities (Acting Head of Puskesmas 1).*

> *The nursing centre is totally a new [different] program and it is different from the Perkesmas (CHN). The difference is that there should be knowledge-sharing as part of the education component, whether there are student placements or not. We [nurses] can do the Perkesmas without the NC (Nurse 2 NC1).*

Through the document analysis, it was shown that the NC is not intended to be run as a new program in the *Puskesmas* (Samba 2002). The NC was set-up to re-introduce *Perkesmas* program for Indonesian nurses, as stated by the founder of the NC:

> *As a nurse educator […], I feel that community health nursing [Perkesmas] is very useful […], but if we used the name Perkesmas, people do not want to do it […]. So, it was decided that the name would be the Nursing Centre (Suharyati Samba, the Founder of the NC).*

NC 1 did not function adequately because the focus was on student education. In *Puskesmas* 1, the NC worked better when there was a student placement, and where these students worked in the NC with families and communities, as stated by a lecturer from NC 1:

> *The operation of the NC was mostly conducted by the students. […] So far in here, the NC was a place for students to learn to provide nursing services. There was research being conducted by the students, but they were not directly related to the NC (Lecturer 1 NC1).*

The NC model in West Java, Indonesia, is not intended to be separate from the *Perkesmas* program, as students and nurses should share mutual benefits from their activities; however, when there are no student placements, the CHN activities should continue and be

undertaken by nurses in the *Puskesmas* (Samba 2012). This discrepancy might be due to a lack of clarity about the NC model, as stated by one of the students: “there is no clarity of scope of practice in the NC because there is no standard operational procedure” (Student 1 NC1).

In summary, the process for NC 1 focused more on the student learning process and, as a result, this NC is viewed as a separate program from the *Perkesmas* activities. A discrepancy in the operation of the NC model in West Java also appears in NC 2. The following section will describe the overall situation of NC 2.

4.2.2 Embedded Case Nursing Centre 2

The NC 2 is co-located in *Puskesmas* 2, which is located in the northern part of the city. The NC in this *Puskesmas* was established in 2009 in collaboration with a diploma 3 nursing education institution and a school of environmental sanitation and hygiene.

This *Puskesmas* has a head who is a medical doctor. The head is supportive of the *Perkesmas* and the NC activities. The Head of *Puskesmas* 2 has a good understanding of the NC model as a collaborative approach between community health services and nursing education institutions; however, she does not see the benefits of the NC in leveraging the performance of the *Puskesmas* because the NC activities are conducted primarily by lecturers. The Head of *Puskesmas* 2 stated:

> *I think the NC is a supportive model for nurses; however, I do not really see the contribution of the NC towards the Puskesmas’ target achievement. The NC is run mainly by lecturers from the nursing academy and the environmental hygiene school, with less involvement from the nurses (Head of Puskesmas 2).*

The Head of *Puskesmas* 2 perceived that the NC belongs to education institutions; thus, the involvement of *Puskesmas* nurses in NC activities is quite limited.

In terms of medical staff and the nurses’ roles, *Puskesmas* 2 has two medical doctors; however, the nurses still have to examine patients, particularly in the Tuberculosis (TB) clinic and in the Integrated Management of Childhood Illness (IMCI) clinic. As a result, the nurses do not have enough time to involve themselves in the *Perkesmas* program.

In terms of the functionality of NC 2, all the lecturers have their own schedules for working in the NC as part of their community service activities where they mostly perform health education and counselling for patients who come to the *Puskesmas*. In addition to the activities in the NC, the lecturers are also involved in school health and home visit activities, as stated by one of the lecturers from NC2:

All the lecturers here want to work in the NC as part of their community service activities. I arrange the schedule for the lecturers to work in the NC. Most of the activities are health education and counselling in the NC, but now we have added home visits and school health activities (Lecturer 3 NC2).

The quote above shows that the Head of the *Puskesmas'* and the lecturers' understandings of the NC model are different from the intended model of the NC. Therefore, even though the Head of the *Puskesmas* is supportive of the NC model, she did not direct the operation of the NC to obtaining mutual goals for both the *Puskesmas* and the education institution. Lecturers, who were expected to have a better understanding of the NC model, also showed some discrepancies in their understandings of the model. Similar to NC 1, these discrepancies might have been caused by a misunderstanding of the NC model being viewed as separate from family nursing and community health nursing practice, as stated by a lecturer from NC 2:

The NC is used by the lecturers only for community service. We don't involve students in the NC because their focus is in the family and the community (Lecturer 1 NC2).

The lecturers in NC2 perceived that the activities of the NC take place only inside the *Puskesmas* building, and considered that student activities outside of the NC, whether in family nursing or community health nursing, were not part of the NC activities. This is a misunderstanding of the NC model. According to Samba (2012), the operation of the NC model consists of activities 'inside' and 'outside (outreach)' of the *Puskesmas,* using nursing processes as an approach consisting of assessment, planning, implementation, and documentation.

In summary, the operation in NC 2 focused more on the lecturers' community service activities inside the building, while student activities in family nursing and community health nursing were not considered as NC activities by the lecturers. Discrepancies in the operation of the NC model in West Java also appeared in NC 3. The following section will describe the overall situation in NC 3.

4.2.3 Embedded Case Nursing Centre 3

NC 3 is co-located in *Puskesmas* 3, which is located in the southern part of the city. The NC in *Puskesmas* 3 was established in 2008 in collaboration with a Bachelor of Nursing education institution. This *Puskesmas* has a head who is a medical doctor, but she is very knowledgeable about the concept of Community Health Nursing. She encourages her staff nurses to carry out the NC and community health nursing activities. In this centre, the Head of the *Puskesmas* has much power over the nursing education institution and the students who have placements at the site.

In terms of the nurse's role, all the nurses in *Puskesmas* 3 are strongly motivated to conduct NC activities both inside and outside of the *Puskesmas* building. Even when there are no student placements, activities in the NC are run by the nurses, as pointed out in the following quote:

> *I have a once a week schedule to work in the NC room, but I also do home visits. When there are students here, I do home visits together with the students. So, even though there are no students, we [nurses] are still practicing in the NC and doing home visits (Nurse 2 NC3).*

Nurses in this *Puskesmas* are highly committed to running the NC because they feel that it is their duty as a community nurse, as stated below:

> *I do not feel that NC activities are a burden as this is what nurses should do in community health centres. Sometimes, I worked over time to get the work done (Nurse 1 NC3).*

> *It is our basic duty and function as community nurses, so the NC is beneficial for nurses to perform nursing care in the Puskesmas (Nurse 3 NC3).*

The nurses' activities in *Puskesmas* 3 are somewhat different than in the other two *Puskesmas* in this study. This is due to the strong support from the head towards the CHN (*Perkesmas)* activities in the NC, as stated below:

> *There are only two things that we [Heads of Puskesmas] need to master which is management of the Puskesmas, and the Perkesmas program. Whatever we want to do, we can use the concept of Perkesmas (Head of Puskesmas 3).*

The Head of the *Puskesmas,* who has a clear understanding of the importance of community health nursing practice, is able to provide a clear job description for the community health nursing activities. This clear job description appears to increase the nurses' motivation to perform the CHN activities, as stated by the Head of *Puskesmas* 3:

> *The point is this; in order to make people want to work, firstly we should have a clear job description for every staff. Secondly, there should be a SOP [standard operational procedure], and thirdly there is task distribution. We have rules, rewards and punishment, and scheduling (Head of Puskesmas 3).*

NC 3 has a strong focus on community health data and nursing activities; however, this is not the case for the male students. In NC 3, only female students were allowed to practice in the NC, as stated by one of the students:

> *I know the concepts of the NC and I really want to practice in the NC, but I can't do the practice. The Head of the Puskesmas only allows female students to practice in the NC. I and other male students cannot practice in there. So, I have only heard about the experiences of my female friends (Student 3 NC3).*

The reason for this practice is not clear, but one possible explanation might be that the head is more concerned with the *Puskesmas'* targets, rather than the students' educational needs and goals. This was expressed by a lecturer from NC 3:

The Head of Puskesmas 3 limited students to work in the NC. Students who are given an opportunity to work in the NC are only female. I don't really understand the reason; perhaps she [the head of Puskesmas 3] has her own target (Lecturer 2 NC3).

The NC 3 has a lesser emphasis on nursing education because only female students who had opportunities to practice in the NC. This leads to the ineffective nursing education in this NC, as stated by one of the students:

I have done a placement in the community and have heard about the NC from the lecture. However, placement in the NC is not effective because we [male students] have not been given a chance to practice inside the Puskesmas; we went straight to the people in the community who are reluctant to come to the Puskesmas (Student 1 NC3).

Even though the CHN services in the NC 3 work very well, nursing education activities could not be implemented at the optimal level. The data also show that NC 3 has inadequate functionality in comparison to the original NC model, in which the emphasis of the NC is to gain mutual benefit for both the students and the nurses without any gender discrimination.

The data from the three sites have shown that there is inadequate functionality of the NC as a collaborative approach to service learning in West Java, Indonesia, from both the healthcare service and the nursing education side. The inadequate functionality of the academic nursing centres would lead to the failure of the NCs in Indonesia. The inadequate functionality and failure of the NCs to survive has not only happened in Indonesia, but has been identified as a global issue in other countries (Barger 2004; Barger & Kline 1993; Bell 2008). For example, Barger (2004) reported that there were 51 academic nursing centres in the US in 1986, but five years later only 45 centres were identified, and 20 of these NCs were new and not part of the original 51. Many of these academic nursing centres do not survive because of a failure to adapt to changes in health policy and demands from the community as stated by Barger (2004):

The era from 1983 to 1992 was one of tremendous evolution for academic nursing centers, as they responded to changes in federal health policy and transitioned from fledgling, part-time operations to regular providers of primary care. Centers that did not respond to these changes simply faded away' (Barger 2004, p. 62).

Despite the failure of some academic nursing centres, this model is still important for clinical education in the nursing profession (Barger 2004).

Another example of an unsustainable centre is the Family Nursing Unit (FNU) in Canada which was closed after 25 years of operation (Bell 2008). The challenges that forced the closure of the centre were that "fluctuating administrative support, lack of understanding about the core belief and mission of the unit, professional jealousy, and failure to sustain a succession plan" (Bell, 2008, p. 278). Moreover, the lack of a 'blue-print' for developing

partnerships in the NC model could also lead to uncertainty about the operation of the NCs (Levine-Brill, Lourie & Miller 2009)

Further situation analysis is needed to identify the factors and consequences of inadequate functionality of the NC model. The following sections will present the factors that influence the inadequate functionality and its consequences for all stakeholders of the Indonesian NCs.

4.2.4 Factors that Contribute to the Inadequate Functionality of the Nursing Centre and its Consequences

This study has identified a number of factors that influence the inadequate functionality of the NCs, including: 1) a mismatch between the theoretical basis and the practice of the NC; 2) multiple and competing agendas on the purpose of the NC; and 3) confusion around the ownership of the NC. These factors have caused great variations in the operation of the NCs. Data analysis related to these factors are presented in the following three sections.

4.2.4.1 A Mismatch between the Theoretical Basis and the Practice of the Nursing Centre

One of the factors that contribute to the inadequate functionality of the NC model is a mismatch between the original theoretical basis for, and the practice of, NCs. The results of documents analysis have shown that the theoretical basis for the NC consists of six concepts: community health nursing services as a system, adult learning, professional organisation, caring, nursing research, and community (Samba 2007, 2012). However, in the interview with the founder of the NC model, she stated her basic assumptions about the NC and emphasised four concepts that underpin the theoretical basis of the NC, as follows:

> *The concepts in the NC model are the concepts of system, caring, adult learning, and community health nursing (Suharyati Samba, the Founder of the NC Indonesia).*

Even though there are six concepts that underlie the NC, both nursing education and community health centre stakeholders expressed different views regarding the theoretical basis of the NC.

Most of the lecturers identified three concepts associated with the NC being education, research, and community service. These are described as follows:

> *The concepts of the nursing centre are education, in which students take part in community placements; research, in which academics and students conduct research; and community service, in which the academic gives service to the community (Lecturer 2 from NC1).*

The lecturers' roles in the NC are related to three obligations of higher education [in Indonesia]. We need to provide services for the students and to anyone who requires the service. Besides education, we also have to do research and community services (Lecturer 2 NC2).

The concepts associated with the NC, as understood by the lecturers, are actually made up of the three roles of higher education academics in Indonesia, as outlined in Indonesian Law Number 12 year 2012 about Higher Education. All lecturers in Indonesia must perform these three roles as performance measures in order to gain promotion and to receive incentives from the government. Therefore, the NC was seen as a way of facilitating these higher education roles.

The perceptions of these three higher education roles as the basis for the NC model have led to a different emphasis on the operation of the NC model. NC1 and NC3 used the NC as a venue of learning for nursing students, as stated by lecturers from these two NCs:

The NC particularly relies on the nursing education institution for student placements. When there are no student placements, the NC does not operate because the nurses are not actively involved in the NC (Lecturer 3 NC1).

Lecturers still need to practice in the NC […] as well as to conduct research, but we cannot do this because of our heavy workload. The actual operation is when there are student placements in the NC (Lecturer 1 NC3).

The low involvement of nurses in community health centres and the heavy workload of the lecturers are factors that negatively influence the operation of the NC primarily for nursing student education from the perspective of the lecturers. However, this was not the case for NC 2. Even though the nurses' levels of involvement in NC 2 were low, the lecturers' involvement was high, and on a continuous basis because:

This NC is used as a venue for lecturers to provide community service to patients and people in the community as one of the requirements for Indonesian lecturers' certification (Lecturer 3 NC2).

The lecturers' understandings of the NC are different from the original intent of the theoretical basis of the NC. Most of the lecturers perceived that the activities of the NC take place only inside the NC room, while outreach activities, such as home visits and community interventions, are not viewed as part of the NC activities. This is also acknowledged by the founder of the NC:

Most of the stakeholders perceived that the NC activities only take place inside the building. This is wrong. NC activities are both inside and outside of the building. So, home visits, family nursing, and community nursing interventions are part of the NC activities (Suharyati Samba, the founder of the NC).

The necessity of activities taking place both inside the facilities and through outreach activities as ways of providing care are also clearly stated in NC documents published by the

founder of the NC and the Provincial Health Office. These documents are available in the NC for the students and the nurses. The original intent of the NC role is to integrate community health services, nursing education, and research in Indonesia (Samba 2002, 2007, 2012), so the role is not merely to fulfil nursing education or community health service needs. These different perceptions of the lecturers can lead to different perceptions of the conceptual elements by nursing students who work within the NC model.

As a result of the lecturers' different understandings of the theoretical basis of the NC, students might end up not knowing about the NC model at all. This study found that students from NC 2 and NC 3 did not know how the NC works because they had no experience of practicing in the NC:

> *I have heard about the NC in the Puskesmas, but I do not know exactly what it is and how it works. My lecturers never explained it to me. We just did the family health nursing and community health nursing (Student 1 NC2).*

> *The Nursing Centre has been explained to us by the Head of the Puskesmas, but I do not completely understand what the Nursing Centre is because we, male students, are not allowed to practice in the NC (Student 2 NC3).*

Students in NC 2 did not have the opportunity to practice inside the NC room because the lecturers' involvement in this NC were very high, and there was no requirement in the curriculum for students to practice in the NC. Thus, the student activities were primarily with families and in the community, which were considered as outreach activities of the NC. This was confirmed by a lecturer from NC 2:

> *Students do not practice inside the NC in Puskesmas 2 because the nursing curriculum does not explicitly state that they should practice in the NC room. You can check the curriculum. Student placements are with families and in the community (Lecturer 1 NC2).*

The lack of requirement for student placements in the NC curriculum is therefore a problem for the functionality of the NC because students do not gain a clear picture of working in the NCs. Even though students in NC 1 had the opportunity to practice in the NC, they were confused about the scope of practice, as stated by one of the students:

> *The truth is that the placement in the NC is the most unclear work I have ever had. There are fewer patients at the nursing centre, so I don't know what to do if there are no patients. On the contrary, there are a lot of patients waiting in the general clinic (Student 1 NC1).*

This data suggests that students from these three NC sites were confused about community health nursing roles in the NC. In this study, lecturers perceived a different theoretical basis from the original NC model, which then influenced the students' understandings of the NC model. The lecturers' understandings about the theoretical basis of the NC might also influence the understandings of community health service stakeholders in relation to the NC.

While the lecturers perceived that education, research, and community service formed the theoretical basis of the NC, participants from the community health centres, including the Head of the *Puskesmas* and the nurses, viewed CHN (*Perkesmas)* as the basis of the NC model*.* The Head of *Puskesmas* 2 stated:

> *I think the NC is a place for nurses to conduct Perkesmas programs inside the Puskesmas building. Nurses' outreach activities are organised by the person-in-charge of the Perkesmas programs (Head of Puskesmas 2).*

Similar to the lecturers' and students' views, the Head of *Puskesmas* 2 also perceived that the activities of the NC are limited to only inside of the NC. This perception of the Heads of the *Puskesmas* also influences the nurses' understandings of the NC model, as reported by one of the nurses:

> *Nurses' understandings about the nursing centre and the nursing process are still low. Nurses feel confused about the nursing centre, whether it is a new program in a community health centre or not. I think nursing education institutions must come and explain more about the NC model to us (Nurse 3 NC1).*

The different perceptions of the theoretical basis from different stakeholders demonstrate a mismatch with the intended concept of the NC. This quote seems to indicate that that there is a deficit in the stakeholders' understandings of the original theoretical basis of the NC, which then appears to lead to the inadequate functionality of the NCs. This discrepancy could be caused by the way the Indonesian NC model was initially set up. The process of the establishment of the Indonesian NC is described by its founder as follows:

> *I went to the Ministry of Health office and met the Director-General of the Public Health service and I asked why Community Health Nursing has changed like this. He [the director] said you do not have to go to the Ministry of Health. […] If you want to make any model for basic health services, you should go to the local government. Therefore, we launched the NC model in 2002, […] and this model has been accepted by West Java province since then (Suharyati Samba, the founder of the NC).*

This excerpt shows that the initiative to establish the NC model came from the nursing education institution and there is no indication that this model was developed collaboratively with stakeholders from the *Puskesmas*. Thus, some of the nurses and the Heads of the *Puskesmas* were not invested in the establishment of the NC. Consequently, these stakeholders may not have valued the NC model as an integral part of the community health service.

This finding shows that the mismatch between the theoretical basis and the practice of the NC model is a crucial factor that needs to be addressed so that the NCs can function at an optimal level. This study also identified another factor that contributes to the inadequate

functionality of the NC; the multiple and competing agendas on the purpose of the NC. The next section will present the data and an analysis of this factor.

4.2.4.2 Multiple and Competing Agendas on the Purpose of the Nursing Centre

The inadequate functionality of the NC model in this study is also influenced by multiple and competing agendas on the purpose of the NC. The purpose of the NC model as a collaborative approach provides direction for stakeholders' activities within the model. In collaborations between two or more organisations, it is likely that different stakeholders will have different agendas. Since nursing education institutions and the *Puskesmas* have different roles and purposes, a power imbalance could have occurred within the NC. Such a power imbalance does not always produce negative effects on team collaboration as long as the members of the team have a collective and developmental orientation towards the needs and welfare of the other members (Van der Vegt et al. 2010). If the self-interested agendas of one stakeholder are overpowering and ignoring the needs of other stakeholders, then it would lead to negative effects for the collaborating team (Van der Vegt et al. 2010). Thus, when one collaborating organisation in the NC has a self-interested agenda that dominates and is not negotiated, this will lead to inadequate functionality of the NC. This study has identified that the stakeholders have different agendas due to a power differential issues between the stakeholders, including those from the community health centres and from nursing education (lecturers). The following sections will present the data on, and an analysis of, the agendas of these stakeholders. The clients' agendas will be presented separately on page 128.

4.2.4.2.1 *Puskesmas* Needs Community Health Data

Strong community health centre (*Puskesmas*) agendas are prominent in NC 3, as these centres need nursing education stakeholders to collect community health data. There is an enormous amount of community health data that is needed by the *Puskesmas*, including demographic data for all residents within the *Puskesmas* coverage area (approximately 30,000 people). Besides the demographic data, according to the Indonesian Ministry of Health Regulation number 75 year 2014, the *Puskesmas* must report the data on maternal health and family planning, child health (including health and childhood illness data, infant cohort, and toddler cohort), immunisation, oral and dentistry health, health promotion, breast-feeding, school health, the incidence of communicable and non-communicable disease, nutrition status, and environmental health.

Even though the agenda to collect health data is prominent in NC 3, this agenda is less prominent in NC 1 and 2. *Puskesmas* 3, as a healthcare service organisation, is particularly

concerned about the provision of health services within their area of jurisdiction, as stated by the Head of *Puskesmas 3*:

> *They [nursing education institutions] have to build the closest area to them first. There are some nursing education institutions that send students to other districts, but I advocated them [to send students to the Puskesmas] (Head of Puskesmas 3).*

The Head of *Puskesmas* 3 viewed student placements in the *Puskesmas* as assets from the nursing education institutions to help the *Puskesmas* to solve health problems in the community. Nursing students who practice in the NC are needed by the *Puskesmas* to collect community health data, as stated by the Head of *Puskesmas* 3:

> *Puskesmas nurses are very busy and only have limited time to do home visits, but students can focus in the field, they can get data about the recent conditions of families and share it with us. The students can help us to achieve the target of all the programs because the Perkesmas [CHN] can link to all programs, such as Tuberculosis (TB) and KIA [Mother and child health] (Head of Puskesmas 3).*

With only a maximum of 13 personnel in each *Puskesmas* (Kementerian Kesehatan RI 2014), collecting this data every year, it is a very difficult task for the staff. Community health data collection through student activities in the NC is an important agenda for the *Puskesmas* for planning, recording, and reporting purposes. However, often the data that are needed by the *Puskesmas* are different from the data required by the nursing education institution, as stated by one of the students:

> *The tasks given by our lecturer were different to the tasks given by the Head of the Puskesmas. For example, we have our own questionnaire, but we also get additional questionnaires from the Head of the Puskesmas. […] When our lecturer came, she said you should have not done that, it is like there is an institution inside the institution (Student 1 NC3).*

Differing expectations and tasks given to students that are not coordinated with the nursing education institution can also diminish the value of the student placement in the NC. Every nursing education institution has specific learning objectives for their students and additional tasks that are not related to their learning objectives will disturb the learning process, as stated by one of the lecturers:

> *We [lecturers] have set up a schedule for students to achieve their learning objectives, but since the Head of the Puskesmas has a different policy, our learning objectives could not be achieved. […] We asked the students to finish the community assessment by the end of the first week, but they could not do so because of the additional tasks asked for by the Head of the Puskesmas to collect other data (Lecturer 2 NC3).*

The *Puskesmas*‘ agendas in NC 3 may have hindered the achievement of the students’ learning objectives. Thus, the lecturers, nurses, and the Head of the *Puskesmas* need to work together in a better way to achieve the goals of both organisations. The overpowering agenda of the community health centres can reduce the achievement of student learning

objectives because it can prolong the time that students take to complete their assessment of the community, so that there is not enough time to complete all the activities required to achieve their learning objectives. This agenda can also create confusion for the students which would diminish the value and quality of their placement in the NC even further.

4.2.4.2.2 Nursing Education Institution's Agenda

Nursing education institutions and their lecturers also have their own targets and agendas, particularly in fulfilling community service points for lecturers and community placements for the students. Strong nursing education institution agendas are most prominent in NC 2, less prominent in NC 1, and the least prominent in NC 3. As mentioned in Section 4.4.2, lecturers in NC 2 claimed that they mainly used the NC to undertake community service activities for lecturers, rather than for student placements.

Community service is one of three compulsory roles of educators in Indonesia, alongside teaching and research (Regulation of Indonesian Ministry of National Apparatus and Bureaucratic Reform number 17 year 2013). All lecturers in Indonesia must undertake these roles in order to collect credit points. These credit points are used for promotion and to receive lecturer's certification incentives. This regulation becomes a driver for lecturers to undertake community service in the NC, as stated below:

> *Since there is a regulation about lecturers' certification and incentives, all lecturers now want to do community service in the NC. We make a schedule every Tuesday, Wednesday, and Thursday for lecturers to do community service in the NC (Lecturer 3 NC2).*

The NC model has created opportunities for lecturers to advance their skills and careers through community service provision which can then be used to increase the value of the NC model. However, the usage of NC 2, which is mainly as a venue for lecturers' community service, is also questioned by a lecturer from this NC:

> *My role in the NC is facilitating and implementing programs to link patients in the Puskesmas and in the community as part of community service, but is this the only thing that we [lecturers] can do in the NC? I don't think so. The NC should be integrated into the Puskesmas [activities] (Lecturer 1 NC2).*

The strong focus on the lecturers' community service agendas would also diminish the function of the NC model to improve the quality of CHN education for students, and also the quality of CHN services in general, because the lecturers do not integrate their community service activities with student learning and community health nursing practice. The *Puskesmas* nurses' involvement in NC 2 is also minimal, as stated by one of the nurses:

> *The NC is only run by lecturers from nursing education institution 2 from Monday to Thursday, while other allied health school lecturers will come on Fridays and Saturdays (Nurse 1 NC2).*

The utilisation of the NC as a venue to facilitate lecturers' community service activities is not evident in NC 1, as this NC has a greater emphasis on student education rather than on lecturers' community service and nurses' activities. This was stated by a lecturer from NC 1:

> *My roles in the NC as a lecturer are mainly as a clinical facilitator for student placements in the NC in the Puskesmas, and also for outreach activities, including in the schools and the community. The NC has become an example for students to learn community health nursing practice in Puskesmas (Lecturer 3 NC1).*

Despite the active involvement of students, the Coordinator of the CHN program in the Provincial Health Office expressed that nurses should be actively involved in the NC. The Provincial Health Office emphasised that nurses should work in the NC and that the NC activities should not be left to the students.

> *We tell the nurses, do not leave the NC to the students only. The nurses must have a role in the NC; the leader of the NC is the Puskesmas nurse, and students are only helping because student placements are seasonal […]. So, every time I go to the Puskesmas, I tell the nurses about this (Provincial Coordinator of the CHN program).*

Even though the Provincial Coordinator of the CHN program agreed that nurses should work in the NCs, this strategy did not appear to be working in NC 1 and NC 2. As mentioned previously, nurses from NC 1 perceived that the NC is different from the CHN program in the *Puskesmas*. Thus, without the student placements, NC 1 did not continue to operate. However, the student's placement times were limited throughout the year and, as a result, there were times when there were no student placements in the NC. Therefore, the lecturers from NC 1 expected independent involvement from the nurses in this centre:

> *The nurses in the Puskesmas are dependent on the nursing education institution to run the NC. This is the weakness of the NC model. I am hoping that the NC can be independently run by nurses when there are no student placements (Lecturer 3 NC1).*

The contribution of nurses was crucial to ensuring the continuity of services provided under the NC model. The lesser contribution of nurses in NC 1 and NC 2, and the overly-strong focus on nursing education institution agendas led to the inadequate functionality of NC 1 and NC2. As a result, the integration of services and learning experience was not able to be developed, implemented, monitored, and evaluated. Therefore, identifying all stakeholders' agendas and needs was also crucial to ensuring the adequate functionality of the NC model (Barger 2004).

4.2.4.3 Confusion around the Ownership of the Nursing Centre

Another factor that contributes to the inadequate functionality of the NC is confusion around the ownership of the NC. The idea of co-locating the NC in the Community Health Centre (*Puskesmas)* is to increase collaboration and integration between the two institutions.

However, this co-location also creates confusion about ownership of the NC among stakeholders. The Head of *Puskesmas* 2 raised this issue in the interview:

> *I don't really understand the NC, who does it actually belong to? Does it belong to the Puskesmas or the nursing education institution? (Head of Puskesmas 2).*

In relation to this issue, the ownership of the NC has been claimed by the Provincial Health Office, as stated by the Provincial Coordinator of CHN program:

> *Right now, I think the NC belongs to 'Dinkes' [the Provincial Health Office] because it has been included in the RPJMD [Provincial Strategic Planning] 2013-2018. The NC is incorporated in the performance indicator […]. So, it is already included in the Health Office's policy, included in strategic planning (Provincial Coordinator of the CHN program).*

Despite the claim from the Provincial Coordinator of the CHN program about the ownership of the NC by the Health Office, the founder of the NC had a different view about this ownership:

> *I have chosen the NC model that is attached with the Puskesmas. [It is] different from other free-standing NCs in other universities. Being [owned] together with the Puskesmas, we expect that not only students, but also nurses, the staff in the Puskesmas, the doctor, the leader, know about nursing (Suharyati Samba, the Founder of the NC).*

From the founder's perspective, the NC is owned by the nursing education institution, the Health Office, and the *Puskesmas*. These different perspectives of the Provincial Coordinator of CHN program and the founder of the NC are a major cause of confusion about the ownership of the NC.

Even though the West Java Health Office has claimed, adopted, and included the NC model in their provincial strategic plan, the NC model has not been fully supported by the Indonesian Ministry of Health, as stated by the Provincial Coordinator of the CHN program:

> *The Ministry of Health is happy that West Java has its own model, but they have not yet endorsed the NC as a national model. Since there is an educational component in the NC, they [Ministry of Health] think that the NC belongs to the education institution and not to the Health Office … so they do not go against or support the NC (Provincial Coordinator of the CHN program).*

This excerpt also shows some level of confusion by the Indonesian Ministry of Health regarding the ownership of the NC. The confusion around ownership of the NC caused the inadequate operation of CHN services and nursing education, such as in NC 1 and 2, who put weight more on nursing education because the NC model had not been endorsed by the Indonesian Ministry of Health and was not included as a national strategy by the *Puskesmas*. In contrast, the emphasis of NC 3 on CHN services by nurses was because the Head of *Puskesmas* 3 understood that the NC had been endorsed by the Provincial Health Office.

The NC model was also intended to provide a base for both nursing students and community nurses to conduct the CHN *(Perkesmas*) program, so that students and nurses would feel that they had their own place in the *Puskesmas*. The confusion around the ownership of the NC would cause nurses' lack of a sense of belonging to the NC. In addition, there was also lack of nurses' sense of belonging towards the *Perkesmas* program, which then contributed to a lack of a sense of belonging to the NC. Most nurses who were employed as program coordinators such as for the Tuberculosis (TB) program, view nursing activities as being separate from their job description, and they were of the view that they had separated roles when they are working on other programs, which made the integration of various programs with nursing rather difficult. Moreover, there were no, or only minimal, records and reports of nursing activities in the *Puskesmas*, because the nurses only record and report on activities that are based on the programs in the *Puskesmas*. The role ambiguity between the role as nurses and coordinator of programs reduced nurses' sense of belonging to the CHN profession. Thus, when the NC model was introduced to community nurses, some were confused about its ownership, and how and where they belonged in this model.

In summary, confusion about the ownership of the NC was experienced by the nurses, the Heads of the Community Health Centres, and the Provincial Coordinator of the CHN program. This confusion contributed to the inadequate functionality of the NC because some of the nurses perceived that the NC was separate from the CHN program, and there was role ambiguity as a nurse and as a member of the *Puskesmas* staff. These three factors have caused the partial integration of CHN service, education, and research as the intended purpose of the NC model. The next section will discuss the consequences of these three factors for the NC stakeholders, including the nurses, the students, and people in the community.

4.2.5 Multiple Consequences of Inadequate Functionality of the Nursing Centre

This study has identified three broad factors that contribute to the inadequate functionality of the Nursing Centre (NC). The inadequate functionality of the NC has a number of consequences for nurses, students, and people in the community, which will be presented in the following sections.

4.2.5.1 Consequences for Nurses

The consequences for nurses include demotivation in undertaking community health nursing (CHN) activities which lead to the devaluation of nursing in community health. When the NC model was introduced to nurses in the *Puskesmas*, there was a range of responses from the

Puskesmas' nurses. Some nurses were willing to implement it while others were not, as stated by the coordinator of the CHN at the Provincial Health Office:

> *Some of the nurses have a good response, while others don't; it depends on the nurses' motivation. So, motivation is the key factor. […] It depends on the motivation of the nurses (Provincial Coordinator of the CHN program).*

Even though this study has shown that there were a few nurses who had high levels of motivation in undertaking CHN activities, most of the nurses were not motivated. Community nurses' have the competencies to deliver CHN services; however, there were no *Puskesmas* that offered such services in 2002 when the first NC was established. This may have been because of the lack of recognition of the nursing role in the community. As some of nurses examine patients and prescribe medicine for patients, some of the patients who come to the clinics in the *Puskesmas* do not recognise nursing as a profession. This was also stated by the nurses:

> *Most of the patients here do not know that I am a nurse. Some clients who bring their sick child to this clinic [Integrated Management of Childhood Illness clinic] often called the nurses who work in the clinic as paediatric doctors … I often said to them that I am not a paediatric doctor, I am a nurse, but people do not understand who the nurse is. People only know that there are only doctors and midwifes in the Puskesmas (Nurse 1 NC2).*

> *Sometimes, patients also called us [the nurses] doc … doc … Sometimes, we feel uncomfortable, so we want to say to the patient that we are not the doctor, but we are not feeling good about that. We fear that the patients will be disappointed; yes, it is a burden also for the nurses (Nurse 1 NC1).*

The data show that there was a lack of recognition of nurses in community health centres because the patients only saw the nurses examining patients and prescribing medicine. In this role, the nurses also experienced some discomfort because the patients did not know that it was a nurse who was examining and prescribing medicine for them. Recognition of nursing profession in community setting is often very challenging because most people know that nurses work in the hospital setting. The lack of recognition of community health nursing as a profession is not only the case in Indonesia, but also in the UK where members of the public do not recognise the role of community mental health nurses (Crawford, Brown & Majomi 2008).

This lack of recognition would also lead to the low nurses' professional identity in community health nursing. Most of the nurses did not reveal their professional identity to the patients because they feared that the patients would be disappointed. However, this practice was misleading for the patients because they had the right to know who was treating them, while the nurses also had the right to be known to the patients as part of their practice accountability based on Indonesian Health Law (*Undang-Undang Republik Indonesia Nomor*

36 tahun 2009 tentang Kesehatan 2009) and had the right to be protected and respected according to their profession.

Apart from lack of recognition, another cause of nurses' demotivation was that there were too many nursing process forms to be completed in the *Puskesmas*. This paper work took a lot of the nurses' time, as stated below:

> *Actually, the nurses need to perform nursing care, but it is difficult. There are many things that have to be filled in, there are a lot of nursing forms that must be completed […]. Although sometimes I go to the field [families and the community], I do not make [family] nursing care plan reports because I was lazy; many forms must be filled out, it's complicated (Nurse 1 NC1).*

The demand to fill in all the paperwork for the nursing care plan had the effect of lowering the nurses' motivation to provide, and document, nursing care to families. In the end, nurses devalued the nursing profession, and some nurses did not even consider themselves to be nurses. Thus, there is a need to upgrade the nursing image through improving nurses' knowledge. This phenomenon has been apparent since the NC was established in 2002:

> *The nurses have to socialise the profession to her/himself because there are some nurses who do not feel like nurses. I think this is the 'disease of nurses'. So, we should not only explain [nursing] to the general public, but also to our fellow nurses. In 2002, many nurses in the Puskesmas did not think of themselves as community health nurses (Suharyati Samba, the founder of the NC model).*

Nurses' low motivation in undertaking CHN activities can also have a negative impact on their job satisfaction as community nurses, which can then lead to low performance levels, low quality of care, and reduce the overall performance of the health centre and the health system (Hayes, L. J. et al. 2012; Mathauer & Imhoff 2006).

Nurses are the largest health workforce which play a critical function in the community setting in Indonesia especially in remote areas (Global Health Workforce Alliance 2013; Hennessy et al. 2006b). However, evidence showed that they have low levels of motivation which contribute to poor quality of community care (Global Health Workforce Alliance 2013), particularly to undertake health promotion and prevention activities (Hennessy et al. 2006b). Through a *Perkesmas* program that was integrated into the NC model, nurses had the opportunity to contribute to the wider community, as stated by the Head of *Puskesmas* 3:

> *Through the NC, we have an opportunity to do the follow-up; nurses will assess and determine the priority of patients who need home visits; from there, we can follow-up and the intervention is not only for one patient but also for a whole family (Head of Puskesmas 3).*

The CHN nurses who worked through the NC had the potential to deliver a holistic form of care, which then had a positive impact on the community. However, this would not be achieved if the NC did not function adequately.

4.2.5.2 Consequences for Students

The inadequate functionality of the NC, and the consequences of this for the nurses, also had a negative influence on the nursing students. The main consequence for the students was the lack of role modelling from the nurses for CHN practice in the *Puskesmas,* as stated by the founder of the NC:

> *Nursing students are confused which one is the community health nurse, because there is no role model (Suharyati Samba, the founder of the NC model).*

As a consequence of these problems, when the students came to the *Puskesmas* for their community placement, they felt confused because the program no longer existed and there were no examples or models of CHN practice in the real-life setting. This was due to the removal of the CHN (*Perkesmas)* program as the seventh basic program in the *Puskesmas*, as stated by the founder of the NC:

> *Since 1975, the community health nursing program (Perkesmas) was the seventh basic program [in the Puskesmas], but then this was changed. Community health nursing no longer exists as the basic program from of the Ministry of Health (Suharyati Samba, the Founder of the Nursing Centre model in Indonesia).*

As mentioned in Chapter 1, the *Perkesmas* role of nurses started to disappear in 2004 when the Indonesian Ministry of Health removed the *Perkesmas* program from the list of compulsory programs in the *Puskesmas.* Therefore, most of the *Puskesmas* in Indonesia focused on the implementation of the six basic programs (health promotion, environmental hygiene, mother and child health and family planning, nutrition improvement, prevention and eradication of communicable diseases, and medication), while the *Perkesmas* program was forgotten by the community nurses, as stated by the founder of the NC: *[…] in reality there is nothing. […] So, there were no Puskesmas that performed community health nursing practice (Suharyati Samba, the founder of the NC).* As a result, the activities of community nurses in the *Puskesmas* became invisible. The invisibility of community nurses not only happens in Indonesia, but has also been reported in two studies in the UK (Crawford, Brown & Majomi 2008; Drew 2011) which led nurses to search for greater recognition and professional identity (Crawford, Brown & Majomi 2008).

In addition to the invisibility of community nurses' activities, there were also misunderstandings about CHN *(Perkesmas)* by nurses and other professionals. The Head of *Puskesmas* 3 stated that:

> *Another problem is the mindset of most people [including nurses] that the Perkesmas is only a home visit. When they talk about Perkesmas (CHN), then they talk about home visits, did they not do TB program activities? Yes, they did. […] All of these activities are part of the*

> *Perkesmas (CHN). So, the mindset of the nurses and decision-makers that Perkesmas is a home visit must be changed (Head of Puskesmas 3).*

The fact is that all of programs that were conducted by nurses in the *Puskesmas* are CHN activities. The misunderstanding of CHN roles also caused role ambiguity for nurses, as stated below:

> *It is difficult to say. Some [activities] still exist, yes, such as family data and the home visit are part of nursing, but most of the work on the [TB] program is separate or different, it is not part of nursing (Nurse 1 NC1).*

As the consequences, students would also confuse about the ideal roles of community nurses in *Puskesmas*. This confusion and lack of understanding about the role of community health nurses is not only happening in Indonesia, but also found in other countries such as Australia and Canada. In Australia, the confusion is due to the multiple terms that are used for community health nursing job titles, such as district nurses, primary healthcare nurses, home care, and community health nursing (Brookes et al. 2004). Similarly, a study in Canada conducted by Bramadat, Andrusyszyn and Chalmers (1996) found that many community health nurses and students experience role ambiguity. As a result, many students may not understand the overall system, and the different services, clients, and resources that are available in community health centres.

Given that the Indonesian health system emphasises comprehensive primary healthcare, adequate preparation of nursing student education to provide disease prevention and health promotion intervention is needed (Keleher & Parker 2013). The lack of role models for community health nursing leads to a lack of professional socialisation in nursing at the community setting for students, which then further reduces the quality of CHN placements because there was a gap between CHN education and services, as stated by the founder of the NC:

> *There was a very big gap between CHN education and services. In fact, it is not a gap; there is not any link at all (Suharyati Samba, the Founder of the NC model).*

The lack of role modelling and the gap between CHN education and practice caused disintegration of CHN education, services, and research which would further lead to a decrease of the quality of nursing education. There was a serious concern about the quality of nursing education in Indonesia which led to a decrease in the quality of nursing student graduates entering the nursing workforce (Rokx et al. 2009), particularly in the community health setting. Thus, the inadequate functionality of the NC would also give consequences for people in the community.

4.2.5.3 Consequences for the Community

The low quality of CHN services and education also had an indirect negative impact on subsequent service provision and led to poor health outcomes for people in the Indonesian community (Rokx et al. 2009; Shields & Hartati 2003). Proper utilisation of the nursing profession could provide prevention and health promotion interventions effectively, particularly in enhancing patient knowledge and compliance (Keleher et al. 2009). The CHN service has great potential for improving the health status of Indonesian people through health promotion and disease prevention activities, because the community health centre is the first line of health service in the Indonesian community (DIKTI 2011). A lack of such prevention and health promotion activities can lead to an increase reliance on a curative approach, and can also undervalue the potential of primary prevention and health promotion in preventing up to 70% of the disease burden of the population (WHO 2008). This reliance on curative services can be seen from the large number of patients who came to the *Puskesmas* every day, as stated by the Head of *Puskesmas* 3:

> *A doctor examines 60 – 100 patients a day; he/she sometimes does not have time to give health education or counselling (Head of Puskesmas 3).*

A client participant stated that she used medication most of the time:

> *There are some people who give advice … don't use too much medicine; if I kept using the medication, it may be a danger later on. But still, if I have the incident [coughing] like that, still have to be checked, cannot do it by myself, must have medicine, there must be vitamins (Client 1 NC1).*

A student also confirmed his experience when caring for families and people in the community who expected treatment rather than prevention:

> *We are still students, but the family always asks for medicine … we [students] are not allowed to give medication. They [families] often ask for medicine, even the head of the sub-village asked 'why don't you bring medicine? […] Everybody thinks like that, asking for medicine. So, we have to explain it again to people in the community (Student 1 NC3).*

Although the consequences for people in the community are not directly influenced by the NC, a well-functioning NC might help to increase the awareness of people in the community about health promotion and disease prevention strategies which is likely to have a beneficial effect on the health of people in the community.

In summary, this study has identified three major contributing factors that caused disintegration of CHN services, education, and research in the NC. This partial integration has caused the inadequate functionality of the NC model which leads to multiple consequences for nurses, students, and people in the community. The consequences for nurses, students, and people in the community can have an interconnected and cyclic effect

which can be difficult to change. A summary of the factors and consequences of the inadequate functionality of the NC is shown in Figure 4.1. In order to improve the functionality of the NC, the NC needs to re-focus and re-scope its strategies to improve the integration of CHN services, education, and research. The analysis of strategies to address the partial integration in the NC model will be presented in the following section.

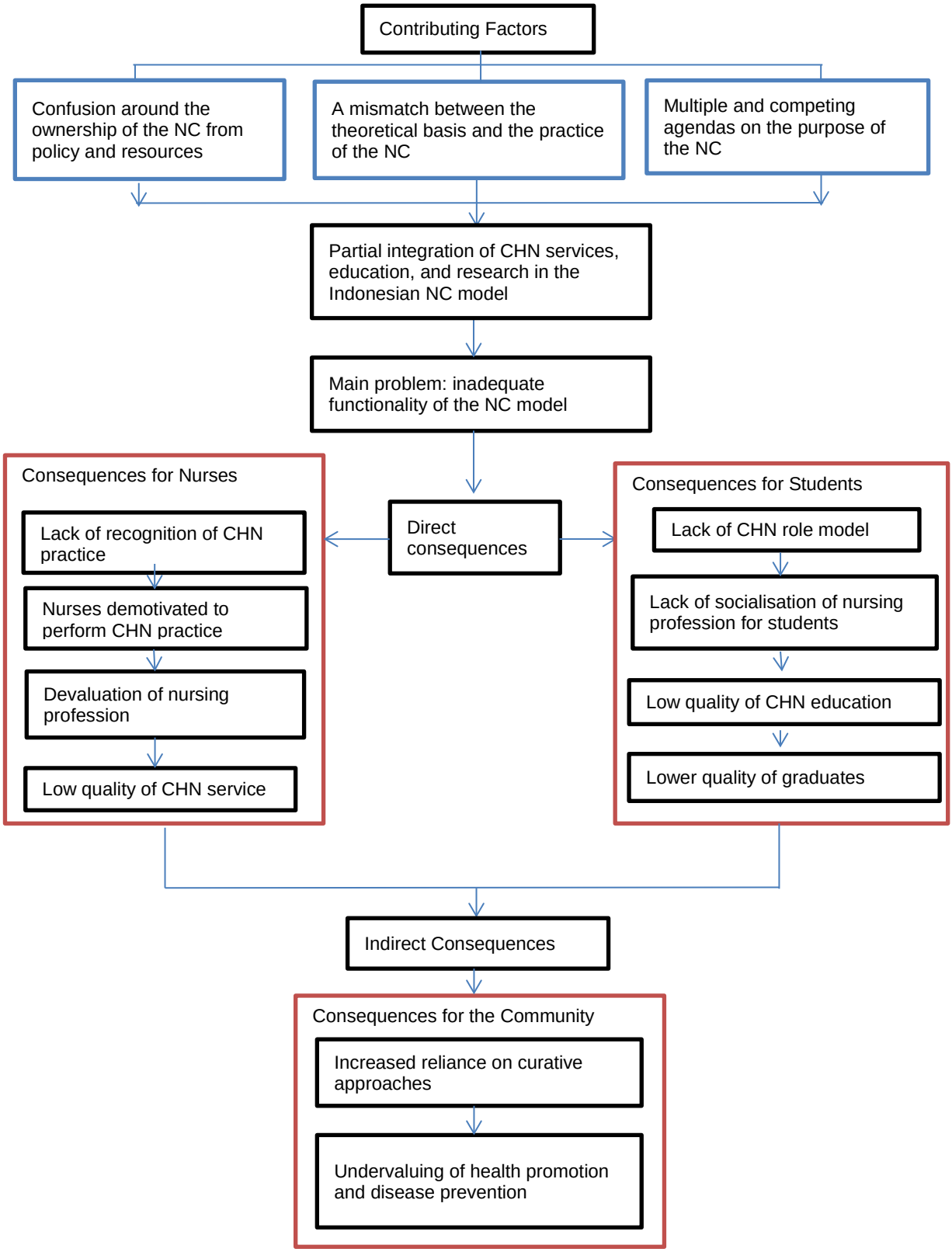


Figure 4.1 Summary of contributing factors to, and consequences of, the inadequate functionality of the Indonesian NC model

4.3 Strategies to Address Partial Integration in the Nursing Centre

Focusing and scoping, as the second feature of theory of change, are the process to identify priorities of strategies that are important, within the reach and capacity of stakeholders to achieve the intended outcomes (Funnel & Rogers 2011). Based on document analysis, the intended scope of the NC is to integrate Community Health Nursing (CHN) services, education, and research through the optimal usage of all potential resources in the community healthcare system (Samba 2007). Therefore, the integration of the CHN services, education and research will become the priority and focus in this thesis. Integration between these three areas was crucial because without this, nursing would be "incapable of building a meaningful knowledge base for evidence-based education and practice" (Francis-Baldesari & Williamson 2008, p. 1). The term integration will be used throughout Chapter 4 to Chapter 7 to refer to the integration of healthcare services, education, and research in the NC.

In this study, the notion of collaboration and integration as the scope of the NC was recognised by the participants. However, this study has found that there is only partial integration in the NCs because it was limited to collaboration in form of co-location which meant that the nurses and the students used the same venue to deliver CHN services. This co-location made little contribution towards the actual integration as all the stakeholders tend to work in silos. As mentioned in Chapter 2, collaboration is the ways in which various resources, such as health professionals, are brought together (Heath, Wise & Reynolds 2013). The collaboration exists in the NC model, as stated by a Head of a *Puskesmas*:

> *I know we collaborate with the nursing education institution for the NC, but it [the collaboration] is not clear, because most of the activities in the NC are performed by the lecturers (Head of Puskesmas 2).*

Such collaboration has not been seen as a form of integration in the NC model because the lecturers only used the NC and the *Puskesmas* as a venue to undertake their community service. Heath, Wise and Reynolds (2013) further defined the integration as the ways in which services are delivered and practices are organised and managed. Therefore integration in the NC can be defined as the ways in which students, lecturers, nurses, and other health professionals are brought together in order to organise and manage health services, education, and research in an integrated way. Based on this definition, the integration in the NC 2 has not taken place because the activities were organised and managed separately.

The following three sections will build on findings from interviews data and documents analysis regarding strategies to address the issue of partial integration in the NC model. There are three strategies identified to achieve this, including choosing an appropriate

educational method to link the CHN services with education in the NC, balancing the multiple and competing agendas, and clarifying the ownership of the NC.

4.3.1 Choosing an Appropriate Learning Approach to Link Community Health Nursing Services and Education in the Nursing Centre

In order to explore the learning approach that is evident in, and appropriate for, the NC, a pattern matching analysis (Yin 2014) was conducted to compare the findings from this study using three relevant learning approaches, including adult learning (Merriam and Bierema (2013), active learning (Dewing 2008), and the components of service learning that were identified in Chapter 2 of this thesis (page 22-26). Samba (2012) proposed both adult learning and active learning as the learning approaches in the NC which may have contributed to the confusion of stakeholders to apply the appropriate learning approach. These three learning concepts were chosen based on the findings from document analysis that stated:

> *Everybody has an individual paradigm that shapes their experiences, interpretations, and understandings of their world. In order to learn effectively, nursing students need a learning method that is active, integrative, cumulative, and consistent. Active learning demands creativity, independent thinking, collaboration, and learning directing by the student (Samba 2012, p.19).*

Active, integrative, cumulative, and consistent learning do not necessarily belong exclusively to the concept of adult learning, but is also embodied in the concepts of active learning and service learning. The following section presents an overview of the pattern matching analysis using the three concepts mentioned above to identify an educational method that can facilitate the integration at an optimal level. As mentioned in Chapter 3, pattern matching is an inductive form of analytisis (Gomm, Hammersley & Foster 2000). This analysis started from a definition of adult learning, active learning, and service learning and was followed by a comparison of the data with each of learning concept. If the empirical pattern and the possible explanation seem to be congruent, the findings can strengthen the credibility of the study (Gomm, Hammersley & Foster 2000; Thomas 2011; Yin). The pattern matching analysis is presented in Table 4.1, which is followed by a narrative explanation of this analysis.

Table 4.1 Pattern matching analysis of the learning approach in the NC

Learning approach and components of learning	Data examples	Researcher Interpretation of Learners	Match to the NC characteristics
1. **Adult Learning** (Merriam & Bierema 2013)			
Students' self-concept moves from a dependent personality towards a self-directed one	*I think placement in the community is too relaxed and less motivating for the future. We should be given a clearer target* (Student 2 NC3)	Dependent	No
Experience as a cumulative resource for learning	*We [students] focus on practice in the family and the community* (Student 2 NC2)	Focus on practice experience	Yes
Orientation to learning shifts from one of subject-centeredness to one of problem-centeredness.	*We have courses of 6-2 application for family, community, and geriatric, so students must have a placement in the NC during these courses* (Lecturer 2 NC3)	Subject/task centeredness	No
Internal motivation to learn	*They [students] do not want to do their tasks, difficult to complete the task* (Head of *Puskesmas* 3)	No internal motivation	No
Readiness to learn	*I felt that collaboration with the students was difficult because the students tend to be too passive* (Nurse 3 NC1)	Some students are not ready to learn	No
2. **Active Learning** (Dewing 2008)			
Based in, and on, personal work experience of practitioners	*Lecturer must give us clear guidance. Even though I have previous work experience in the hospital, I was confused about what to do in the NC* (Student 3 NC1)	Students' personal work experience might not be applicable in the NC	No
Dialogue with self	There is no data to show that students are required to creatively imagine, think about, and reflect upon aspects of practice in the NC	Dialogue with self is not evident in the data	No
Observing	*I did not give health education alone; sometimes with a nurse and sometimes with my fellow students. This made me confident when giving the health education* (Student 1 NC1)	Students do not observe, instead, they are doing the activities	No
Dialogue with others. One-to-one or group dialogue between practitioners about a practice topic or activity	… *we also do monthly discussions and reflection on cases with the Head of the Puskesmas* (Nurse 1 NC3)	Dialogue and reflection are used by health service stakeholders	Yes
Doing (case studies, role-playing, simulation activities, and other activities)	*All students must provide family nursing care for families in the community* (Lecturer 1 NC2)	Students provide services in the real-life setting	Yes
3. **Service learning** (based on the review in Chapter 2)			
Structured intra-curricular experiential learning	*I have got a new experience because of this CHN placement in the city, we know about diseases in the community and we learn about epidemiology too* (Student 1 NC3)	Students learn from the experience	Yes
Reflection	All students have to write a journal while they are on placement, they must write their everyday learning activities (Lecturer 3 NC1).	Students' reflective activities through journal writing	Yes
Reciprocity	… *while they [nurses] share their knowledge with students, they also learn themselves* (Head of *Puskesmas* 3).	Reciprocal learning for stakeholders	Yes
Specified benefit and outcomes	*[…] now as the Provincial Coordinator of the CHN program, I know that the benefits [of the NC] are very big, especially for the data* (Provincial Coordinator of the CHN program)	Participants perceived benefits from the NC	Yes

Table 4.1 shows that there are overlapping components of adult, active, and service learning, such as learning from experience and reflective activities which are evident in the data. However, the analysis showed that components of service learning are well-matched with the characteristics of the overall NC model in West Java, Indonesia.

The pattern matching analysis in Table 4.1 shows, firstly, that the concept of adult learning, as the educational basis of the NC, is not evident in the practice of the NC. The concept of adult learning emphasises that participation in learning activities should be voluntary, objectives and instruction should be collaboratively determined, and learners should be adults and not traditional college-age participants (Merriam & Bierema 2013). This approach focuses more on the learning objectives of the students, and pays less attention to the nurses in the community health centres. Therefore, adult learning that is claimed to be the theoretical basis for education in the NC is not an appropriate educational method to facilitate optimal integration and collaboration between different stakeholders in the NC. Therefore, I argue that the main reason for the only partial integration of the NC is the inappropriate method of CHN education implemented within the NCs.

The second set of pattern matching data in Table 4.1, using the concept of active learning from Dewing (2008), also shows that the components of active learning are not evident in the practice of the NC. Active learning is defined as "an approach for in-depth learning that draws on, creatively synthesizes and integrates numerous learning methods. It is based in and from personal work experience of practitioners" (Dewing 2008, p. 273). Based on these definitions, active learning and practice development might not be appropriate for the NC model because this approach is based in and from personal work experience in the community setting. The data has shown that some students have work experiences in hospital setting; however, these work experiences are not applicable in the community setting. Moreover, the NC model does not apply numerous learning methods as outlined in the active learning approach. The NC uses experiential learning as the main learning method. Therefore, the central principles of active learning are not evident in the NCs, except for doing the experiential learning and dialogue with other and reflection, which are also components of service learning.

The third set of patterns identified in Table 4.1, using the components of service learning identified in Chapter 2, shows that these components are evident in the practice of NCs in Indonesia. Based on the literature review in Chapter 2, service learning is defined as:

> *A structured form of intra-curricular experiential learning that engages students in service and learning in real-life experiences using reflection and reciprocity as tools to achieve the specified outcomes and benefits for all stakeholders (see Chapter 2 page 28).*

Pattern-matching using service learning as the educational method in the NC shows that there is evidence of the components of service learning throughout the three NC cases. However, this evidence does not appear in all three of the NC sites, so the overall NC did not function in an optimal way. This is because the concepts of service learning are not recognised in the Indonesian nursing education setting. Even though the participants in this study did not mention service learning specifically, the data show that components of service learning have been practiced inconsistently across the three NCs. The inconsistent method of the operation and evaluation of the service learning approach has also been identified in the literature by Stallwood and Groh (2011). Service learning itself also needs to be strengthened if this educational method is to be formally applied in the NC. The method service learning needs to be structured and consistent with its evaluation in order to identify the effectiveness of this approach in the NC. Consistent operation and evaluation of service learning can provide clear expectations for academic staff and partner organisations (Narvasage et al. 2002). In order to maintain the consistent operation and evaluation of service learning, the proposed conceptual model that has been developed in Chapter 2 (see page 27) could be used to guide the implementation and evaluation of service learning approach.

In summary, one of strategies to address partial integration in the NC is choosing and appropriate learning approach to link CHN services, education and research. The result of pattern matching analysis has shown that service learning is the appropriate learning approach in the NC model because it can help to balance the agendas between community health services and nursing education stakeholders. The analysis of strategies to balancing the agendas among stakeholders will be presented in the next section.

4.3.2 Balancing Multiple and Competing Agendas

In order to improve the integration, the second strategy is to set common ground for, and balancing agendas among, the NC stakeholders. The findings of the situation analysis of the NC in the previous section demonstrated that there is a need for stakeholders to understand these different roles and purposes to achieve close collaboration in a fully-integrated system.

The nursing education institution has the potential to act as an entry point for improving practice through collaboration with health service organisations using service learning as one of the theoretical bases for the NC, as mentioned in the previous section. By using components of service learning, the NC model can focus on providing structured experiential learning for students, and also on conducting reflective activities in an integrated way for both community health service and nursing education stakeholders. Shared perceptions and

reflections between academic and health centre staff is suggested as a way forward by one of the lecturers:

> *We [academics and Puskesmas staff] should share similar perceptions about the NC. We should meet regularly to discuss our experiences and to reflect on this to increase the functionality of the NC (Lecturer 1 NC3).*

Discussion and reflection by both lecturers and community health centre staff is one of the methods suggested by participants to set a common ground for both education and health service stakeholders. In this way, the NC can focus on achieving a balance of agendas and mutual benefit for all stakeholders.

Another way of facilitating discussion and balancing multiple and competing agendas is to use effective communication. Communication has been identified as a key internal factor for the achievement of intended outcomes in the NC, particularly from participants' experience in the NC 3. The Head of *Puskesmas* 3 reported on her experiences in relation to communication in an organisation:

> *When you come to an organisation or institution, and you see that it [organisation] is very messy, and then there must be one factor, the communication does not work well. So, it is not skill or anything else. The key is in communication (Head of Puskesmas 3).*

This study has found that the nurses in NC 3 were involved more actively in the NC and CHN activities than their counterparts in NC 1 and NC 2. In relation to active involvement, the Head of *Puskesmas* 3 explained further about her communication with her staff and nurses:

> *Maybe the secret is in communication, communication between us is very intense. Every morning we have "apel pagi" [morning briefing], to give information to the staff, and then we have BBM [Blackberry Messenger] group. […] The relationship between the leader and the staff does not have to be physical, anytime anywhere we can communicate (Head of Puskesmas 3).*

Even though the Head of *Puskesmas* 3 claimed that she had good communication processes with her staff, this was not the case with the nursing education stakeholders, as stated by one of the students:

> *Actually, our interactions with nurses and the staff in the Puskesmas were good; however, there seems to be some miscommunication between the staff and our lecturers. It was good in the beginning, but in the middle [of placement] there was some miscommunication, so it was confusing (Student 2 NC3).*

Miscommunication can become one of the barriers to balancing multiple and competing agendas in the NC. Fortunately, the *Puskesmas* 3 nurses were supportive of the nursing students during their placements, as stated by one of the students:

Our [students] interactions with the nurses were good, the nurses respected the students. The nurses already knew the strong character of the Head of the Puskesmas. Some of the nurses also came to the field, for example when we needed help in the community (Student 1 NC3).

The quote displayed above shows that communication is the key factor for the adequate functionality of the NC. However, miscommunication occurs during interactions between different stakeholders in the NC and creates pressure and confusion for *Puskesmas* staff and students. Poor communication was also reported in another study by Andrews et al. (2006) which showed that there was inadequate communication between the education institution and the placement site, because most of the staff at the placement site were unaware of the student learning objectives.

This finding demonstrates that effective communication is required from both the *Puskesmas* and the nursing education institution leaders to achieve mutual benefit and positive mutual outcomes. The clarification of roles and curriculum requirements would further enhance inter-organisational communication between the education institution and the practice setting (Andrews et al. 2006). Through regular communication in the development of collaboration, the role of the stakeholders can be clarified which could then reduce concerns about the roles of the various stakeholders (Fuller et al. 2011). Adequate inter-organisational communication between the leaders of the *Puskesmas* and the nursing education institution would also improve mutual understanding between the stakeholders in relation to the NC model. Besides inter-organisational communication, adequate intra-organisational communication in terms interpersonal communication, such as between the *Puskesmas* leader and the staff, or between the lecturers and the students, is also needed. Improving interpersonal communication within the organisation could become a practical way for managers to enhance organisational performance (Simpson & Zorn 2004).

4.3.3 Clarifying the Ownership of the Nursing Centre

The third factor that contributes to partial integration within the NC is confusion about the ownership of the NC which is caused by a lack of recognition of the nursing profession in the community setting. Recognition of the nursing profession in the community setting is often very challenging because most people know that nurses work in the hospital setting. The lack of recognition of community health nursing as a profession is not only the case in Indonesia, but also in the UK where members of the public do not recognise the role of community mental health nurses (Crawford, Brown & Majomi 2008).

Therefore, the third focus of the NC is to provide clarity of ownership of the NC through professional socialisation in nursing within the NC model. Professional socialisation is defined as “a process whereby a person gains the knowledge, skills and identity that are

characteristics of a profession" (Brown, Stevens & Kermode 2013, p. 565). The findings in this study indicate that the NC can help to facilitate the professional socialisationof nurses and nursing students. This socialisation is very important, particularly in the community setting:

> *The situation in the community is different from the hospital setting … In the community setting, people in the community have power in their own environment, while we [community health nurses] do not have the power. Therefore, we need a strong socialisation of the [nursing] profession in the community (Suharyati Samba, the Founder of the NC).*

A major challenge is to actually undertake the professional socialisation of nurses in community health setting, as stated by the Head of *Puskesmas* 3:

> *[…] it is difficult to explain Perkesmas [CHN] to the nurses. I think it is a challenge for nursing education institutions to educate nurses and to give better understandings of the concept of Perkesmas (Head of Puskesmas 3).*

This finding shows that the best form to explain the concept of CHN as part of professional socialisation in nursing is conducted through education. Professional socialisation in nursing could be conducted in either the educational or the practice setting (Keogh 1997). Hence, lecturers play a major role in facilitating the professional socialisation of students.

Besides the professional socialisation of nurses and students, providing information about the NC service for people in the community could also increase people's awareness about the nursing services in the NC, as stated by the participants:

> *The NC is not familiar for patients and the people in the community. We need to provide more information [about the NC] so that people want to come to the NC (Lecturer 2 NC3).*
>
> *Factors that influence the operation of the NC are the limited number of nurses, and the lack of information about the NC for people in the community (Nurse 2 NC2).*
>
> *The weakness [of the NC] is the lack of information […], so it is difficult to know [about the NC]. I think socialisation of the NC must be increased so that everyone would know the NC service (Student 2 NC3).*

The community's awareness of the NC could also increase the utilisation of the NC by the public which would likely contribute to the more optimal functioning of the NC. Gaining community support in order to maintain a client base that utilises the NC service is important for maximising operation of the NC (King 2008).

This study has also found that the commitment of the leader at various levels is another prominent factor that could help to clarify the ownership of the NC. In order to facilitate the integration at an optimal level, and to achieve the adequate functionality of the NC, leaders from health offices, *Puskesmas*, and nursing education institutions need to have a strong commitment towards CHN and the NC. '*The commitment is not only from lecturers but also*

from the Head of the Puskesmas and health office leaders' (Suharyati Samba, the Founder of the NC).

The importance of gaining a commitment from the Head of the *Puskesmas* was also stated by the Provincial Coordinator of the CHN program:

> *The support is from the leaders […]. So, the best way is that there is support from the Head of the Division [of the Health Office], and then the Head of the Sub-Division, and the Head of the Puskemas (Provincial Coordinator of the CHN program).*

The Head of the *Puskesmas* plays an important role in the integration of the NC and the CHN in the *Puskesmas*. The Provincial Coordinator of the CHN program further explained how to convince the Head of the *Puskesmas* to support the operation of the NC:

> *This is the role of regencies or city health offices. […] So, from the regency or city health office, they invite the heads of the Puskesmas for socialisation (Provincial Coordinator of the CHN program).*

An understanding of the elements of the NC and the commitment of the key stakeholders including Head of the *Puskesmas*, leaders from health offices and nursing education institution are important in order to reach a consensus on the ownership of the NC. This consensus would enhance a sense of belonging to the NC.

The Head of *Puskesmas*' commitment and sense of belonging are not only important for the integration in the NC, but are also significant in helping nurses understand that the NC does not create a work burden for them if the CHN services are integrated into the NC, as stated by one of the nurses:

> *I do not think that the NC adds more of a burden for us. We are nurses, this is what nurses do. Sometimes, we find it difficult to fill in the family folder, but the Head of the Puskesmas always explains how to do it, and we also do monthly discussions and reflections of cases with her (Nurse 1 NC3).*

The nurses in NC 3 did not feel that the NC added an extra work burden for them because the Head of the *Puskesmas* had a strong commitment to the NC, and explained to the nurses how to conduct activities in the NC, as stated by one of the nurses:

> *The Head of the Puskesmas gives guidance and makes the nurses' job easier. She even gives examples of practice and role plays with patients in the NC (Nurse 2 NC3).*

Among the three NCs in this study, only the Head of the *Puskesmas* in NC 3 showed a strong commitment towards the NC and *Perkesmas*. This strong commitment from the leader also enhanced the commitment of the *Puskesmas* nurses towards *Perkesmas* activities, which can assist in achieving better integration in the NC.

In summary, the findings from document analysis and interviews data showed that the intended scope of the NC is to integrate CHN services, education, and research. Thus, there is a need for the NC to focus on strategies to overcome the problem of partial integration in the NC model. This study indicates that a service learning approach which consists of structured experiential learning, reflection, reciprocity, and the setting of specified outcomes and benefits for all stakeholders, alongside balancing multiple and competing agendas, and clarifying the ownership of the NC and enhancing stakeholders' sense of belonging to the NC, could be used to achieve the integration at an optimal level.

Focusing and scoping of the NC strategies are also important to identify the achievable outcomes that could be measured in the NC. Sequencing of outcomes using an outcomes chain can help to determine a series of achievable outcomes within certain time frames, namely short-, medium-, long-term, and ultimate outcomes (Funnel & Rogers 2011). The identification of an outcomes chain is needed in order to prepare for further activities in the program while in process of achieving the earlier outcomes (Funnel & Rogers 2011). Even though the focus and scope of this thesis is on the integration in the NC, the identification of an outcomes chain could help the NC team to prepare for further activities when the integration has been achieved at optimal level. The analysis of perceived outcomes of the NC from the interviews data will be presented in the next section, followed by the development of an ideal outcomes chain of the NC model.

4.4 Developing an Outcomes Chain for the Nursing Centre

The outcomes chain is the third feature of the theory of change that can assist the program manager to consider the ways in which a program works in order to achieve results and to address any issues that might affect the achievement of those results (Funnel & Rogers 2011). The outcomes chain can be used as a tool to think about how the NC will function in order to achieve short-, medium-, and long-term results. An outcomes chain is the heart of the program theory and shows the contingency relationships between these short-, medium-, and long-term results (Funnel & Rogers 2011). It can also serve as a strategic plan to provide a clear long-term vision and direction for the NC model in Indonesia and other countries.

In order to develop an outcomes chain for the NCs in this study, firstly, all the perceived outcomes for the stakeholders of the NCs were analysed from the interviews data. The stakeholders consist of students, lecturers, CHN service stakeholders including the Head of the *Puskesmas* and the nurses, decision-makers and leaders at the Provincial Health Office and the City/Regency Health Office, and also clients (individuals, families, and the

community). Secondly, these perceived outcomes will then be turned into a series of outcomes to demonstrate a number of causal pathways for improving the quality of CHN services and education in Indonesia which would improve the health outcomes for people in the community. There are a number of cross-over outcomes for these stakeholders as they tend to influence each other. However, in order to develop a comprehensive evaluation framework for the NC model, the series of outcomes need to be made clear in order to assist with the evaluation of the effectiveness of the NC model. Apart from identifying the series of desirable outcomes, the program manager also needs to pay attention to the potential undesirable outcomes that might be occurred (Funnel & Rogers 2011). This study has found that the stakeholders perceived both desirable and undesirable outcomes of the NC, and these outcomes will be presented in the following sections.

4.4.1 Desirable Outcomes

This study found a range of perceived desirable outcomes from the NC stakeholders' perspectives, including students, lecturers, nurses, health decision makers, and clients. The students reported that they had gained new knowledge for their future career as a nurse through their experiential learning, and had developed psychological skills and caring behaviours from their experiences in community engagement. The perceived outcomes for the lecturers included the opportunity to perform community service and to improve their practice skills. Through research and community service in the NC, lecturers can develop and test new intervention strategies and service delivery models that are appropriate for specific populations which can then be used to teach nursing students (Zachariah & Lundeen 1997). In this way, students would value the nursing research and evidence-based practice when they graduate (Pravikoff, Tanner & Pierce 2005).

Apart from the perceived outcomes for the students and the lecturers, this study has also identified a number of perceived outcomes for the nurses and the *Puskesmas*, including the achievement of the *Puskesmas*' targets, knowledge-up-date, collaborative learning, and increases in the nurses' self-esteem. The perceived outcomes for health-decision makers are the revitalisation of, and increased funding for, the CHN program, and achievement of the Health Office's targets. Finally, the perceived outcomes for the clients (individuals, families, and the community) include increased knowledge, improved attitudes and behaviours towards health promotion and disease prevention, and improved health outcomes, as reported by a number of families. These outcomes will be presented in the following sections.

4.4.1.1 Outcomes for Students

Through learning experiences in the NC and in the community, most of the students reported that they not only achieved the learning objectives, but also gained more practice experience in the community:

> *[…] in the NC, besides managing the patient, we organized time to meet the community, and have to prepare everything in case people in the community ask about things. It is really, really helpful (Student 3 NC1).*

The NC model provides opportunities for students to learn from their new experiences. They learn about how to live in different types of communities and can gain insight into health problems and community organisation. Most students reported that they not only gained family nursing and community health nursing skills, but they also improved their communication skills to further their career as a nurse:

> *For my future career as a nurse, I think the communication skills with people in the community could be useful and applied everywhere, including in the hospital, to give health education in the hospital, and for the preparation of patients' discharge (Student 2 NC1).*

Besides improving their communication skills, one student also stated that the placement gave him the opportunity to develop his psychological skills and perspectives through community engagement:

> *I have got a lot of experience, I know more, and also developed psychological skills. This was also training for our psychological skills as future nurses, because when I first came to the community, I felt anxious and nervous … I was confused about what to do, but after having this placement, I know what to do for next time, so it was training for our psychological capacity (Student 2 NC3).*

The development of psychological skills means that the student not only gained knowledge of CHN and how to deal with the community, they also learned how to cope when they encounter new and difficult situations in the community. In their placement through the NC model, students gained both communication and psychological skills which are important for their future careers as nurses. Another important outcome is the development of caring insights among the students:

> *Before I met the patient, I felt lazy to start it up [give intervention], but once I started [the interaction], I want to give, and want to give again. […] I used the same approach, just starting to give health education. When the client gave a positive response, then I felt good (Student 1 NC1).*

> *I spent most of the time visiting the "Posyandu" [health post in the community], families, and the community, because we have the task to practice in an area with high TB incidence to care for TB patients and the community (Student 2 NC3).*

The above quotes from students in NC 1 and NC 3 showed that students' caring insights were developed through providing care for families and people in the community.The students' interactions with the clients (individuals, families, and the community) were useful for the development of caring insights because they were involved in identifying the patients' problems through assessment, and then planning and implementing interventions that would help to improve the health outcomes of the clients. These insights would lead to the development of students' caring behaviour. Caring behaviour is defined as the actions or attitudes of nurses to understand, accompany, assist, and encourage clients and to treat them as unique individuals (Hwang et al. 2012). Use of the NC model is expected to facilitate the development of the caring behaviour of the students and the nurses working in the *Puskesmas* because this model can provide a consistent caring environment in the classroom and in practice, as pointed out by the founder of the NC model in Indonesia:

> *The nature of caring is a mutual relationship between the person who provides care and people who receive the care […]. The prerequisite of caring behaviour is a consistent caring environment whether in the classroom environment, in the [nursing] laboratory, or in the placement setting. The environment must be a caring situation because without this, the value of caring would not emerge, because it has to be mutual (Suharyati Samba, the Founder of the NC).*

The analysis of the NC documents also showed the concept of caring as one of the theoretical bases of the NC model. In these documents, caring is identified as one of the fundamental elements of nursing service, education, and research within the NC model that serves to facilitate the improvement of the quality of the nursing workforce in the community. Caring is the core of the nursing profession (Lukose 2011). Caring is argued as a distinct disciplinary foundation for the nursing profession because "it provides an ethical, moral, values-guided metanarrative for its science, its human phenomena, and its approach to caring-healing-person-nature-universe" (Watson 2008, p. 249). In the act of caring, there is a process of providing help and motivating others so that they can perform self-care and be responsive towards their own needs (Samba 2012).

This current study shows that the students learn to develop caring behaviour through interacting with fellow students, clients, nurses, and their lecturers in the community setting. The NC model is designed to provide a consistent caring environment for students and nurses. Students who have learnt about caring for patients in the classroom can then apply this knowledge consistently in the field. By observing the positive behaviour of nurses in the NC, and providing services to clients in real settings, students will be able to see the big picture of patients' health problems, provide holistic care, and develop caring behaviour towards patients, after they have graduated (Van Zandt, Sloand & Wilkins 2008). However, in this current study, students' caring behaviour did not occur at an optimal level in all NCs due

to the inadequate functionality of the NC. Similar findings were reported in a survey of 26 students in *Airlangga* University, Indonesia, which showed that 23.1% students demonstrated low levels of caring behaviour (Nursalam et al. 2015). This indicated that there is a need to provide a caring environment in the placement setting in order to encourage students to develop their caring behaviours.

In summary, the perceived outcomes of the NC model for students consist of the attainment of skills for CHN practice, and the development of caring behaviours. These outcomes lead to a high quality of graduated nurses. This will also contribute to increasing the quality of the CHN services in the future, and will improve health outcomes for people in the community.

4.4.1.2 Outcomes for Lecturers

In terms of the outcomes of the NC for lecturers, only the lecturers from NC 2 perceived benefits: "*all lecturers want to come to the NC because they need points for community service activities in order to get promotion or lecturer certification*" *(Lecturer 3 NC2).*

Even though NC 2 was the only venue to be used for community service activities, it is evident that the NC has the potential to provide benefits for the lecturers. The lecturers in NC 1 and NC 3 expressed that they were interested in developing their CHN skills and research through the NC model, as stated below:

> *I wanted the lecturers to also practice in the NC because when we [lecturers] give service in the NC, we can maintain our competency. It is beneficial to increase the lecturers' skills as well. However, this is difficult to do because our workload is so high, so we have limited time to practice in the NC (Lecturer 3 NC1).*

Despite the lack of time and the bureaucratic barriers for these lecturers in NC 1 and NC 3, they perceived the opportunity to conduct practice in the NC as positive outcomes for lecturers. These activities would also create opportunities for lecturers to conduct research in the NC. However, these activities need to be organised and integrated into the operation of the NC so that the quality of CHN education can be improved. With the high quality education, nursing students can engage in meaningful experiential learning, deliver quality care and develop positive attitudes in caring for clients in their professional practice (Koh 2012). Thus, when the students graduate and enter the workforce in the community setting, they could contribute in improvement work as part of their daily work as health professional (Cronenwett et al. 2007). In this way, they would participate in producing positive outcomes for the new students, other nurses in community health centres, and people in the community, as the ultimate outcomes.

4.4.1.3 Outcomes for Nurses and Community Health Centres

Generally, nurses perceived that there were advantages to the NC, because the lecturers and students in the NC were helping them to achieve the health education targets for the *Puskesmas*. There are various performance targets in the *Puskesmas* which are primarily based on six basic programs in the *Puskesmas* (Kementerian Kesehatan RI 2014). In addition to these targets, the nurses also need to report the achievements of the CHN program in relation to health education, health promotion, and disease prevention activities (Kementerian Kesehatan RI 2006). This perceived outcome of the NC model are mentioned by most of the nurses:

> *We are grateful because the lecturers come here and give health education in the NC almost every day. We [nurses] have difficulty in doing that because there are only four nurses here and we need to do a lot of activities (Nurse 1 NC2).*

Apart from helping nurses to achieve the CHN targets, two nurse participants perceived that there were benefits of updating knowledge from being involved in the NC:

> *The benefits of the NC is particularly to give knowledge up-dates, and I can learn from the students' reports about the latest knowledge on nursing, and can also improve the practice of nurses because their skills are more 'sharpened' by practicing in the nursing centre (Nurse 2 NC1).*

The Provincial Coordinator of the CHN program also stated that the NC should provide benefit for nurses, particularly in up-dating their knowledge:

> *With the NC, the Puskesmas nurses can refresh and update new knowledge about nursing care, they can receive knowledge transfer from lecturers or students, there are a lot of benefits from it [the NC] (Provincial Coordinator of the CHN program).*

She further explained that the updating of knowledge by providing nursing care services can also help to improve nurses' careers:

> *The NC is beneficial for nurses to fill in the credit points for promotion. In the NC, they can do nursing care services inside the building that can be used to fill in the 'DUPAK' [List of Credit Points for Promotion in Indonesia], or from the NC they can be referred for a home visit, it can also be used to get promotion. It is also good to improve their community nursing skills (Provincial Coordinator of the CHN program).*

The nursing student participants perceived that the updating of knowledge for nurses in the NC enhances trust towards the nurses and can allow them to get closer to people in the community. Therefore, the people in the community will listen to the health education provided by the nurses and implement it accordingly, as stated by one of the students:

> *Since people trust the nurses and ask critical question, the nurses will become motivated to read the books to add their knowledge. […] people in the community will be healthy through the health education given, and also improves the capacity and confidence of the nurses to give nursing care (Student 3 NC1).*

The Head of the *Puskesmas* has also seen significant changes in the updating of the knowledge of the nurses:

> *I have seen a significant change in my staff; whether they like it or not, they [nurses] have to learn again, because they have to teach the students (Head of Puskesmas 3).*

From the above information, the updating of knowledge for nurses is a distinct advantage of nursing involvement in the NC that can help to improve their performance in the community, as well as improving their career in the future.

Besides the updating of knowledge in the NC, the NC model can also become a venue for knowledge-sharing and collaborative learning between nurses, students, and clients. The Head of the *Puskesmas* stated:

> *When there are students on placement in the Puskesmas, all the nurses must transfer their knowledge to the students. We made a schedule for every nurse to share their experiences. […] while they share their knowledge with the students, they also learn for themselves about what the right practices are (Head of Puskesmas 3).*

Nurses and students can learn from each other in the NC, but they are not the only recipients of the learning benefits. The clients and students can also learn from each other. When the students are working in the NC, they can learn new knowledge and techniques for delivering health education to the clients using leaflets in the NC. The clients also learned from the students' explanations, as stated below:

> *The leaflets help make the health education clear and I can read it again at home. Yes, nursing students gave explanations about my daughter's TB infection in the NC ... (Client 1 NC3).*

In the NC, students function as learners because they learn from the nurses and the clients, but the students also function as teachers when they create the pamphlets to be used for other nurses and to provide health education for clients.

Learning together in the NC can also increase nurses' self-esteem and self-confidence, as stated by the Head of the *Puskesmas*: "*I saw a benefit that we have not realised before, and on the other hand, through learning, nurses can improve their self-esteem*" (Head of *Puskesmas* 3). The Provincial Coordinator of the CHN program also stated that the NC can help to increase the nurses' self-confidence:

> *All this time, the CHN program exists, but nurses in the Puskesmas are confused with what they have to do. With the NC, we have a model; particularly the NC has its own room in the Puskesmas. Therefore, nurses in the Puskesmas get their self-confidence back because Perkesmas (CHN) has its own place in the Puskesmas (Provincial Coordinator of the CHN program).*

Through the NC model, nurses have a dedicated venue for CHN activities inside the *Puskesmas* which means that the nursing profession is recognised by patients and other health professional in the *Puskesmas.* This recognition would increase the value of the community health nursing profession.

Teaching and learning together in the NC not only improves nurses' professional-esteem, it also increases the students' self-esteem because they are providing direct health education to people in the community, and they feel that the people respect the nursing profession, as stated by one of the students:

> *In the hospital, nurses are worthless. We nurses were underestimated by the families, more so if the patient comes from a wealthy family. In the community it is different, we give direct health education to the community; we feel that the people respect us so that it helps increase our self-esteem and self-confidence as nurses (Student 1 NC3).*

The NC in *Puskesmas* 3 is also gaining an international reputation. This can also help to increase the nurses' professional-esteem and confidence, as stated by the Head of the *Puskesmas*:

> *The WHO [World Health Organisation] then visited my Puskesmas, and there was a doctoral student from Japan who was interested in doing an internship for a month here, she went everywhere with the Puskesmas nurses. That experience made my nurses feel happy; this also increased their self-esteem (Head of Puskesmas 3).*

In summary, the outcomes of the NC model for nurses in community health centres consists of CHN knowledge updates, the sharing of knowledge, and collaborative learning in the NC. These outcomes lead to an increase in the nurses' self-esteem and self-confidence to perform activities in the NC. The ultimate result of these outcomes is a higher quality of CHN service in the *Puskesmas*. This ultimate outcome in conjunction with other health programs and sectors will contribute to improved health outcomes in the community.

4.4.1.4 Outcomes for Health Decision-Makers

Health decision-makers in this study include the leaders of Provincial and City/Regency Health Offices, the coordinators of CHN at the provincial and city/regency level, and the Heads of Community Health Centres (*Puskesmas*). One of the perceived outcomes of the NC for the health decision-makers is revitalisation of CHN practice. The founder of the NC stated that:

> *I am a lecturer, and the head of the community health nursing department felt that what we have been teaching [CHN] was useless because CHN practice did not exist. As a lecturer, I knew that this knowledge [CHN] is very useful. Therefore, I came up with an idea to revitalise the community health nursing program (Suharyati Samba, the founder of NC Indonesia).*

The NC is viewed as a model that can revitalise CHN *(Perkesmas)* practice in West Java, Indonesia. The use of the term 'Nursing Centre' as an alternative to *Perkesmas* in community health centres has created an opportunity to give new energy and activities to CHN practice in Indonesia. This was the reason for the up-scaling of the NC model throughout 27 Regencies and Cities by the Provincial Health Office. By the end of 2015, the Health Office expects that there will be at least one NC in every city and regency in West Java province. The revitalisation of CHN practices as an outcome of the NC model was also expressed by the Provincial Coordinator of the CHN program:

> *I personally see that Perkesmas (CHN) in regencies and cities have not been implemented well. After I read the Nursing Centre book […], I think if we developed this nursing centre model, then Perkesmas could be revitalised (Provincial Coordinator of the CHN program).*

Another outcome of the NC for health decision-makers is in the data that has been collected by the students as an unpaid workforce whichis beneficial for the *Puskesmas* and the Health Office. The Provincial Coordinator of the CHN program stated:

> *… When I was a student, I didn't really understand the benefits [of the NC], but now I know that the benefits are very big […]. It will help the Puskesmas staff, especially to get community data. So, it has to be started by the students, they should give the data to the Puskesmas, and then the data can be analysed … So, the family folder is forever, put it in the Puskesmas (Provincial Coordinator of the CHN program).*

The community data collected by the students are important for planning and budgeting at the provincial and city/regency levels, as well as providing evidence of the successful achievement of the Health Office's targets. Success in West Java has attracted the attention of the Ministry of Health which also provides more benefit for the Provincial Health Office:

> *We exposed our activities in West Java to the Ministry of Health. From there, they saw our success in West Java. Therefore, the Ministry of Health always involves West Java in training, development of the 'NSPC' (Norm Standard Procedure Criteria) to produce Ministry of Health decrees, guide books, and technical guide books. They always invite West Java (Provincial Coordinator of the CHN program).*

In summary, the outcomes of the NC model for health decision-makers in the Provincial or Regional Health Offices consist of the revitalisation of the CHN program, obtaining comprehensive community data for planning and budgeting, and the successful achievement of the Health Office's targets for the CHN program, which will lead to involvement in the development of health policy and increased funding for the CHN program. The ultimate result of these outcomes is the high quality of the CHN services in the *Puskesmas*. This ultimate outcome alongside other health programs and sectors will contribute to improving health outcomes in the community.

4.4.1.5 Outcomes for Clients (Individuals, Families, and the Community)

The NC improves patient care and knowledge through the provision of health education, so that people in the community can understand that medication is not the only issue associated with curing a disease. Other outcomes for clients include changes in knowledge, attitudes, behaviours, and/or health status. These changes are expressed by one of the client participants below:

> *Thank God there is a lesson learned from that [the health education], such as water should be clean, should be kept clean because a lot of bacteria entered the body of my children, such as from dirty hands. So, thank God now, this month my children have been given a healthy condition, no medicine. Hopefully, they will continue to be healthy (Client 1 NC1).*

This quote shows that the outcomes resulted from more focused health education and counselling. Another client felt that talking with the students was more relaxing and motivating after receiving health education at the NC:

> *Yes, the benefits are good … I like it when the students provide health education. I feel that it is more relaxed when I talk with the students, while the nurses are more serious (Client 1 NC3).*

Most of the clients said that they were satisfied with the nursing care provided by the nursing students and nurses:

> *[...] the nurses give explanations, and I can understand ... The service is good, fast, and direct. The facilities are also good. I am satisfied (Client 3 NC1).*
>
> *I am satisfied [with the health education], until my child complete the TB medication (Client 2 NC2).*

The benefits of the nursing centre for the community include improving community awareness of the communicable disease, and that the community will understand how to treat and prevent the spread of the disease to other families. With nursing student visits, the family will receive free health education and, in this way, they do not have to spend much money to go the *Puskesmas*.

Health education also changes some of the families' habits, as stated by one of the clients:

> *I really like spitting cough phlegm in front of the house, she [nursing student] said it is not allowed. Then, my children like to urinate everywhere; she [nursing student] said that is not good too. […] Now thank God, there is a change. We continue to learn from the leaflets with pictures. So, always be careful when coughing (Client 1 NC1).*

The students also stated that some of their clients do not change their behaviours, but they do show slight improvements in their levels of knowledge, as stated by one of the students:

There was one client that has changed his behaviour until now, but my two other clients have not changed totally. At least, there are some changes in their food intake, knowledge, and attitudes from the family (Student 2 NC3).

In summary, the health education and interventions being used in the NC may provide positive outcomes for clients and their families. The clients viewed the health education provided by the students as providing benefits for the family, because they can learn from the health education which also changed their knowledge, attitudes, and behaviours. Together with other health programs and interventions, the adequate functionality of the NC could contribute to the ultimate outcomes of the improvement of health outcomes for people in the community.

4.4.2 Undesirable Outcomes

Besides these aforementioned desirable outcomes, this study has also found three undesirable outcomes of the NC, including the extra work burden for nurses, conflict between students and the Head of the *Puskesmas*, and the stigmatisation of families who receive home visits. Even though these undesirable outcomes were one-off incidences reported in this study, it is important to recognise these because undesirable outcomes might become counterforces that can diminish the value of the NC model.

One nurse in NC 1 said that the nursing centre added an extra work burden for nurses, because they are already busy with their regular activities:

The NC would add a burden for the nurses. When there was no NC, we did not have to work in the NC, but there is the NC now, so it adds a work burden. It gives nursing experience, but it just adds to the workload (Nurse 1 NC1).

This same nurse further explained the reason for this added burden:

On average, nurses do not need [CHN], not special, as well as too busy. For example, the nurse should examine the patient in the BP [the general clinic][…] so no time to do nursing […] If we are not too busy in BP, then we can work in the NC, so, it is just difficult. Because the nurses are busy examining patients, time is also limited, nurses need to go to the field [for "Posyandu"], and one nurse must check the patient (Nurse 1 NC1).

The NC is perceived as adding a work burden because the nurses feel that CHN practice is not important for them, and that their priority is examining patients in the general clinic. This situation is of some concern given that nurses are educated to perform CHN practice rather than replacing physicians' work in the community health centres.

Another undesirable outcome is that there were conflicts between the students and the Head of the *Puskesmas* in NC 3:

> *There was one group of students who talked inappropriately to the Head of the Puskesmas. Therefore, she [the head] had a bad impression of all the students. […] We [students] could not work optimally because of the conflict (Student 1 NC3).*

> *As human, we [students] sometimes make mistakes. The Puskesmas is already good; they are responsive when there is a problem in the community (Student 3 NC3).*

This conflict may simply have been a one-off incident during the students' placement in the NC 3, but it created a significant disturbance to the students' learning processes. Conflict in the placement setting was also reported in an Australian study, of which 38% of students encountered conflict with the placement agency (Maidment 2003). Nursing education institutions need to be aware of the possibility of conflict between students and other stakeholders in the NC and to take preventative measures to avoid conflict in the future.

The final perceived undesirable outcome of the NC is that there has been stigmatisation of the families who receive home visits from the students. One of the clients said that she is not completely satisfied because she also wanted students to visit all families in the neighbourhood, stating that:

> *I felt the benefits of the student visits; unfortunately, this was only for one family. I want all families in the neighbourhood to also be visited by the students. So, my neighbours would not think that it is only my daughter who has the 'disease' (Client 3 NC3).*

This client had a daughter with TB and was afraid that people in her neighbourhood would stigmatise her family as having 'diseases' (Indonesian: "*penyakitan"*) because of frequent home visits from the students. Even though this was only one case, the lecturers and students need to be aware of the possibility of stigmatisation from people in the community, particularly for families who have stigmatised diseases, such as TB and HIV/AIDS.

4.4.3 Turning Perceived Outcomes into an Ideal Outcomes Chain for the Nursing Centre

After identifying the perceived outcomes of the NC from the various NC stakeholders, the next step is to combine these outcomes and turn them into an outcomes chain for the overall NC model as a single case study. As outlined by Funnel and Rogers (2011), the outcomes chain will be used to link the theory of change and the theory of action in Chapter 5 to provide a clear plan for activities in order to achieve the expected outcomes for the NC model in Indonesia, and on a global basis. The outcomes chain would also be able to assist the NC team to identify the factors that would enable or hinder the achievement of the outcomes as well as the long-term impacts of the NC model.

Figure 4.1 depicts the ideal outcomes chain for the overall NC model based on perceived outcomes that have been identified by stakeholders in the three NC sites in this study. In this figure, there are four levels of outcomes identified in this study, short-, medium-, and long-term, and ultimate, outcomes. The first level consists of three outcomes, including the review and collectively reconceptualise the theoretical basis of the NC that is consistently applied in practice, shared common ground for the purposes of the NC, and consensus on ownership of the NC. Achievement of these short-term outcomes would generate second-level (medium-term) outcomes, including the integration of CHN services, education, and research in the NC, and adequate functionality of the NC model. The successful achievement of the medium-term outcomes would lead to five long-term outcomes pathways for stakeholders, including for health offices' leaders, nurses and community health centres, students, lecturers, and clients (individuals, families, and the community). The clients' outcomes are presented in broken lines of boxes in Figure 4.2, because the achievement of outcomes for the clients stem not only from the NC model, but also from other programs in the *Puskesmas* and in the community. Even though the clients' outcomes are not solely a result of the NC model, their outcomes need to be included in order to generate a comprehensive evaluation framework for the NC model. Finally, the fourth level is the ultimate outcomes of the NC which are to improve the health and well-being of people in the community, and to achieve a high quality of CHN services and education.

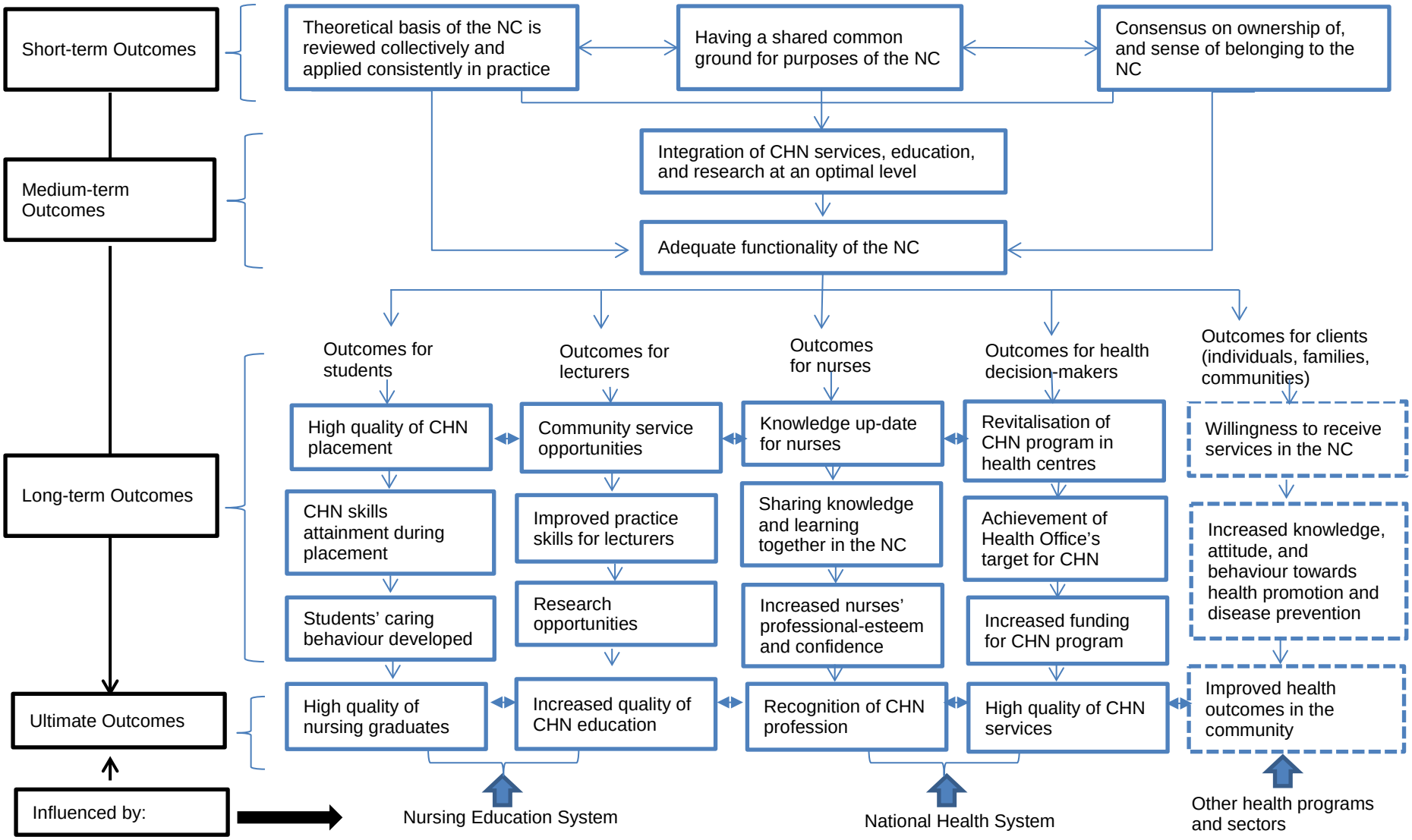


Figure 4.2 The outcomes chain of the NC model

4.5 Summary

Using the theory of change as an analytical framework, Chapter 4 has presented the data emerging from the situation analysis, focusing and scoping the strategy of the NC, and the overall outcomes chain for the Nursing Centre (NC) model in West Java, Indonesia. The findings show that the inadequate functionality of the NC in West Java, Indonesia, has been underpinned by a mismatch between the theoretical basis and the practice of the NC, multiple and competing agendas surrounding the purpose of the NC, and confusion about ownership of the NC.

There is much evidence to suggest that the concept of adult learning has failed to facilitate the integration of CHN education and practice. The evidence in this study shows that a service learning pedagogy could become an alternative educational method in the NCs, because this method has the capability to link and integrate the CHN services and education through experiential learning, reciprocity, reflection, and the setting of mutual specified outcomes and benefits for all stakeholders involved in the NCs. In this way, the stakehodlers' agendas could be balanced and the ownership of the NC could be clarified.

The findings reported in this chapter advances knowledge in the field of academic nursing centres by identifying factors and consequences related to the inadequate functionality of the NC, recognising the scope of the NC which is to achieve the integration of CHN services, education, and research, and providing an outcomes chain for all stakeholders in the NC model. From the participants' perspectives, a NC that integrates community health services, nursing education, and research, could produce outcomes for stakeholders, including students, lecturers, community health service stakeholders (including the Head of the *Puskesmas*, nurses, decision-makers, leaders of the Provincial Health Offices and the City/Regency Health Offices), and clients (individuals, families, and the community). In this study, the purpose of the outcomes chain is to identify the most important outcomes that need to be prioritised and addressed in order to achieve the NC's fullest potential. Based on the findings in this chapter, it has been identified that the integration of CHN services, education, and research at an optimal level is the most important outcome that needs to be initially addressed. Therefore, Chapter 5 will focus on an analysis to identify the success criteria of such integration, as well as to identify the factors that would enable or hinder the achievement of the integration, and what the NCs can do to address these factors.

CHAPTER 5 UNDERSTANDING THE CRITERIA OF, AND STRATEGIES FOR, INTEGRATION IN THE NURSING CENTRE

5.1 Introduction

Chapter 5 will present results and an analysis of the interview data and document analysis through the lens of the theory of action as an organisational and analytical framework. The theory of action is the second component of the program theory that outlines the mechanism to bring about intended changes within a program (Funnel & Rogers 2011). This chapter continues the analysis from Chapter 4 which identified the inadequate functionality of the Nursing Centre (NC) that needs to be addressed through the integration of Community Health Nursing (CHN) services, education, and research. As mentioned in Chapter 4, the term integration will be used throughout Chapter 5 to refer to the integration of these three areas in the NC. In addition to integration in these three areas, this chapter also refers to the integration of the NCs into the Community Health Centres (*Puskesmas*).

The theory of action is useful for this chapter because it can help to identify the mechanism which assists in producing optimal integration in the NC, identifying the assumptions and information about the factors which affect integration, and outlining the rationale for the choices and priorities of the activities that can be undertaken to achieve integration in the NC. According to Funnel and Rogers (2011), there are three key features of a theory of action: identifying the key indicators of or success criteria for the intended outcomes, the factors that affect the achievement of these outcomes, and the activities that could be undertaken to address these factors. In this chapter, only the main features of the theory of action will be used to guide the analysis of the theory for the NC, as Funnel and Rogers (2011) suggested that not all features are included in a program theory because some aspects of the outcomes can be considered as being more important than others.

The analysis of the outcomes chain in Chapter 4 demonstrated that the integration is the first step in overcoming the problem of the inadequate functionality of the NC, which then becomes the priority outcome to be addressed in this study. Hence, the integration as the medium-term outcome is the focus of the thesis, rather than the long term community health improvement outcomes. Therefore, for the purposes of this thesis, the features of theory of action will be used to analyse the key indicators of or the success criteria for the integration, the factors that affect the integration, and the ways to address these factors to achieve the integration at an optimal level.

5.2 Key Indicators of or the Success Criteria for the Integration

In this chapter, the priority outcome of the integration in the Nursing Centre (NC) that was identified in Chapter 4 will be defined more specifically, including the key indicators to measure successful and effective program performance (Funnel & Rogers 2011). The first step in developing a theory of action is to determine the relevant indicators of success criteria for the integration in the NC which identify the features of integration from the literature, the interviews data and documents analysis. This study has found four key indicators of or the success criteria for integration within the NC model: the intention to integrate, continuous and consistent operation of the NC, having a shared common ground, and consensus on ownership of the NC. Each of these indicators has specific attributes that are related to success criteria of the integration which will be used to develop an evaluation framework for the integration of the NC. The data analysis of these indicators and its attributes will be presented in the next four sections, and will be followed by the evaluation framework for the integration that will be presented in section 5.2.5.

5.2.1 Intention to Integrate

The findings indicate that some participants expressed their desire and hope that the NC model could assist with integrating CHN services, education, and research at an optimal level. The intention to integrate consists of four attributes, namely attitude toward integrative, subjective norms, perception of behavioural control, and the overall intention. These key indicator and attributes will be used to develop an evaluation framework for the integration in the NC.

The founder of the NC stated that integration was the original intention of the NC:

> *I think we should not separate CHN (Perkesmas) from the NC because the NC provides community health nursing services, and then there is education, research, and development. […] in fact, this is the initial concepts, the integrated management of education, service, and research and development (Suharyati Samba, the Founder of the NC).*

The lecturers and the Heads of Community Health Centres (*Puskesmas)* also supported the idea of integration in the NC, as stated by the following participants:

> *Our [lecturers] role in the NC is limited, we would like to have integration between education, service, and research and development of community health nursing in there [the NC] (Lecturer 1 NC3).*

> *I learned about Perkesmas [CHN] program, then I knew that we need the integration of education and health services, including the concept of Perkesmas [CHN] (Head of Puskesmas 3).*

The stakeholders' intention to integrate is considered to be the first key indicator that determines the success of the integration. The nurses also supported integration in the NC, particularly to integrate other programs within the NC in the Puskesmas:

> *The benefit of the NC is that there is a change of works system, programs do not work in a silo, but there is integration of programs (Nurse 3 NC1).*

> *Perkesmas in the NC can integrate with other programs. […] So, nurses can be involved in all programs, the Perkesmas can integrate many programs (Nurse 1 NC3).*

The nurses expected that the NC model would change the work processes in the *Puskesmas* because many health programs in the *Puskesmas* were fragmented. These fragmented programs made the work of the *Puskesmas* nurses ineffective because they did not collaborate with each other.

The participants also expected that the NC model would not only integrate CHN services and nursing education, but also the multiple fragmented programs in the *Puskesmas*. This is why the NC was supported by the Health Offices in West Java, as stated by the founder of the NC:

> *If I saw it from the Health Offices' point of view, they were aware that the NC has helped them. So, the head of the City Health Office at that time told me that money is not the problem. He said "Perkesmas is up to you, whatever you want to do". […] Why did the City Health Office support the NC so much? It was because when we have had the first NC presentation, the Head of the subdivisions from the Health Office came, and they saw at the presentation that their programs were being addressed by the NC activities (Suharyati Samba, the founder of the NC).*

The aforementioned quote indicates that nurses and other stakeholders at the Health Office had favourable attitudes towards integration. In the NC context, intending to undertake integration means that the stakeholders are coordinating their future plans for integration. Intention can be predicted through "attitudes, subjective norms, and perceived behavioural control" (Ajzen 2011, p. 450). Attitude toward a behaviour is the subjective belief that the person's behaviour would produce certain outcomes (Ajzen 2011). The NC stakeholders would be more likely to have a favourable attitude towards integration if they could see the benefits of integration for themselves, their work groups, and their organisation.

Apart from the favourable attitudes of individual nurses, the commitment from stakeholders to change the work culture also ensured that integration in the NC would be feasible:

> *Our work culture in here is different. […] The policy is different from when I was working in another Puskesmas. At that time, I never worked overtime because everyone has gone home and I did not want to work alone. However, it is different here […]. In here every morning, we have morning briefing, it is compulsory, to discuss our work for the day. Everyone works hard here, never jealous if someone goes home early. If our work has not finished yet, we will do overtime here (Nurse 1 NC3).*

The work culture in *Puskesmas* 3 was different from *Puskesmas* 1 and 2. In the data collection phase in *Puskesmas* 1, there were two nurses working after working hours in the emergency room; however, none of the nurses and staff worked overtime in *Puskesmas* 2, while in *Puskesmas* 3, some of the nurses and other staff did. These findings indicate that subjective norms and work culture can also contribute to the integration in the NC. In addition to attitudes, intention is also determined by subjective behavioural norms (Ajzen 2011) which reflect the stakeholders' normative beliefs and their motivations to comply with these beliefs (Bock et al. 2005). The normative beliefs in the NC reflect the stakeholders' ideal standards for CHN practice in community health centres who then comply with these beliefs. The normative beliefs are also influenced by the availability of social support from peers, the Head of the *Puskesmas*, and the presence of other barriers such as multiple roles, demands from the Health Office or from people in the community.

Despite the intentions of most of the participants in this study to integrate CHN services, education, and research, there were a few who thought that integration was not feasible. This view came primarily from NC 2 in which the collaboration between nursing education institutions and the *Puskesmas* was limited to community service by the lecturers. The lecturers in NC 2 particularly emphasised their community service activities in the NC:

> *We [lecturer] also conducted community service in the NC. Students are not involved in the NC [inside the Puskesmas] because there is no requirement in our curriculum for students to have a placement in the NC. Students focus on family nursing and the community (Lecturer 1 NC2).*

In West Java, Indonesia, nursing education institutions are divided into certain zones by the Regency and City Health Office in which the students and lecturers practice in the community. This zoning is used by the lecturers from NC 2 to collaborate with the Health Office through the NC, particularly to fulfil their community service roles in addition to student placements with families and in the community. In NC 2, the intention to integrate student experiential learning into the NC was less feasible because placements in the NC were not mandated by the curriculum.

Furthermore, the active involvement of nurses in NC 2 was less feasible because there were only a small number of nurses in *Puskesmas* 2:

> *The NC is under the CHN program in the Puskesmas. However, the nurses' involvement in the NC is limited because we do not have enough human resources, as there are only four nurses here (Nurse 1 NC2).*

The aforementioned quote indicates that nurses and lecturers perceived that they could not undertake the integration due to various barriers from both nursing education and community health centre stakeholders. In NC 2, the intention to integrate CHN services, education, and

research was not evident due to the lack of human resource capacity and the curriculum, both of which were perceived as barriers that were difficult to control by the stakeholders. Perceived control and perceived difficulty are variables of perceived behavioural control (Trafimow et al. 2002). Perceived behavioural control is related to internal and external factors such as “the information, mental and physical skills and abilities, the availability of social support, emotions, compulsions, and absence or presence of external barriers and impediments” (Ajzen 2011, p. 449). Therefore, the success of integration in the NC is also determined by the perceived behavioural control of stakeholders in relation to having or receiving sufficient information about the NC model, their mental and physical skills and abilities to perform activities according to the NC model, and their emotions and compulsion to collaborate in the NC. Trafimow et al. (2002) further suggested that the perceived difficulty is a better predictor for most behavioural intention than perceived control. These perceptions influence the intentions of the stakeholders to collaborate in order to integrate CHN services, education, and research in the NC.

This study has demonstrated that the stakeholders of the NC have certain attitudes, subjective norms, and behavioural control towards integration. As Bock et al. (2005) put it, individual attitudes reflect salient personal beliefs that are influenced by motivational forces which include individual benefits, group benefits, and organisational benefits. The findings of this study have shown that the intention to integrate among the NC stakeholders is considered to be one of the key indicators for integration which consist of four attributes: attitudes, subjective norms, perceptions of behavioural control towards the integration in the NC, and overall intentions.

5.2.2 Continuous and Consistent Operation of the Nursing Centre

This study has also found that another key indicator for integration in the Nursing Centre (NC) model is the continuous and consistent operation of Community Health Nursing (CHN) services, education, and research. This key indicator has two attributes which are continuity of the service provided and consistency of education and research in the NC. Similar with previous section, these key indicator and attributes will be used to develop an evaluation framework for the integration in the NC.

The issue of continuous operation was raised by the nurses in NC 3, as stated below:

> *Previously, there were students and lecturers who are on standby in the NC; however, they are not doing that now. Since lecturers from nursing education institution X are not on standby in the NC, we [nurses] took over the NC, and every nurse gets a turn to work in the NC (Nurse 3 NC3).*

The continuity of nursing education was also mentioned by the nurses in NC 1. The continuous involvement of the nursing education institutions was seen as an important part of the consistent operation of the NC. In NC 3, the nurses took over the NC when there were no students or lecturers available; however, this was not the case in NC 1 where the NC activities stopped when there were no student placement activities. In contrast to NC 1 and NC3, NC 2 had the continuous involvement of lecturers over the years, as mentioned in Chapter 4.

The findings of this study indicate that there is a lack of connection between the operation and integration. The operation of the NC is not yet clear and consistent, particularly for nurses in NC 1:

> *The concept of the NC is confusing, it is not clear. Nursing education institution X should come here more often and clarify the concept of the NC to us [nurses] (Nurse 2 NC1).*

Clarity of information about the indicators of the NC, and the nurses' involvement in the NC are important issues for facilitating continuous and consistent operation of the NC. In order to achieve the consistent operation of the NC, the "*stakeholders need to understand the elements of the NC*" (Suharyati Samba, the founder of the NC). An understanding of the theoretical basis of the NC was particularly important for the Head of the Community Health Centre (*Puskesmas*), because part of this person's role is to motivate the *Puskesmas*' nurses and staff to work in the NC. One of the lecturers explained:

> *This Head of Puskesmas "X" is well-known in Indonesia; she has been giving training and talking about nurses and the NC. Not all the Heads of Puskesmas understand about the concept and usefulness [of the NC] for their staff, so they want to do it [the NC activities] (Lecturer 1 NC1).*

From the document analysis of the NC publications, it was identified that the NC model has four different working mechanisms (see Figure 3, 4, 5, and 6 in Appendix 1), services provision inside the facility, outreach activities, education, and research (Samba 2002, 2007, 2012). One criticism of these four working mechanisms is that they do not link to the continuous and consistent integration in the NC. A person reading these documents might assume that CHN services, education, and research are not a part of NC activities. Therefore, there is a need for a clear relationship between the NC and the clinics in the *Puskesmas* through clarifying the elements of the NC in order to maintain the continuous and consistent operation of the NC.

The findings from the document analysis and interviews demonstrate that there are inconsistencies in CHN services inside the facility. In the actual operation of the NC, the services provided are limited to health education, while the mechanism of client referrals is

also unclear as the NC only sees clients who have been referred from the clinics in the *Puskesmas.* Most of the participants, particularly the students and the nurses, mentioned health education and counselling as the activities inside the NC facility. This was also confirmed by one of the lecturers:

> *The NC according to the students is only for health education. There are no other activities that are conducted by students. Registration patients must go to the "poli" [Puskesmas' clinics] first, and then to the NC. The patients from registration can go straight to the NC, but the students do not know this (Lecturer 1 NC1).*

This study has also found that the operation of CHN services in the NC facility is not yet consistent. A lecturer from NC 3 suggested that the flow of CHN services inside the NC facility should be clarified:

> *So, the service flow must be clear; in that way, the NC can work if the flow of services is clear. For example, from administration or registration, next to examination, and then take medication and so on, and then go to the NC, and it should become a compulsory system (Lecturer 2 NC3).*

Apart from the activities conducted inside the NCs, the students also focused on outreach activities in the community. The outreach CHN services were conducted in the target area by nurses and students with supervision from the lecturers. The outreach services consisted of follow-up care from individual cases in the *Puskesmas*, family nursing care, gerontology nursing care, care for specific groups, and community health nursing care in the target area (Samba 2002, 2007, 2012). The work process for these outreach activities was found in the document analysis, and is as follows:

> *Students and nurses conduct community assessments with community organisations and other sectors in the community. The findings of these community assessments are presented to the community in order to collaboratively develop an action plan to address the community problem. Apart from problem solving in the community, the results from such assessments can also be used to determine the number of families that might have health problems and need intervention. Such an intervention could be in the form of health education, counselling, direct care, or a referral. These families then receive nursing care from the students and nurses. At the end of the nursing care, it is hoped that the families' health problem has been resolved. These activities are expected to increase the life expectancy of people in the community (Samba 2012, pp. 47-8).*

Even though the NC documents outlined the working process for CHN outreach activities, most of the nurses perceived that the CHN (*Perkemas*) program consisted only of home visits, as stated by the Head of a *Puskesmas*:

> *After reading about Perkesmas [CHN] and the NC, I understand that it is a very useful approach. Unfortunately, not all the nurses understand Perkesmas. They perceive that Perkesmas is only home visits. In fact, it is more than that (Head of Puskesmas 3).*

The nursing students also saw clients in their homes more so than in the NC facility, as stated by one of the lecturers:

In the new curriculum, students must do home visits to patients who come to the NC, but not all patients. Patients who have health problems that require a home visit will be visited by the students (Lecturer 1 NC1).

All the students from the three NCs stated that they spent more time practicing with families and in the community, so the students did not see home visits and community activities as part of the NC model:

We [students] focus on practice with families and the community. We do not practice in the NC, we only see the coordinator of the NC whenever we have data or things that need to be discussed with the Puskesmas staff (Student 2 NC2).

The data above show that there are variations in the operation of CHN services, education, and research in the NC 1, 2, and 3 sites. Clear working processes which lead to the integration are needed to maintain the continuous and consistent operation of the NCs as one of the key indicator of succesful integration in the NC.

5.2.3 Having a Shared Common Ground

The findings of this study have shown that having a shared common ground on the purpose of the NC among stakeholders is needed for the integration in the Nursing Centre (NC). This key indicator has four attributes which include knowledge sharing, focus of the NC, type of collaboration, and reciprocity and leverage for organisations based on the target achievement. As well, these key indicators and attributes will be used to develop an evaluation framework for the integration in the NC.

An understanding of the needs of each stakeholder would create mutual benefits that would lead to having shared common ground for integration in the NC, as stated by the participants:

So, the NC model is expected to have a domain from the Puskesmas which tells us what we need. The Puskesmas said we need that, and this nursing education institution helps to overcome certain problems (Head of Puskesmas 3).

As lecturers, we have a responsibility to give services for both students and people in the community (Lecturer 2 NC2).

As discussed in Chapter 4, there are multiple and competing agendas surrounding the purpose of the NC model. Despite these agendas across the three NC sites in this study, there is one basis for common ground that has been identified in this study, which is to provide community health nursing care that will benefit their clients (individuals, families, and people in the community). Most of the stakeholders emphasised the benefits of the NC for clients. The following excerpts are examples of students' and nurses' views about this:

The benefit of the NC is very big for people in the community because they can receive free health consultations. People do not have to spend money, but they will know how to manage their illness, such as TB and diabetes mellitus (Student 3 NC1).

Patients can receive more knowledge in the NC, we can prevent patients from getting worse, […] we explain how to take care of the disease at home so that the patients can be independent in conducting self-care (Nurse 1 NC3).

These findings show that people-centred care (including individuals, families, and people in the community) is the common ground that can bring all the stakeholders together in a close collaborative and integrated system within the nurse-led care model. Putting people at the centre of the NC could also become the shared common ground for the purposes of the NC model, because all the stakeholders would embrace the benefits of inter-sectoral collaboration and better coordination of care around people's needs, which will give access to comprehensive quality services (WHO 2015). Even though the different stakeholders might have different agendas, such as the achievement of *Puskesmas*' targets, student learning, community service, or research, these could be synchronised towards the improvement of health outcomes for individuals, families, and people in the community through close collaboration between the nursing education institution and the *Puskesmas*. This expectation for close collaboration was expressed as follows:

With the NC model, I would hope this Puskesmas can become a 'teaching' Puskesmas where nursing education institutions and the Puskesmas work together very closely (Acting Head of Puskesmas 1).

According to Heath, Wise and Reynolds (2013), there are a number levels of collaboration, firstly, basic collaboration onsite where stakeholders co-located in the same facility but they use separate, or some shared, systems, and how these organisations work together is not clearly defined. Secondly, close collaboration onsite with some system integration or approaching an integrated practice. Thirdly, full collaboration in a transformed/merged integrated care practice means that organisations are working together in close collaboration as a single health system treating the whole person (Heath, Wise & Reynolds 2013). Through close collaboration in a 'teaching' *Puskesmas*, not only the clients but also the *Puskesmas* staff, especially the nurses, could gain benefits. The nurses could up-date and share their knowledge with other nursing education stakeholders, as discussed in Chapter 4 (see pages 121-122).

Apart from the levels of collaboration, from the perspective of the Heads of the *Puskesmas,* they expected that the involvement of nursing education in the NC could become a form of leverage to improve the performance of the *Puskesmas* and the health outcomes for people in the community:

In the Puskesmas without the NC, students come to the Puskesmas, and they just follow the nurse or midwife everywhere. […] nursing students did not provide any leverage or impact for the Puskesmas; the students are only bothering the Puskesmas, but if we arrange the students' activities carefully, then they can create a form of leverage for the Puskesmas (Head of Puskesmas 3).

Indeed, the involvement of nursing students in NC 3 has created leverage for the achievement of higher levels of family independence in *Puskesmas* 3. Every month, nurses have certain targets for conducting home visits and improving family independence to the highest level (level 4) for their clients. As mentioned in Chapter 1, the "Family Independence Level" is an indicator required by the Indonesian Ministry of Health to measure the performance of CHN activities in the *Puskesmas*. There are seven criteria in the family independency indicator, which include that the family can accept the nurses, accept the health services as planned, state the problem correctly, use health facility as recommended, perform simple care as recommended, perform prevention activities actively, perform health promotion activities actively. The family independence level 4 means that the family has shown all of these seven criteria after receiving nursing care. This target was pointed out by one of the Heads of the *Puskesmas*:

> *Every month, staff write a monthly report of the achievement of the targets, […] the nurses will present the achievement of the targets for families with independence level 4 for the Perkesmas (CHN) program, and how many families that have completed care (Head of Puskesmas 3).*

With the NC model, the achievement of family independence level 4 in the NC 3 is higher through the involvement of nursing students in the NC, as stated by one of the nurses:

> *Last year [2013], we did not achieve our targets, especially for families with independence level 4. Our target was 360 families; however, we only were able to work with 289 families with independence level 4. Our achievements were higher when there were student placements here, usually in January (Nurse 1 NC3).*

Using NC 3 as an example, the quote shows that 289 out of 360 families or 80% of the families have reached the "Family Independence Level 4". Families who are classified as having an independence level of 4 means that they can undertake disease prevention and health promotion activities in an active way. Students have contributed to the improvement of family independence in health through providing family and community nursing care as part of their learning objectives, as stated by one of the lecturers:

> *They [students] have learning objectives for placements in the Puskesmas, including in the NC facility, in families, and in the community. Students must provide care for two families with health problems and one elderly family in their designated community area. They also perform one home visit for a patient who comes to the NC in the Puskesmas. Each student is also assigned an area in the community to be managed for health promotion activities as part of their CHN course (Lecturer 1 NC1).*

Through placement in the NC, students not only achieve their learning objectives to provide nursing care for families and the community, but they also provide a free health service for the community. The results from document analysis of NC 3 data showed that without students' placement, the *Puskesmas* nurses achievement was less than 50% of their targets.

Even though the students do not get paid to provide health services to families and for people in the community, all the students acknowledged that this learning experience had significant benefits for their future careers:

> *When we graduated, we have to look for a job. […]. So through placement in here [NC 3], we know that the community is like this. It is different from the hospital setting […] In the community, we have to find the problem by ourselves. Before having this experience, I imagined that it would be difficult, but actually it is not as difficult as I imagined after all (Student 2 NC3).*

Placement in the NC provided the opportunity for the nursing students to learn about how to live in the community, identify people's problems, and to find solutions to these problems. In turn, these problem-solving skills are useful for their future careers as nurses.

Apart from gaining benefits from experiential learning for both the students and for people in the community, the collaboration between nursing education and the *Puskesmas* also helped the *Puskesmas* to leverage the quantity and quality of family nursing coverage as one of the CHN services. In addition to the family nursing activities, the students also provided interventions to increase people's understandings of the importance of health promotion activities in the community. Thus, the integration in the NC has the potential benefit of improving the health status of people in the community.

The findings in this study have shown that a shared common ground in the NC could become one of the criteria for success in the integration. Based on analysis of interviews data and documents, it has been identified that the attributes of the shared common ground are knowledge sharing, focus of the NC, the type of collaboration, and reciprocity and leveraging of the power of nursing education towards the improvement of the health outcomes of people in the community. However, these are not enough to enhance the integration in the NC. This integration also needs to be supported by consensus on ownership of the NC so that there will be clear authority, rules for the operationalisation of the NC, recognition, and job descriptions in the NC. The analysis of these indicators will be presented in the next section.

5.2.4 Consensus on the Ownership of the Nursing Centre

As discussed in Chapter 4, there is confusion around ownership of the Nursing Centre (NC) among the stakeholders. Therefore, the last key indicator for success criteria of the NC is a consensus about ownership of the stakeholders to the NC, so that integration in the NC could be achieved. This key indicator consists of four attributes, namely the policy for the NC, Memorandum of Understanding (MoU), job description, recognition of contribution of all stakeholders through comprehensive documentation and reporting. Similar with other three

key indicators, the key indicator and attributes in this section will be used to develop an evaluation framework for the integration in the NC.

The Heads of the *Puskesmas* suggested that such a consensus should be written into the initial planning stage of the NC:

> *There should be a Memorandum of Understanding (MoU) between the Health Office and the nursing education institution about a clear vision and mission for the NC (Head of Puskesmas 2).*

> *The NC must have a vision and mission that has been discussed with the Health Office, the Puskesmas, and the nursing education institution. This vision and mission should be written into the MoU between the city Health Office and the nursing education institution. In this way, we will have a clear direction for the collaboration (Head of Puskemas 3).*

The vision and mission of the NC is viewed by the participants as an important basis upon which to clarify the ownership of the NC. The results from the document analysis, however, did not find any written vision and mission for the NC model. There is only a general aim of the NC, which is to provide high quality services and nursing education in an effective and efficient way (Samba 2002). The importance of a written agreement for the NC was also put forward by the Provincial Coordinator of the CHN program: "*The Provincial Health Office, the Regency/City Health Office, and the nursing education institution should meet in the Puskesmas to discuss and set up a MoU*". The above data show that there is a need for a clear vision and mission to act as the basis for the integration in the NC. Therefore, a vision and mission that are written into the MoU can become one of the attributes for an agreement about the ownership of the NC.

The MoU signed by the City or Regency Health Office and the nursing education institution can also serve as the basis for collaboration between these two organisations. Apart from a clear vision and mission in the MoU, the findings also show that there is a need for a written policy to act as a legal framework to undertake NC activities in the Community Health Centres (*Puskesmas)*. One of the students stated that:

> *'the weakness of the NC is from the legislative side, people are not aware of it, so we [students] still have limitations to be involved in the NC and we need more support from the nurses who are competent' (Student 2 NC1).*

This legal aspect has limited the involvement of students in the NC. The lack of a written policy for the operationalisation of the NC was also raised by the Provincial Coordinator of Community Health Nursing (CHN) program from the Health Office:

> *There is no NC policy from the governor; the policy of 'at least one NC in every regency/city in West Java' is from the Health Office. […] Now, after the new RPJMD [Provincial Development Plan] 2013‑2018, we included the indicators of Perkesmas [CHN] and the Nursing Centre to the strategic plan of the Provincial Health Office. So, the initiative came from my division office*

... It was stated that by the end of 2015, there will be at least one NC in every city/regency in West Java Province. However, there is no written decree about this policy (Provincial Coordinator of CHN program).

The lack of a written policy about the establishment of the NC would influence its operation when there are structural and staff changes at the Health Offices or at the *Puskesmas* level. Moreover, this lack of a written policy has also caused different interpretations of, and confusion around, the position of the NC in the *Puskesmas*, particularly for nurses:

Nurses' understandings about the Nursing Centre and the nursing process are still low. Nurses felt confused about the Nursing Centre, whether it is a new program in a Puskesmas [community health centre] or if it is not (Nurse 3 NC1).

In order to clarify the position of the NC in the *Puskesmas*, a written policy from the government is needed. Therefore, such a written policy is considered as one of the attributes of the agreement about the ownership of the NC.

As discussed in Chapter 4, Section 4.2.4.3 (page 98-100), the nurses perceived that the *Puskesmas* programs were not part of the CHN (*Perkesmas*) program, and most felt that they did not belong to the nursing profession when they were performing other program activities in the *Puskesmas*. For example, a nurse who has responsibility for a Tuberculosis (TB) program thinks that this part of her job is not part of nursing. This narrow view of nursing is also influenced by the view of the Puskesmas leaders and managers, as stated by the Head of *Puskesmas* 3:

Why Perkesmas is not working properly? It is because the Head of the Puskesmas does not understand the process of Perkesmas. I want to help to change the mindset of the leaders and managers of the Puskesmas so that they have a complete picture of Perkesmas. All programs should be covered by Perkesmas (Head of Puskesmas 3).

Apart from the need of legal policy of the NC, there is also a need of the change for CHN legislation as the foundation of the NC model as a compulsory program in *Puskesmas*. This is strongly supported by the Heads of the *Puskesmas*:

This concept of Perkesmas must be mastered by the Head of the Puskesmas. Personally, I agree if the Perkesmas become basic [compulsory] program, because we are in an era of decentralisation. We get resource funding from the basic program. The work of the Head of the Puskesmas is overwhelming … People are only concerned about the basic six, even though the fact is that all of the health programs can be included in Perkesmas. If Perkesmas included the basic seven, then people would be concerned about Perkesmas, because it is the soul of the Puskesmas. The back-bone of the Puskesmas is Perkesmas [CHN], because more than 50% of the health personnel in the Puskesmas are nurses (Head of Puskesmas 3).

The interview data shows that the Head of the *Puskesmas,* who is also a medical doctor, recognises the importance of CHN (*Perkesmas)* as the backbone of the *Puskesmas* activities. Unfortunately, the potential of the nurses has not been recognised and fully utilised. Underutilisation of nursing potential happens not only in Indonesia, but has also

been identified in Australia where community nursing is an underdeveloped resource, hence there is an opportunity to improve community health nurses' roles to strengthen the health system (Keleher et al. 2009).

The recognition of the potential of community health nurses can support the professionalism of CHN practice in the *Puskesmas*, as the basis of the NC model. This lack of recognition also influences the nurses' lack of a sense of belonging as community health nurses because they do not have a clear job description in the *Puskesmas.* The lack of a job description has caused difficulties in evaluating the type and quality of nursing service provision in Indonesia which can lead to sub-standard care delivery (Hennessy et al. 2006a). The Provincial Coordinator of the CHN program has stated the need to identify a job description for nurses and related administrative requirements in the initial planning of the NC model:

> *The nursing education institution and the Puskesmas should prepare a follow-up plan and administration in their own organisation; […] and prepare assignment letters, job descriptions, and scheduling from the leader of these organisations (Provincial Coordinator of the CHN program).*

This quote shows that the existing job descriptions need to be prepared by the Heads of the *Puskesmas* and the leaders of nursing education institutions, because there is no standardised job description for nurses in Indonesia (Hennessy et al. 2006a) . On the one hand, preparing these documents for the *Puskesmas* and nursing education institutions would capture the realistic capacity of these two organisations; on the other hand, this process would create disparities in nurses' work performance in the NC because each organisation is likely to have different agendas and different directions for the operation of the NC. The lack of a clear job description leads to role ambiguity and conflict (Hayes, L. J. et al. 2012) which then increases the potential of a higher turnover of nurses (O'Brien-Pallas et al. 2010). Therefore, a clear job description for the NC personnel is proposed as one of the attributes for a consensus on the ownership of the NC.

In conclusion, there are four attributes related to a consensus on ownership of the NC. These attributes consist of written policy, recognition of the contribution of the nurses, a MoU, and clear job descriptions for the NC. All of key indicators and attributes that have been identified in previous sections will be combined together as an evaluation framework for integration in the NC. This framework will be presented in the following section.

5.2.5 Evaluation Framework for Integration in the Nursing Centre

Overall, this study has identified four key indicators for the integration in the NC. These key indicators are the intention to integrate; continuous and consistent operation of the NC;

having a shared common ground; and consensus on the ownership of the NC. Each of these indicators contains a number of attributes. In total, there are 14 attributes that could be used as the criteria for the success of the integration in the NC. The key indicators and its attributes are the essence of the evaluation framework of the integration because they will be useful to evaluate the success of a program, as well as providing direction for the preparation and operation of a program (Funnel & Rogers 2011).

In this study, the proposed evaluation framework for integration in the NC consists of cultural and process aspects. As Strandberg-Larsen and Krasnik (2009) suggested, cultural and process aspects of the evaluation instrument should be included in the development of a new measurement, in addition to measures of structural integration, and intermediate and ultimate outcomes. Cultural measurement is related to the willingness to take part in the integration of healthcare delivery and education, while process evaluation is an assessment of the actual coordination activities within the model (Strandberg-Larsen & Krasnik 2009). The cultural aspects in this NC evaluation framework include the intention to integrate and having shared common ground through which to demonstrate the willingness of stakeholders to take part in the integration. The process aspects of the evaluation framework consist of continuous and consistent operation of the NC, and a consensus on the ownership of the NC, which assess the actual coordination activities within the NC model. The evaluation framework for the integration in the NC is presented in Table 5.1. This framework can be used at any stage of the NC development. At the preparation stage, this evaluation framework can be used as a form of guidance to evaluate the feasibility of the establishment of the NC model. In the termination stage, this evaluation framework can be used to evaluate the actual integration in the NC.

Table 5.1 Evaluation framework for the integration in the NC

Key Indicators	Attributes
Intention to integrate	Attitude towards integration
	Subjective norms towards integration
	Perception of behavioural control towards integration
	Overall intention to integrate
Continuous and consistent operation of the NC	Continuity of the service provided
	Consistency of education and research in the NC
Having shared common ground on the purpose of the NC	Knowledge sharing
	Focus of the NC
	Type of collaboration
	Reciprocity and leverage for organisations based on the target achievement
Consensus on ownership of the NC	Policy for the NC
	Memorandum of understanding (MoU)
	Job description
	Recognition of the contribution of all stakeholders through comprehensive documentation and reporting

After identifying the key indicators and its attributes of the success of the integration, the next step is to identify the factors affecting the successful achievement of the integration of CHN services, education, and research in the NC. These factors, being the second feature of the theory of action (Funnel & Rogers 2011), will be identified in the following section.

5.3 Factors that Affect the Integration in the Nursing Centre

In the previous section, the key indicators and its attributes were identified as success criteria for the integration at an optimal level. In order to achieve integration in the Nursing Centre (NC), a number of assumptions relating to the factors that facilitate and impede achievement need to be identified (Funnel & Rogers 2011). The findings from analysis of interview data and documents show that factors that affect the integration consist of human resources capacity, time management, infrastructure and funding, a comprehensive and effective recording and reporting system, and a comprehensive evaluation plan.

5.3.1 Human Resources Capacity

The limited human resources capacity is considered as the most difficult barrier for Community Health Nursing (CHN) practice in the NC.

> *The most difficult barrier in the NC is human resources, especially the number and capacity of the nurses. […] Another thing is the capacity of the nurses, because most of them still have an educational background of SPK [high school grade nurse]. This often becomes a barrier to performing the family nursing process (Head of Puskesmas 3).*

The issue of there not being enough nurses in the Community Health Centre (*Puskesmas)* to run the NC is also evident in the NC 1 and NC 2 sites. This issue was also experienced by the founder of the NC:

> *The biggest barrier is the person who wants to work in the NC. The number of human resources is a major barrier, only a few nurses want to work in the NC (Suharyati Samba, the founder of the NCs).*

The capacity of the nurses to perform family nursing and the CHN process also becomes a barrier for the NC model. The low capacity levels of the nurses and students in conducting meaningful and beneficial interventions for clients were also recognised by the founder of the NC and the Provincial Coordinator of the CHN program:

> *I saw the weaknesses of our colleagues for CHN service in the Puskesmas was that they do not have the capacities that can be used by people in the community. They just talked, gave health education and counselling, but they did not perform interventions that could give direct benefits for people in the community (Suharyati Samba, the founder of the NCs).*

> *From the results of monitoring in 27 regencies, we recognised the barriers to the program. One of the barriers is the lack of capacity of the nurses in the Puskesmas to perform nursing care [process] (Provincial Coordinator of the CHN program).*

These findings demonstrate that human resources capacity particularly that of the nurses, can affect integration in the NC. The low capacity to undertake the CHN services could increase the perceived difficulty of integration among the NC's stakeholders, which may affect the intention of stakeholders to integrate CHN services, education, and research in the NC.

In Indonesia, nursing care follows a standard process, including the documentation that has to be completed by nurses in the hospitals and in the community setting. In the community setting, there are family nursing processes and community health nursing processes. These processes consist of assessment, planning (including a nursing diagnosis), implementation, and evaluation (Kementerian Kesehatan RI 2006). These family and community nursing processes are relatively new in the community setting, so nurses with an education background equivalent to high school grade may find these nursing processes difficult to complete. These difficulties arise because these nursing processes are usually taught at the diploma or bachelor degree level of nursing. Another issue may arise is if the Coordinator of the CHN program and/or the NC is not a nurse, because they do not have the skills to do the nursing processes. This issue was raised by a lecturer and most of students:

> *[…] previously, the person in charge [in the NC] was a nurse and everything worked well, […] however, now a midwife is in charge in the NC, does it work? I saw a big difference between a nurse and a midwife as the person in charge of the NC (Lecturer 2 NC3).*

> *So, I strongly agree with the NC, but it has to be supported with nursing human resources (Student 3 NC 2).*

The NC is open to collaboration with other health professionals in the *Puskesmas;* however, one participant expressed that ideally a nurse should become the coordinator of the NC in *Puskesmas* because a person from a different profession would have a different attitude, subjective norms, and perceived behavioural control about the operationalisation of in the NC model. According to Lecturer 2 in NC 3, the coordinator of the NC needs to have a good knowledge about CHN theory and practice because the coordinator will need to supervise nursing students who undertake Diploma III or Bachelor of degree in nursing, as well as to motivate other nurses in the *Puskesmas* to undertake the CHN activities. However, there is a phenomenon in Indonesia where midwives are given nursing duties, which is inappropriate because the focus of care between these two professions are different (Hennessy et al. 2006a). According to the International Confederation of Midwives (2011, p. 1), "midwives are the most appropriate care providers to attend women during pregnancy, labour, birth and the postnatal period". This indicate that midwives have distinct roles and competencies in relation to women and children while nurses have a greater focus on health promotion, prevention and the care of individuals of all ages, families, groups, and communities in all

settings using autonomous and collaborative care (International Council of Nurses 2009). Moreover, Indonesia is also experiencing a rise in infectious diseases which require highly specialised nursing care (Hennessy et al. 2006a). In order for the integration takes place in the NC, the coordinator of the NC could become a champion who has a sound knowledge of CHN and a strong intention to integrate CHN services, education, and research within the NC to facilitate the collaboration with nursing education institutions.

Since the CHN is one of the main bases of the NC model, the requirements of the NC Coordinator is similar, or higher, than the requirements of the CHN Coordinator in Indonesia. According to the Kementerian Kesehatan RI (2006), the criteria for the Coordinator of CHN in the *Puskesmas* are: a nurse with an educational background (at least) of Diploma III in nursing, has received CHN training, and has experience in conducting CHN activities. These criteria are important because the Coordinator of CHN has the responsibility of supervising other nurses in the *Puskesmas* in performing their roles as community health nurses. These roles include being a case finder, care giver, health teacher/educator, coordinator, collaborator, counsellor, and role model (Kementerian Kesehatan RI 2006). It is unlikely that a person from non-nursing educational background would understand and undertake these roles in *Puskesmas* because the NC is a nurse-led model.

Apart from the limited number and capacities of the nurses in the NC and the *Puskesmas*, another problem related to human resources was the ineffective student-nurse relationship in the NC which created another barrier for integration. Some of the students thought that not all the nurses wanted to collaborate and undertake the NC activities with the students:

> *Not all the nurses referred patients to the NC, and not all the nurses did the NC activities, only a few nurses referred or gave consultation to clients in the NC (Student 3 NC1).*

In contrast, many of the nurses thought that the students were not ready. One of reasons for the students not being ready was that they were overwhelmed by the multiple tasks they had to undertake within quite limited timeframes, as part of the nature of CHN practice in the NC, the *Puskesmas,* and in the community:

> *Students who have a placement here must be serious; […] there were students who complained that they were tired because they had to write assignments and present them within a time limit. If the students did not finish their assignment, the Head of the Puskesmas told them to get out of the meeting, there was no excuse for that [uncompleted assignment] (Nurse 1 NC3).*

Indeed, multiple assignments when students have a placement in the NC and in the community distracted their concentration when they were practicing in the NC. One of the nurses also mentioned the difficulties in working with the students:

Coordination with the students is difficult because they have many deadlines from their campus, so they are busy with their work. […] There should not be any barriers between the students', nurses', and lecturers' activities (Nurse 3 NC1).

Some of the students might also not be ready because of the lack of positive attitudes towards CHN practice in the NC and in the community, as stated by one of the Heads of a Puskesmas:

I place a greater emphasis on attitude. Nursing students can become smart by learning for one or two days in the Puskesmas, but the attitude is the most difficult. This attitude is discussed here. […] I don't want to make placement difficult for the students, but it is very ironic if our future nurses lack a good attitude because the nurses are the 'spearhead' of healthcare wherever they work, whether they work in a hospital or in a Puskesmas (Head of Puskesmas 3).

CHN practice is different from hospital-based nursing practice. Some students may not be aware of this difference so they might not be ready when undertaking a community placement. Thus, the students are often not ready to conduct a deep assessment of the patients' condition in the NC and, as a result, the interventions undertaken may be superficial and do of little benefit for the patients.

In order to overcome the human resource issues, the students and the nurses suggested that there should be a nurse on standby in the NC to facilitate effective collaboration between the students and the nurses:

If possible, I hope that there is an additional nurse on standby in the NC. It is better if this additional nurse is from the Puskesmas rather than from the education institution because this person will understand the workings of the Puskesmas and can collaborate with other Puskesmas as well (Nurse 1 NC3).

It would be better if there was a specific nurse for the NC, so that he/she did not have mixed responsibilities […]. In this way, the NC will work well and the students will also be able to interact easily with the nurse (Student 3 NC1).

Through collaboration in the NC, this human resource barrier might be resolved:

With limited numbers, the workload of the nurses is high. So, through collaboration with education institutions, they would get help to collect the community data. The students are helpful for the nurses, and the student results can be used for the Puskesmas (Provincial Coordinator of the CHN program).

Collaboration with the nursing education institution and a dedicated nurse in the NC were suggested by the participants to address the human resource issues in the NC. Although the feasibility of adding a new nurse was also difficult, the NC stakeholders could consider this human resources factor in order to achieve the integration in the NC.

5.3.2 Time Management

Time management was also identified as one of the factors that affect integration in the NC. Both the lecturers and nurses were busy with their own workloads, so they did not have time to sit together to discuss how they might most effectively work together. Even though lecturers from NC 1 and NC 3 mentioned that they were interested in doing community service in the NC, they could not undertake these activities due to other commitments in the education institution, as stated below:

> *[…] we [lecturers] had schedules to work in the NC previously when there were no student placements. However, we often could not make it because of many other activities on campus. Now, we only go to the NC to supervise the students (Lecturer 2 NC1).*

> *Perhaps it is because the work-load that makes us very busy, we have time limitations in the education institution as well (Lecturer 1 NC3).*

Lack of time is a major barrier for lecturers in NC 1 and NC 3 in undertaking community service. Moreover, NC 1 has a greater focus on student education through placements in the NC and in the community; hence the NC 1 relies on students from nursing education institution 1.

The nurses were also very busy with day-to-day activities and they had only limited time to work in the NC, as stated by these participants:

> *Sometimes, when we [lecturer] have time to go to the NC, the nurses are busy because they have to attend training or they have another meeting (Lecturer 1 NC3).*

> *[…] nurses cannot do much in the NC […] because they are busy examining patients, also need to go to the field for 'Posyandu' [integrated health post] (Nurse 1 NC1).*

Nurses faced a number of barriers in undertaking NC activities because most of them had double, or even multiple, responsibilities in the *Puskesmas*, as stated by one of the nurses:

> *In the Puskesmas, I have responsibility as the TB Coordinator, and the HIV/AIDS, leprosy, and sexually-transmitted diseases programs (Nurse 2 NC1).*

The multiple nature of the nurses' roles was inevitable because of the limited human resources in the *Puskesmas*, hence the nurses found it difficult to become more involved in the operation of the NC. Even when there are specialist medical doctors examining the patients, the doctors still needed the nurses to assist them in the clinics.

In order to overcome these time barriers, time management through tight scheduling and clear job descriptions were suggested as solutions by the Provincial Coordinator of the CHN program:

It depends on the role of the Head of the Puskesmas; there should be a clear job description for every nurse. For example, there are six nurses, and every nurse has a job description and scheduling to work in the NC. This method has been implemented in three Puskesmas. Using the job description, nurses can work in the NC (Provincial Coordinator of the CHN program).

However, some of the nurses reported that a clear job description and tight scheduling were not enough to keep the NC running every day:

Every nurse has a schedule to work in the NC once a week. I also have my schedule, but this schedule might be changed because we need to see how many nurses are available on each day, because sometimes there are meetings that require attendance. If we have many meetings, the NC will be closed for the day (Nurse 2 NC3).

Even though there was scheduling, many of the nurses could not keep to the schedule because there were incidental activities outside of the *Puskesmas*. The students and the lecturers from the nursing education institution also had their own scheduling:

Students also get their schedule to work in the NC, but not all the students are directly involved. There are two nursing education institutions that send students for placement here (Nurse 1 NC3).

In the beginning, we [lecturers] still make our schedule to work in the NC, but can this schedule be applied with the current bureaucratic procedure there? From here [nursing education institution], we make a schedule for every day, but not all day, just for a few hours (Lecturer 2 NC3).

Scheduling is an effective way to allocate human resource activities; however, it appears that this is not enough to enable the integration that is required for the optimal functioning of the NC. Poor time management may be a barrier to the feasibility of integration in the NC in terms of the continuous and consistent operation of the NC. There is a need for further research to find a solution for a better time management process that would enable optimal integration.

5.3.3 Infrastructure and Funding

Infrastructure and funding are important factors that could enable the integration, as stated by the founder of the NC: *"nurses in the Puskesmas do not only need training, but they also need infrastructure support such as a room, a nursing kit, and other facilities"* (Suharyati Samba, the founder of the NC). The availability of infrastructure to support the operation of the NC is different among the three centres. The document analysis outlined that a specific room should be dedicated to the NC as the co-location site with the nursing education institution (Samba 2002). The purpose of the co-location of the NC in the *Puskesmas* was to: *"socialise the nursing profession towards students, nurses, other Puskesmas personnel, doctors, leaders, and people in the community […] in a caring environment"* (Suharyati Samba, the founder of the NC).

The specific room for the NC was a way of showing all the stakeholders that nursing activities exist in the *Puskesmas*, as stated by one of the nurses:

> *If there is no NC [in the Puskesmas], students work in the poli-clinics straight away, helping our job. There is no room for practice and learning for students. Students just follow the nurses' work; no activities are carried out by themselves. With the NC, students and nurses will have our own room to perform nursing activities (Nurse 1 NC1).*

The NC room is meant for activities inside the building, such as individual health education, counselling, and direct care. This room would also be a dedicated nursing station and a space for storing all health data and reports of activities in families and in the community that had been conducted by the nurses, students, and lecturers.

In NC 1, there was a dedicated room for the NC on level 3 and another room for the *Perkesmas* program on level 1. The separation of these spaces showed that there was a misunderstanding about the characteristics of the NC model. As a consequence, NC 1 was not physically integrated with the *Perkesmas* program, although it was located in the same *Puskesmas* building. This was pointed out by the Acting Head of *Puskesmas* 1:

> *We have separate rooms and also have separate coordinators for the NC and the Perkesmas program. This is because the focus of the NC is education. When there are students here, they use the NC room (Acting Head of Puskesmas 1).*

The room for NC 1 was rarely used when there were no students in the *Puskesmas* because the NC room is located on level 3 and there is no elevator in the *Puskesmas,* thus the NC room is difficult to access, especially for clients who bring their children. This shows that a dedicated room for the NC is insufficient to facilitate integration if the nurses have a misunderstanding about the usage of such a room. Moreover, an inconvenient location of the NC room in the *Puskesmas* can also become a barrier for integration.

The issue of inconvenient location was also expressed by the lecturers in NC 3:

> *Previously, the location of the NC was convenient on the first floor, before the exit door. Now it is located on the second floor, it is inconvenient for the patients (Lecturer 2 NC3).*

> *The nurses said that not all the patients want to go to the second floor [for the NC] to get more health information about their illness. However, on one day, only five to six patients came to the NC, though actually there were lots of patients in the Puskesmas (Lecturer 1 NC3).*

The inconvenient location of the NC has caused significant barriers to integration. NC 3 is located in a shared room with a nutritionist in the *Puskesmas*. This location is inconvenient because it is located on the second floor and is not completely closed. However, the privacy of the clients was maintained by the staff who worked in the shared NC room. An inconvenient location was also apparent in NC 2. Even though NC 2 is located on the first floor, close to the entrance and in the waiting room, the location is in an open space and did

not provide privacy for the clients, particularly for those families with children who had TB, as stated by one of the clients:

> *I received information in the NC in the waiting room. The information about TB was useful for me and my daughter … However, if possible, I think it would be better if the consultation place was in a closed room for more privacy, because I did not feel comfortable talking about my daughter's TB disease in front of so many people (Client 1 NC2).*

Based on this information, the ideal room for an NC is one which would be conveniently located and could provide privacy for the patients and their families. The dedicated room for the NC is an important part of the infrastructure that would facilitate the operation and integration in the NC.

Apart from the room, other infrastructure that is needed in the NC consists of furniture, family folders, and documentation facilities. In the NC model, such infrastructure is shared among stakeholders. The Provincial Coordinator of the CHN program also mentioned the process of sharing responsibility between the Health Office and the *Puskesmas*:

> *After training, we followed-up for the infrastructure, such as the room and furniture because we needed a place [for the NC]. We shared the task [to provide infrastructure] between the Provincial or City/Regency Health Office or the Puskesmas. At the last meeting, we agreed that furniture would be provided by City/Regency Health Office, the Puskesmas will provide the family folders, the printing of reporting and recording sheets, and arranging the place [for the NC room] (Provincial Coordinator of the CHN program).*

The Provincial Coordinator of the CHN program did not mention the involvement of the nursing education institution in providing infrastructure for the NC. In fact, the education institutions in NC 1 and NC 3 also shared some of the facilities in the NC, as stated by the lecturers:

> *We, from the nursing education institution, also have an investment in the NC room. We provide computers, scanners, and printers in the NC to be used by the nurses and students (Lecturer 3 NC1).*

> *We even provided various models [in the NC], such as a model for lungs and the GI [Gastro Intestinal] tract. We facilitated this with the expectation that patients and the community would get a better understanding when they received health education using a three-dimensional model, so the client's health problems could be resolved (Lecturer 2 NC3).*

Shared infrastructure among the stakeholders in the NC can assist in increasing stakeholders' sense of belonging to the NC which, in the end, would enhance the integration in the NC model. As Li et al. (2009) suggested, the provision of organisational infrastructure can promote knowledge-sharing in the healthcare setting which also encourages a sense of belonging among members of a community of practice. The NC model can also become a community of practice in which novices and experts interact to learn together and share

knowledge in order to foster socialisation and develop individuals' identities as health professionals (Li et al. 2009). The professional identity of nurses was evident in NC 3:

> *We are conducting CHN services in the NC because we are nurses. This is what nurses should do. So we do not think of the NC as a burden for us (Nurse 2 NC3).*

This quote shows that nurses who have a strong professional identity would have a sense of belonging towards the NC and undertake the activities within the NC.

Despite the shared infrastructure, there is no shared funding between the Health Office and the nursing education institutions. Each organisation funded their own activities; for example, the Provincial Health Office funded the *Puskesmas* and the nursing activities, while the nursing education institution funded the activities of the lecturers and students in the NC and in the community:

> *Lecturers get funding from the education institution to perform their community service activities in the NC (Lecturer 3 NC2).*

> *I have got regional development funding for 40 million Indonesian 'Rupiah' in 2011, in 2012 we have got 250 million Indonesian 'Rupiah', I use that money for the establishment of NCs in two regencies (Provincial Coordinator of the CHN program).*

This data shows that there was no collaboration in terms of funding for the NC between the Health Offices and the nursing education institutions. Funding is a sensitive matter in the NCs and the stakeholders prefer not to discuss this, as stated by the founder of the NC:

> *We often argue with the Health Office about payment and funding, and whether patients have to pay for the NC services or not. However, we cannot ask poor patients to pay for the services. In the end, we decided not to include information about payment and funding in the work mechanism of the NC, it is better to avoid any trouble (Suharyati Samba, the founder of the NC).*

Even though the NC aimed to integrate CHN services, education, and research, the issue of funding was not raised by any other participants in this study. The current practice of resource allocation was limited to the sharing of infrastructure and facilities in the NC. The information from the founder of the NC shows that the sensitive issue of funding has the potential to become a major barrier that can prevent collaboration and shared common ground in the NC. However, discussions about shared funding among stakeholders might enable close collaboration between the health services and the nursing education institutions. Either way, the stakeholders need to be aware that funding is both an enabler and a barrier for integration in the NC because the division, structure, and flow of funds can affect all aspects of integrated care (Kodner & Spreeuwenberg 2002).

5.3.4 A Comprehensive and Effective Recording and Reporting System

As there are two co-located organisations in the NCs, data recording and reporting becomes an important issue. In relation to record keeping and reporting, the founder of the NC considered that such reports should be assessed and kept in the *Puskesmas*:

> *All data about vulnerable families, high-risk families, and regular families should be kept in the Puskesmas. The data is the result of education and services together, even though most of the data comes from education because we have more human resources … Lecturers should not take the report to the education institution and should assess the students' reports in the NC, and then leave it in the Puskesmas. The reports should not be brought to the education institution because it would be useless there. […] but if the reports are kept in the Puskesmas, the data can be useful for the Puskesmas (Suharyati Samba, the founder of the NC).*

Even though the founder of the NC intended to keep the records and reports in the *Puskesmas*, the actual integrated evaluation was difficult to undertake because each institution needs to keep the evaluation report for their own evidence. Moreover, the reports required by the education institutions were different from those required by the *Puskesmas*:

> *Family folders are used based on the standard forms from the Puskesmas; however, for the nursing education institution, we also have our own standard family nursing report. So, the students create two reports because the Puskesmas has a standard form, and for family nursing, we have a complete format from assessment until evaluation. The Puskesmas asks for the original family folder, but we also ask for a copy of this for the education institution, but for the family nursing format, they [nurses] do not ask, they just ask for the number to be reported (Lecturer 1 NC3).*

Similar recording and reporting procedures also existed in NC 1, "*We ask students to make two reports, one using the family folder for the Puskesmas, and one full report for the lecturers*" (Lecturer 1 NC1).

The recording and reporting system for nursing education in NC 1 and NC 3 were quite different from NC 2. In NC 1 and NC 3, the students were required to submit two reports, one each for the nursing education institution and the *Puskesmas*. In this way, both the nursing education institution and the *Puskesmas* would have records and reports of the students' activities in the NC. However, this mode of reporting potentially created an additional burden for the students because they had to create double copies of the report. These double copies also hindered the knowledge-sharing process as the lecturers would assess the report in the nursing education institution, hence the *Puskesmas* nurses would not know the lecturers' feedback on the students' report. Therefore, the lack of knowledge-sharing impedes the integration in the NC.

In NC 2, the records and reports were kept exclusively in the nursing education institution. *"Since the NC is run mainly by the lecturers, they keep all the records in the education institution"* (Head of *Puskesmas* 2). Keeping the records and reports of community service

activities within the nursing education institution would also help to monitor the lecturers' activities, to prevent records being lost, and to prevent data being falsified, as stated by one of the lecturers:

> *It was more difficult [to monitor the lecturers' activity] when we were using the register book in the NC. Sometimes, the book was borrowed, and some of the lecturers were just copying from previous activities. So, it was difficult to monitor the lecturers' activities in the NC (Lecturer 3 NC2).*

As the records were the only evidence that the lecturers had to prove their community service activities, they kept the data within the control of the nursing education institution. While this strategy benefited the lecturers and the Coordinator of Community Service at the nursing education institution, the *Puskesmas* lost this valuable information about the health status of people in their coverage area. This lack of recording of the lecturers' activities in the NC also led to a lack of recognition of the education institution's contribution to the NC.

Despite the contribution of nursing education towards CHN, there was little recognition of the students and lecturers in the *Puskesmas*. There was no reported and recorded data in the community health centres showing the students' and lecturers' contributions to the achievement of the CHN program. As the results, the contribution of the nursing education in the NC was not recognised by other stakeholders. This was stated by the Head of *Puskesmas* 2: "*The NC activities are performed by lecturers from school X and Y; however, I have not seen its impact and leverage towards the Puskesmas performance*" (Head of *Puskesmas* 2).

The lack of comprehensive recording and reporting in the NC would serve to underestimate the contribution of nursing education institutions towards the achievement and improvement of *Puskesmas* performance, and also carried the potential risk that students were being used for other purposes such as collecting data for the head of *Puskesmas* that is not part of their learning objective. Underestimating this contribution would result in the disappointment of the nursing education stakeholders which could impede the integration in the NC. One lecturer expressed her disappointment with the *Puskesmas*:

> *To be honest, I am a little bit disappointed with the Puskesmas. […] I saw a tendency that my students were being used for other things that has nothing to do with the program or the course, or the people in the community, or the NC (Lecturer 2 NC3).*

Comprehensive recording and reporting of activities in the NC would serve as recognition of the contribution of both institutions, and also for the monitoring of the quality of CHN services and education in the NC. Monitoring by both institutions would build trusting relationships and recognition of the contributions of both institutions. This would increase the stakeholders'

sense of belonging towards the NC, which would enable integration. In order to recognise the contribution of nursing education in the NC, the founder of the NCs suggested that:

> *In terms of education, there should be indicators, such as how many students or nurses who learn at the NC. The second indicator is research and development, how much research that has been done in the Puskesmas to support education and CHN services in the Puskesmas? (Suharyati Samba, the founder of the NCs).*

Despite the consideration from the founder to include education and research indicators for the NCs, this did not happen because there was no requirement to record and report education and research activities by the Provincial Health Office. As well, the nursing education institution did not have any obligation to report their education and research indicators to the *Puskesmas* and the Health Office. The writing of separate reports for the *Puskesmas* and the nursing education institution creates a barrier for the integration in the NC because every institution has different data; for example, the *Puskesmas* only has the number of the families who have received complete care, while the nursing education institutions only have the student and the research data. The lack of a comprehensive and effective recording and reporting system leads to difficulties in evaluating the effectiveness of the NC model.

5.3.5 A Comprehensive Evaluation Plan

In the previous section, the issue of the separate reporting and recording activities for the nursing education institution and the *Puskesmas* was discussed. This separation leads to a lack of a comprehensive evaluation plan of the NC model. This study has identified that there was no evaluation plan for the NC but rather a process evaluation is conducted when there is a student placement in the NC, as stated by one of the Heads of a Puskesmas:

> *Evaluation together with the education institution usually is conducted when there is students' placement in the Puskesmas, at the end of the student placement. […] Then, at the end of the placement, there is also overall presentation, we [Puskesmas] take notes what we have to do, and then the lecturers also take notes about what should be improved and what the intervention is (Head of Puskesmas 3).*

This excerpt shows that the Head of the *Puskesmas* has separate discussion and reflection meetings with the staff, and only met with the lecturers on two occasions, at the initial and the final presentation for the CHN student placements. These separated discussion, reflection, and evaluation processes have been identified as a weakness of current practice in Indonesian NCs. Evaluation at the end of the students' placements is the common practice among health education institutions and the *Puskesmas;* however, this evaluation usually focuses on problems in the community and the student activities during the placements rather than covering all aspects of the NCs' activities, and is usually in the form of verbal statements from both institutions. The only written report is those of the students that are

usually kept in the nursing education institutions, as discussed in the previous section. The fragmented nature of evaluation in the NC institutions can become a barrier that impedes the integration.

Fragmented evaluation is also evident as there is no achievement of the targets for NC activities inside the facility. *"For the NC itself, we do not have targets from either the Health Office or the Ministry of Health"* (Head of Puskesmas 3). Performance measurements for the NCs from the Provincial Health Office were limited to the number of NCs that had been established in the Cities and Regencies in West Java, as well as the number of families and vulnerable groups that received complete care which are related to the CHN program, as stated by the Provincial Coordinator of the CHN program:

> *The indicators for the CHN program […] are the percentage of regencies and cities that implemented Perkesmas (CHN) in the Puskesmas. There are three indicators for performance, which are the percentage of families that completed care, the percentage of vulnerable groups that completed care, and the percentage of regencies and cities that have at least one Nursing Centre (Provincial Coordinator of CHN program).*

This data show that the performance indicators for the NC set by the Provincial Health Office did not facilitate integration of CHN program into the NC. As mentioned in Chapter 4 (see page 124), the Provincial Coordinator of the CHN program perceived that the NC is a means to revitalise the CHN practice in *Puskesmas*, however, the data show that there is a fragmented evaluation of the NC and the CHN program. The fragmented nature of the evaluation also resulted in difficulties in measuring the outcomes and impacts of the CHN activities in the NC, as stated by the Provincial Coordinator of the CHN program:

> *The measurement that we use is only the percentage of KM I, KM II [Family Independence Levels] just like that, there are no specific indicators. […] From the Ministry of Health, we can only use 'in between' indicators; for example, TB cases, the 'in between' indicator for TB is the percentage of home visits, and the final indicators are the percentage of successful TB treatment. From all indicators of the TB program, the only indicator that can be related to the Perkesmas (CHN) program is the percentage of home visits. The data of TB indicators are held by the TB coordinator, not the Perkesmas (CHN) coordinator (Provincial Coordinator of the CHN program).*

Clearly, the impact of the NC activities would not be visible in a short term using only these types of measurement because the current forms of measurement are limited to the number of families who receive nursing interventions. This was stated by the Provincial Coordinator of the CHN program and the Head of *Puskesmas* 3:

> *[…] the only indicator [at the moment] is the number of families that have received complete care, but the impact after they finish receiving the care could not be measured because there are no other indicators that we can use (Provincial Coordinator of the CHN program).*

It is difficult to track the leverage of the NC because most public health activities in the Puskesmas cannot be measured over the short-term. The function of the students in the NC is to maintain continuous efforts in the community (Head of Puskesmas 3).

The CHN service in the NC could only be evaluated based on the outputs of family nursing care, because it was difficult to measure the contribution of increases in family independence levels towards health outcomes, as stated by the Provincial Coordinator of the CHN program:

It is difficult to measure the contribution of improvements in family independence levels towards the achievement of TB targets. TB is included in the communicable disease program, while paediatric TB is included in the child health program. So, when a vulnerable family with paediatric TB receives a home visit from the Perkesmas (CHN) nurses, the data is recorded and reported as the sum of the children who received care, but there is no specific case reporting for every disease in the CHN reporting system (Provincial Coordinator of the CHN program).

Part of the problem is that it would be difficult to measure the success of the outcomes and impact of the CHN service in the NC because the results of this service are not always quantifiable in the short-term; for example, a reduction in TB cases. The difficulties of measurement may not be reflective of a deficiency in the NC model but may be more about the difficulties of measuring CHN outcomes. The outcomes of CHN activities are not immediately visible as there are forces operating outside of the NC that also affect the achievement of outcomes. Using paediatric TB cases as an example, this involves three different programs being TB, child health and CHN programs. These programs have their own indicators, funding, and reporting systems, so it is difficult to integrate these programs. The fragmentation of the programs also becomes a barrier toward a comprehensive evaluation of the NC which, in turn, also impedes the integration.

As a result of the fragmentation of the programs in the *Puskesmas* and the lack of a comprehensive evaluation and continuity of student activity in the NC, new students who undertake placements in the NC need to spend much time to collect community data from the beginning of the placement and then to give these reports to the Head of the *Puskesmas*, as stated by one of the students:

We have had our questionnaire, but we were running out of time for the implementation phase because we did too much data collection for community assessment, we did not have time to consult about the data with the Head of the Puskesmas […] There was one group that consulted on the data, but then they had to repeat the data collection again (Student 3 NC3).

Since the full reports were kept in the nursing education institution, the students and nurses did not have access to them. So, after the students finished their placement, there was no follow-up to improve upon the weaknesses that had been previously identified, and the new students would have to collect the same data from the beginning again. Consequently, most of the students' time was spent collecting the data without any clear follow-up action.

Even though the impact of the NC model on the health status of the community was difficult to measure in the short-term, the Provincial Coordinator of the CHN program suggested integrating research into the NC in order to obtain more comprehensive data about the outcomes and impacts of the NC:

> *I think it [the outcomes and impacts] should be measured, because it will be easier [for us] to get funding. For example, with the Perkesmas (CHN), we provide care to 100 children with TB, and then at the NC, we can show that the CHN approach can decrease the incidence of TB by a few per cent. […] We can get this data by using research in the Puskesmas and collecting primary data from the NC records and from the TB coordinator (Provincial Coordinator of THE CHN program).*

This excerpt shows that integrating research into the NC would help to measure the impact of the NC on the health outcomes of individuals, families, and people in the community.

As well, the performance indicators set by the Provincial Health Office do not mention the quality of the interventions. Even though the NC model can increase the quantity of CHN services, there is also an issue about the quality of the interventions by the nurses and students who work in the NC that warrants the attention of a comprehensive evaluation. Indeed, not all the students paid attention to the quality of the care being provided in the NC, as stated by one of the lecturers:

> *People in the community should be so satisfied with the service provided that they were willing to come back again to the NC. Unfortunately, currently the people do not feel the benefit of the NC in the Puskesmas. Sometimes, the nurses and students did not assess the patients' condition deeply, so the intervention is not applicable to the patients (Lecturer 3 NC1).*

The capacity of the nurses and students also needs to be enhanced in order to improve clients' satisfaction levels towards the CHN services in the NC. When people are satisfied with the service that they receive, they spread the word, and as a result, more people use the service, as stated by one of the nurses:

> *I receive requests for CHN services from people in the community; they spread the word about the services. There was a specific group of people who received community nursing care and then they spread the word to their friends about this community health program and they felt the benefits. So, their friends also wanted to get the same service from the Puskesmas (Nurse 3 NC1).*

Client satisfaction towards the quality of care provided in the NC could also become one part of a comprehensive evaluation of the NC model to enable the integration.

This study has found that the lack of a comprehensive evaluation plan can impede the integration in the NC because the stakeholders work in a fragmented way so that they do not have a shared common ground to achieve and evaluate the performance of their respective organisations. Consequently, the quality of the CHN services and interventions provided by

the nurses were not sufficient to produce clear outcomes for stakeholders and people in the community.

In summary, this study has identified the factors that affect the achievement of integration. These factors are human resources capacity, time management, infrastructure and funding, a comprehensive and effective recording and reporting system, and a comprehensive evaluation plan. Identifying these factors can assist with an understanding of ways to resolve the issues that are affecting the achievement of outcomes (Funnel & Rogers 2011). The final step in the theory of action is to identify which activities and strategies can be initiated in the NC to address these factors. These strategies will be presented in the following section.

5.4 Identifying Strategies to Address the Factors that Affect Integration in the Nursing Centre

An important part of the theory of action is to clearly specify what a certain program can do to overcome the factors that are affecting the outcomes (Funnel & Rogers 2011). There are a number of activities that can be initiated to address the factors that influence integration which were identified in the previous section. This study has identified that a structured approach for setting up and evaluating the Nursing Centre (NC), and components of service learning are strategies to address the factors affecting integration in the NC. As discussed in Chapter 4, this study has proposed service learning as one of the theoretical bases of the NC model to link CHN services and education in order to produce better outcomes for students, nurses, and people in the community.These components are structured experiential learning, reflection, reciprocity, and the setting of specific outcomes and benefits for all stakeholders. In addition to the service learning components, conducting research has also been identified as another strategy. This section will also identify the lack of connection between these strategies in current operations and what the NC currently fails to do in order to achieve integration. The identification of these points is a key step for improving the program and to address the barriers to the success of the program (Funnel & Rogers 2011).

5.4.1 A structured Approach for Setting-Up and Evaluating the Nursing Centre

The analysis of the interview data and documents has shown that one of the key strategies for setting up and evaluating the Nursing Centre (NC) involves a structured approach which proceeds through a series of steps. The findings indicate that this setting-up should be structured into the preparation, orientation, working, pre-termination, termination, and adoption phases. This strategy could be used to address the issues of human resources capacity, time management, and infrastructures and funding that were identified in the previous section.

In the preparation phase, information about the role of the nurses, lecturers, and students need to be made clear because this is important for the building of trusting relationships between the stakeholders. One of the lecturers also explained what needs to be done in the preparation phase:

> *The lecturers' role is to give early explanations to the students and the Puskesmas [Community Health Centre] staff. In the preparation phase, lecturers give explanations to the Puskesmas staff, and more importantly, to the Head of the Puskesmas. […] Usually, we have a meeting with the Puskesmas staff to explain the NC (Lecturer 1 NC1).*

Interviews data demonstrated that the clear information in the preparation phase was critical as the first phase to set up the NC. This was also suggested by one of the nurses:

> *The provision of information for nurses before the students come for placement was not yet clear. The schedule, authority, and involvement of the Puskesmas nurses should be stated clearly by the nursing education institutions (Nurse 3 NC1).*

The preparation phase is also useful to set up a structure for the experiential learning for students in the NC as one of components of service learning (Gupta 2006; Perry, Gabe & Metcalf 1998; Riedford 2011). Gupta (2006) used a simple and practical method which is the PARE (Preparation, Action, Reflection, and Evaluation) model to achieve community partnership goals which emphasises the preparation phase as a critical step for the success of service learning. After determining the focus, the academics share this information in an on-campus orientation session about expectations, policies and procedures, and the appropriate roles and responsibilities that the students must follow (Kemsley & Riegle 2004). Following such preparation and orientation, students then undertake the service learning activities (Gupta 2006; Kazemi, Behan & Boniauto 2011).

The importance of student engagement in service, and real-life experience in a structured way, was also emphasised by the founder of the NC:

> *Internalisation of professional [nursing]culture is not only a theory taught in the classroom or merely cognitive; internalisation must be taught and shared throughout nursing education and practice … Therefore, we need nursing education in the classroom as well as in the practice setting … (Suharyati Samba, the Founder of the NC model).*

Consistent nursing education was structured not only in the classroom but also in the real practice setting. Through structured learning experiences in the NC and in the community, most of the students reported that they not only achieved the learning objectives, but also gained more practice experience in the community:

> *[…] in the NC, besides managing the patient, we organized time to meet the community, and have to prepare everything in case people in the community ask about things. It is really, really helpful (Student 3 NC1).*

The NC model provides opportunities for students to learn from their new experiences. They learn about how to live in different types of communities and can gain insight into health problems and community organisation. After the nursing education institution and the *Puskesmas* stakeholders have agreed to set up a NC within the *Puskesmas*, the NC can proceed to the second phase which is orientation phase.

The orientation phase is a period when lecturers provide training and examples of activities in the NC to students and nurses. The students suggested:

> *The system needs to be fixed. The lecturers need to explain to the new students how the activities should be done by the students and nurses in the NC. The students just give health education and home care, but sometimes there are no patients in the NC. […] Lectures just need to give examples so that the new students who come to the NC will not be confused (Student 1 NC1).*

In the orientation phase, trusting relationships are needed, as stated by one of the students: "*So, we are still in the orientation phase. We need to build trust with every person in the room, and approach the staff*" (Student 1 NC1). When the students are in the orientation phase, trusting relationships with the nurses and the *Puskesmas* staff facilitate a smooth learning experience for the students. Problems arise when the trusting relationships break down, as experienced by some of the students in NC 3:

> *We have had an uncomfortable situation with the Head of the Puskesmas. There was one group of students who were accused of making-up the data, so the Head of the Puskesmas told the group to collect the data again (Student 3 NC3).*

Trust between the nursing education institution and the *Puskesmas* stakeholders would also facilitate the integration. The above data suggest that a sound preparation phase and trusting relationship in the orientation phase need to be achieved in order to facilitate integration in the third phase which is working phase.

In the working phase, the students and the nurses are expected to work together to provide health services for clients, as stated by the founder of the NC:

> *The working phase is for education, service, and research. So, the idea of the working phase is that health services can be performed even though they are conducted by the students. We hope these services can be done together with the nurses, so when the placement is finished, the activities can be continued by the nurses. The results of these activities can be used as the basis for nursing research (Suharyati Samba, the founder of the NCs).*

After the preparation, orientation, and working phases, the analysis of the NC documents showed that the termination and adoption phases are needed in the NC.

The termination phase is when the collaboration between the nursing education institution and the *Puskesmas* is ended. In this phase, the NC is evaluated, strengthened, and modified

based on the results of the evaluation. After the termination phase, there is the adoption phase, which is when other *Puskesmas* want to develop a new NC in their own workplace, and the current NC becomes independent (Samba 2002, 2007, 2012).

However, there was a range of different views from the participants about whether the collaboration in the NC should be terminated or continued. One of the lecturers expressed her personal views on this as follows:

> *In the future, I hope that the NC will become independent, which means that nurses in the NC could perform CHN services independently without relying on the nursing education institution too much (Lecturer 3 NC1).*

The idea of the NC becoming independent was also supported by the founder of the NC:

> *I explained that the role of community health nurses will become smaller as the clients become more independent and, in the end, the nurses can leave the clients because the main purpose is to make the people independent, so the nurses would not be with them forever. Similarly, with the NC, we need to make a clear contract from the beginning that lecturers and students would not be forever in the same NC; the role of the education institution would become smaller as the role of nurses is growing in the NC. In the end, when the nurses are ready, the nursing education institution would leave the NC and develop a new one in a different Puskesmas (Suharyati Samba, the founder of the NCs).*

This quote shows that the founder of the NC suggested a pre-termination phase, which is a period when the role of the education institution becomes smaller and the role of nurses is growing in the NC. Out of the three NCs examined in this study, only NC 3 showed signs of nurses' independence to work in the NC:

> *Since the nursing education institution is no longer on stand-by in the NC, the nurses have been working independently in the NC. So, the students only come here at certain times for their placements (Nurse 1 NC3).*

However, the idea of an independent NC was not supported by the nurses in NC 1 and NC 2, because they relied on the education institutions to operate the NC:

> *The nursing education institution should not leave the NC just like that. It is a shame if this NC is not working anymore (Nurse 2 NC1).*

> *The NC in this Puskesmas is working because of the lecturers from the education institutions who come here. We [nurses] have difficulty with running the NC because we only have 4 nurses here. If there were no lecturers, the NC would be closed (Nurse 2 NC2).*

On the one hand, continuous collaboration would enhance integration. On the other hand, the nurses may become too dependent on the nursing education institution, and this would also reduce opportunities for other *Puskesmas* to establish new NCs in their workplaces due to the limited number of nursing education institutions in the region. Nevertheless, this issue needs to be discussed by the stakeholders during the preparation phase so that both organisations have a clear structure and direction for collaboration and integration in the NC.

5.4.2 Reflection

In order to address the issues of human resource capacity, time management, infrastructure and funding in the Nursing Centre (NC), the findings in this study have demonstrated that regular reflection and discussion can be used to reach consensus on ownership of the NC, which could then improve the integration in the NC. The Head of *Puskesmas* 3, and the nurses in NC 3, mentioned that reflection activities can provide opportunities to improve their capacity for evaluation and planning:

> *For evaluation and planning, we have a monthly meeting; we also do monthly discussions and reflection on cases with the Head of the Puskesmas (Nurse 1 NC3).*

> *For the NC, we have got cases that we discuss in the DRK [Discussion and Reflection of Cases]. If necessary, we have 'amprok' [group meeting] by inviting the doctor for example (Head of Puskesmas 3).*

The lecturers in NC 1 reported that their students also conducted reflective activities through journal writing: "*all students have to write a journal while they are on placement, they must write their everyday learning activities*" (Lecturer 3 NC1).

As discussed in Section 5.3.5, the Head of *Puskesmas* 3 and the nurses had regular discussions and reflection on cases; however, the lecturers were not involved in these activities. The nurses requested for the lecturers to have regular meetings with them:

> *There should be a regular meeting with the nursing education institution lecturer, at least once every six months. [...] We need a regular meeting to explain what the NC is, the requirements, if we need a special room, and so forth (Nurse 3 NC1).*

This quote shows that the issues of time management, and infrastructure and funding could be discussed in a regular meeting in the NC. The lecturers also mentioned the importance of having regular meetings with the nurses:

> *In this NC, for example, we [lecturer] should have a regular meeting once a week with the nurses just for an hour to discuss home visit cases or an outbreak case, or other cases that need specific attention. We discuss why these cases happen; who is the person in charge for the area, so we discuss it together, so that we can understand exactly what is happening in the community (Lecturer 1 NC3).*

These findings show that the reflective activities implemented in NC 1 and NC 3 did not produce optimal results for the nurses or the students. In order to obtain optimal benefit from the reflection activities, the lecturers could be involved in the monthly Community Health Centre (*Puskesmas)* meeting to discuss and identify strategies to achieve mutual goals, as stated by one of the lecturers:

> *I was helping the Health Office for discussion and reflection on cases in 2013. The lecturers can act as a facilitator in discussions and reflecting on cases, especially in discussing the*

family nursing process with the nurses. In this way, we can change the way of thinking of the nurses (Lecturer 2 NC1).

The lecturers can also become a resource person for the discussions and can facilitate the reflection on the nurses' experiences using cases that would be useful for increasing their knowledge as well as teaching their students about real problems in the community. Bassi (2011, p. 165) stated that reflection is "a framework within which students process and synthesise information from their experiences". A number of studies have shown that reflection is important in creating meaning within the service learning experience and as an integral component of service learning in order to improve critical thinking and caring behaviour (Baumberger-Henry, Krouse & Borucki 2006; Julie, Daniels & Adonis 2005; Schofield et al. 2013; Sedlak et al. 2003). The facilitation of reflection activities could be achieved together by the nurses and the students. In this way, they would learn new knowledge and have a strong intention transform and integrate CHN services and education in the NC. Thus, reflection activities through regular meeting and discussion can be seen as a strategy to address the human resource capacity, time management, and infra-structure and funding issues in order to improve the integration in the NC.

5.4.3 Reciprocity

The findings in this study indicate that the principle of reciprocity, particularly in relation to learning, can be used to address the issues of human resources capacity, time management, infrastructure and funding in the Nursing Centre (NC). Addressing these issues would enhance the stakeholders' intention to integrate and undertake continuous and consistent operation of the NC.

The process of reciprocal learning has the potential to take place in the NC as students learn from the nurses, and the nurses also learn from the students:

We know the latest theory of community health nursing and family nursing through reading the students' reports, and we can share our nursing knowledge with the students (Nurse 1 NC3).

… particularly to give theory up-date, and I can learn from the students' report (Nurse 2 NC1).

With the new responsibility of sharing their knowledge with the students in the NC, the nurses can learn and provide Community Health Nursing (CHN) services in the NC so that they can then explain these principles to the students. Nurses, students, and clients can learn together in the NC. Nurses working in the NC provided examples to the students about delivering health education to the clients. Through this process, "every individual, organisation, and entity involved in service learning functions as both a teacher and a learner" (Laplante 2009, p. 6). Reciprocity is evident in NC 1 and NC 3, but less so in NC 2, because in this NC, the students have only limited interaction with the nurses.

Students also learned how to deliver health education when they were accompanied by a nurse or another student:

> *For the students, they can get new knowledge when giving health education, they also accompanied by a nurse (Nurse 1 NC3).*

Learning together in the NC can help both the students and the nurses to gain new knowledge about the delivery of health education in the NC. Unfortunately, not all the nurses take part in the reciprocal learning, as stated by one of the lecturers:

> *When we had student placements in the NC, the Head of the Puskesmas assigned one nurse to collaborate with us. However, we actually wanted to work not only with that person, but also with other nurses in the Puskesmas (Lecturer 1 NC3).*

The low involvement of the nurses in student activities was expressed by one of the nurses:

> *Moreover, not all nurses and programs were involved in the NC. Students made their own activities and there was no agreement with the nurses (Nurse 3 NC1).*

This implies that involving all nurses in the NC is the preferred option of both the nurses and the lecturers. Through full involvement, a consensus on stakeholder commitment to contribute could allow reciprocal benefits. Allowing stakeholders to make small incremental commitments to contributing to the NC might facilitate cooperation because it helps to enhance reciprocity among stakeholders (Kurzban et al. 2001). This commitment could also encourage better time allocation and management because when one stakeholder is willing to allocate time, then the other stakeholders generally reciprocate and work together to achieve their goals (Kurzban et al. 2001). The need to commit to collaboration was also expressed by the lecturers:

> *All stakeholders should walk together. The point is that we need to collaborate and sit together to improve the operation of the NC (Lecturer 1 NC1).*

> *The different perceptions have happened because we do not sit together, so togetherness and openness from both institutions can lead to discussions about family nursing problems. Actually, this activity could also become an initial step to conducting research [in the NC] (Lecturer 1 NC3).*

The above points show that there is potential to develop reciprocal relationships in the NC; however, this is not currently happening because the stakeholders do not come together to discuss their mutual goals. Togetherness and openness between nurses, lecturers, and students would increase understanding between the stakeholders and produce positive changes for the nurses:

> *With the NC, nurses were braver to do home visits, because we had a model. Nurses were more comfortable, and found that there was enough data to do community health development. If we didn't have the NC, the nurses would only concentrate on their own program, and never discuss their nursing knowledge (Nurse 2 NC1).*

The nurses also wanted a consistent reciprocal benefit in the NC, not only for the students and patients but also for the nurses in the Puskesmas:

> *The specifications of the NC are not clear, what should the nurses do when there are no students here? I think the NC should become a place for consultation and the sharing of knowledge, not only for the patients but also for the nurses (Nurse 2 NC1).*

These comments show that the nurses expected that the NC could become a continuing education site for nurses as well, even when there were no student placements. Another need that was expressed by nurse is about the reciprocity to use facilities in the nursing education institution, as stated by one of the nurses:

> *Nurses should be able to come to the campus [of the nursing education institution X] any time to learn. How can we [nurses] access the library on campus? We never get this information. If students can come and learn in the NC, then the nurses should be allowed to come to the campus X (Nurse 3 NC1).*

However, none of lecturers mentioned about the possibility of nurses to use the facilities in the nursing education institution. From the lecturers' perspective, integration in the NC needs to include CHN services as well as nursing student education and research, as stated by one of the lecturers:

> *We [lecturers] are hoping that the NC does not only become a venue for providing services to patients and their families, but also as a venue for nursing education and research. However, so far in here, the NC has only been used as a venue for students to learn how to provide services [for patients and their families]. We have some students who have conducted research, but the research is not specifically directed at the NC (Lecturer 1 NC1).*

While the lecturers viewed the NC as a space for providing services, student learning, and research, the nurses wanted more reciprocal learning in which they would also have opportunities to improve their knowledge through interaction with the nursing education institution.

These findings show that through the establishment of reciprocal relationships, the NC model has the potential to change community health nursing practice because this model provides a 'place' for nurses, lecturers, and students to integrate CHN services, education, and research. However, in order for this to happen, all the stakeholders need to commit equally to contributing to integration in the NC. These similar levels of commitment are needed because people will cooperate and reciprocate if they know that the other stakeholders are also contributing at a similar or higher level (Kurzban et al. 2001). This level of commitment and contribution should be discussed in the preparation phase in which the stakeholders can set specific outcomes and benefits from the collaboration.

5.4.4 Setting Specific Outcomes and Benefits for All Stakeholders

This study has found that the setting of specific outcomes and benefits for all stakeholders in the Nursing Centre (NC) could help to address the lack of comprehensive and effective recording, reporting, and evaluation planning. This strategy would also enhance the shared common ground among stakeholders that contribute to integration in the NC.

The participants suggested that there was a need for a clear relationship to be established between the NC and the clinics in the Community Health Centre (*Puskesmas)* through a process of clear goal setting. For example, the process of patient referral from the *Puskesmas*' clinics to the NC needs to be made clearer because the current process has failed to refer enough patients to the NC, so that only a few patients come to the NC. This is a significant problem because *"the integration of CHN services, education, and research would not be optimal with limited number of patients in the NC*" (Lecturer 1 NC3). The positive outcome of the NC is that the clients would receive an in-depth health education, as stated by one of the nurses:

> *If there was a NC, the health education would be in-depth. If there was a NC, we could give longer and more detailed health education (Nurse 1 NC1).*

Despite this benefit, the idea of having the NC for all patients would also be problematic and time consuming because the clients would get more time spent on more detailed health education in the NC. On the one hand, longer and more detailed health education could provide benefits for the clients; on the other hand, this practice only allows a limited number of patients to receive the NC services.

Another reason for the lack of clients in the NC is that there is no requirement from the Health Offices or the Ministry of Health to report on the achievement targets for the NC. Without any targets, the nurses and other health professionals in the *Puskesmas* often forget to refer patients to the NC. One of the lecturers added that the students should develop a strategy to bring patients to the NC:

> *So, when students practice in the BP [General Clinics], they should create an internal strategy with the students who are in the NC to refer patients to the NC. … The students tend to wait passively for patients from the BP [General Clinics]; therefore, no patients come to the NC (Lecturer 1 NC1).*

This excerpt shows that the patient referral process is unclear and creates confusion for the students. As there are no performance indicators for activities inside the NC set by the Provincial Health Office, only NC 3 set its own targets while the other two NCs did not have any specific targets. The lack of specific targets for NC activities inside the NC became a barrier for the nurses to undertake these activities.The patient referral system to the NC by

Puskesmas staff has been implemented in one of the NCs examined in this study. The Head of the *Puskesmas* stated:

> *Nurses [in Puskesmas 3] set their own targets of at least 50 people to come to the NC. The problem is that our community views the Puskesmas as a place to get medication, which means that in order to get patients to the NC we need help from other health professionals such as doctors, dentists, nutritionists, and others who will refer patients to the NC. From there, many things can be made as part of our internal policy … that one person in the 'BP' [General Clinic] must refer at least two patients every day (Head of Puskesmas 3).*

The strategy in NC 3 is an excellent example, because there is a clear relationship between the NC and the clinics through a process of clear goal setting. This strategy might be used to facilitate further integration between the clinics and the NC in the *Puskesma*s as the current operation of Community Health Nursing (CHN) services has failed to facilitate the integration at an optimal level.

In terms of outcomes for students, the findings of the document analysis of the published NC texts (Samba 2007, 2012) also shows a lack of specified outcomes of CHN education in the NC. The lecturers only mentioned the curriculum for community health nursing and family nursing as the basis of student placements:

> *We are just following the nursing curriculum, community health nursing and family nursing. Students must have placements in the community and with families. There are no competencies for students to practice in the NC (Lecturer 1 NC2).*

Indeed, the document analysis of the Diploma 3 nursing curriculum in Indonesia shows that there are three competencies for students that are relevant in the community setting: CHN; nursing care for special groups such as occupational health, school nursing, and nursing care for older people; and family nursing (Badan Pengembangan dan Pemberdayaan SDM Kesehatan Indonesia 2006). The scope of CHN competencies is only related to people in the community, as there is no specific information about student competencies in the *Puskesmas*. This curriculum is the basis of the lecturers' decisions in NC 2 to not involve students in the NC inside the building.

A similar situation has also been identified in the core nursing curriculum for the bachelor degree in which CHN and family nursing are separate courses (AIPNI 2015). Even though the bachelor degree curriculum includes topic information on the programs in the *Puskemas*, there is no link between CHN activities and family nursing and the programs in the *Puskesmas*. While students learn about CHN, nursing care for specific groups, and family nursing, they are not equipped with the competency to integrate all of these forms of nursing care within the *Puskesmas* as the authorised organisation to deliver these activities. As a consequence, when students graduate from the Diploma 3 and the Bachelor of Nursing and

then work in the *Puskesmas*, they would view CHN and family nursing practices as being separate from the *Perkesmas* program in the *Puskesmas*.

These findings show that the NC has failed to set specific outcomes and benefits for all the stakeholders, although some of the stakeholders suggested that this should be the case:

> *The nursing education institution and the Health Office should sit down together and discuss specific targets for the NC (Head of Puskesmas 2).*

The setting of specific outcomes and benefits for all stakeholders is important to motivate the students, the nurses, and the Heads of the *Puskesmas*. Even though there is no evidence of the setting of specific outcomes in the NC, the stakeholders recognised the importance of this activity. Moreover, the setting of specific outcomes and benefits in the preparation phase could enable comprehensive data recording, reporting, and evaluation of NC activities. These data could then be used as a basis for further research in the NC.

5.4.5 Research

Research is one of the strategies that can be undertaken in the Nursing Centre (NC) to overcome issues of ineffective data recording, reporting, and evaluation of the NC, and to identify ways to improve the human resource capacity and time management in the NC. This study has found that most of the research activities are Community Health Centre (*Puskesmas)* nurses and staff. Opportunities for research could arise from the basic data collected by the students:

> *When the students have finished their data collection, they will find out about the health problems in the community, so these data can be used as basic data for the researcher. […] they do not have to collect the basic data by themselves. If these three things [education, services, and research] can work together, then we will save time and money, and be more efficient (Suharyati Samba, the founder of the NC).*

Even though most research activities were conducted by the lecturers and students, one of the nurses expressed that he would like to be involved in this research activity:

> *If we can have our name on the reports, it could help us to get credit points for promotion. I would like to be involved in these activities [research] and have my name on the reports (Nurse 3 NC1).*

The importance of research was also expressed by two Heads of *Puskesmas* to improve services in the NC and the *Puskesmas*:

> *I always welcome students and lecturers who want to do research here. It is very important to improve the Puskesmas performance. We [Puskesmas staff] do not have time to do research, so I always ask the students to do research here and give us the reports. I like to read the research reports, especially the conclusion section (Head of Puskesmas 3).*

Research findings are important for us [Puskesmas] to show what is needed to improve our service. I hope at the end of the research, you can share your research findings with us so that we can do something to make things better (Head of Puskesmas 2).

These findings show that the lecturers, nurses, and the Heads of the *Puskesmas* understand the importance of research in the NC. Involving the key stakeholders in collaborative research activities could become a strategy to build on the desire and willingness of the champions in the nursing education institution and *Puskesmas* to improve the quality of community nursing care and students education in the NC. Moreover, the research can be used to meet the needs of the *Puskesmas,* Health Office, and people in the community. Research agendas in the NCs that are aligned with the needs of people in the community can build reciprocity and maintain trusting relationships with the community (Zachariah & Lundeen 1997). The results of these research activities are useful for the Health Office to planning and improving the health programs in order to improve the health outcomes for people in the community.

Despite the desire of stakeholders to be engage in research activities, the results of the document analysis show that the existing guide to the research process in the NC does not provide clear steps or relationships between research and other activities in the NC. The results of the document analysis of the instruction book for the NC model, from *Dinas Kesehatan Propinsi Jawa Barat* (2003), shows that there are three research activities in the NC: research supervision, research activities, and the dissemination of research findings. The research supervision activities are conducted by the lecturers for student research. Besides supervision, the lecturers can also conduct their own research in the NC. The dissemination of research findings is the final research activity in the NC. The analysis found that the relationship between the NC and the research activities is not clear and fails to show a clear research mechanism that can be followed by the stakeholders. This unclear mechanism can also create confusion among the nurses and students who conduct CHN research. These findings indicate that research activities can provide opportunities to improve the quality of CHN services and education in the NC. However, there is also a need to develop a clear link between CHN service provision, education, and research in the NC.

5.5 Summary

Chapter 5 has presented an analysis using the theory of action as the second component of the program theory. The theory of action relates to what the program does or expects to do in order to activate the theory of change that has been identified in Chapter 4. The findings show that there are four key indicators of or the success criteria for integration in the NC. These key indicators are the intention to integrate, continuous and consistent operation of

the NC, having a shared common ground, and consensus on ownership of the NC. These four key indicators have a total of 14 attributes that could be used to develop an evaluation instrument to measure the successful achievement of integration in the NC. First, attributes of the intention to integrate are attitude towards integration, subjective norms towards integration, perception of behavioural control towards integration, and overall intention to integrate. Second, attributes of continuous and consistent operation of the NC include continuity of the service provided and consistency of education and research in the NC. Third, the indicator of having a shared common ground have four attributes including knowledge sharing, focus of the NC, type of collaboration, reciprocity and leverage for organisations based on the target achievement. Finally, the consensus on ownership of the NC consists of four attributes, which are policy for the NC, memorandum of understanding (MOU), job description, and recognition of the contribution of all stakeholders through comprehensive documentation and reporting.

After identifying the success criteria, this study has also identified the factors that affect integration in the NC model, being human resources capacity, time management, infrastructure and funding, a lack of a comprehensive and effective recording and reporting system, and a lack of a comprehensive evaluation plan. The identification of these factors provides a clear direction for the strategies that can be undertaken to address these factors in order to achieve integration in the NC. There are a number of strategies that have been identified to address the factors that affect integration, including a structured approach for setting up and evaluating the NC, reflection, reciprocity, the setting of specific outcomes and benefits for all stakeholders, and conducting research.

Overall, the findings from the analysis in Chapter 4 provided important new insights about the influencing factors and consequences of the inadequate functionality of the NC model in Indonesia which could be addressed through integration as the theory of change for the NC model. Chapter 5 has highlighted the key indicators and factors that affect successful integration from the participants' point of view. The discussion also permitted consideration of the role components of service learning and research, which include structured experiential learning, reflection, reciprocity, and the setting of specified outcomes and benefits for all stakeholders to reinforce this integration. Together, these key indicators and factors can bring about the intended integration and outcomes, as the theory of action for the NC model. The findings from Chapters 4 and 5 will be tied together in the following chapter in a graphical representation of the conceptual framework of the NC model, the program theory as an evaluation framework, and the logic model as a 'blueprint' for integration in the NC model in Indonesia, which may also be applicable to NCs in other countries. This exercise

will then lead to a discussion of operational considerations in the Indonesian context, along with the relevance of this exercise for the operation and evaluation of academic NCs on a larger scale.

CHAPTER 6 DISCUSSIONS: CONCEPTUAL MODEL AND EVALUATION FRAMEWORK FOR THE NURSING CENTRE

6.1 Introduction

This chapter brings together the major insights that have been identified in this study and provides a discussion of these in relation to the academic Nursing Centre (NC), service learning, and the integrated health service literature. The previous two chapters have reported on the findings from the interviews and the document analysis using the theory of change and the theory of action that form the program theory, proposed by Funnel and Rogers (2011), as an organisational and analytical framework.

By using the lens of program theory, the components of the NC can be understood from the different stakeholders' points of view to identify which parts of the NC work well and which parts do not in order to achieve short-, medium-, and long-term, as well as ultimate outcomes of the NC model (Funnel & Rogers 2011). These findings will be combined to form a graphical representation of the NC model, which has been produced inductively from the interviews and the document analysis, in fulfilment of the first research objective, which is to understand the components of the NC model as a collaborative approach to service learning in West Java, Indonesia. As well, in relation to the achievement of the second research objective, the findings identified in Chapters 4 and 5 will be combined into a graphical representation of the program theory as a 'blueprint' and an evaluation framework for the NC model in Indonesia, which may also be applicable to NCs in other countries. This exercise will then lead into a discussion of the applicability of the proposed conceptual model and the program theory of the NC for the Indonesian context, along with the relevance of this program theory for academic NCs and service learning on a larger scale. Finally, this chapter will also provide a discussion on the nature of the NC evaluation framework in the wider context of integrated health services, academic NCs, and the field of service learning.

The first section of this chapter will provide an overview of the study findings, which will be followed by the presentation of a proposed conceptual model for the Indonesian NC model. The third section will present the program theory as an evaluation framework for the NC.

6.2 Overview of the Study Findings

The overall finding from this study shows that integration of Community Health Nursing (CHN) services, education and research could improve the functionality of the Nursing Centre (NC). Thus, the NC needs to focus on activities to maintain a continuous and consistent application of the theoretical basis of the NC, develop a shared common ground among the stakeholders, and to create a consensus on the ownership of the NC. These practices would improve integration in the NC which could produce a series of outcomes for each stakeholder, as presented in the ideal outcomes chain of the NC (see Figure 4.2 page 129).

This current study found that there are four key indicators of or success criteria for the integration in the NC. These indicators are the intention to integrate; continuous and consistent operation of CHN services, education, and research; having a shared common ground on the purposes of the NC; and coming to a consensus on the ownership of the NC. However, there are a number of factors that could affect the achievement of this integration. These factors are human resource capacity, time management, infrastructure and funding, a comprehensive and effective recording and reporting system, and a comprehensive evaluation plan. These factors can be addressed by using a structured approach for setting up and evaluating the NC model, various components of service learning (structured intra-curricular experiential learning, reflection, reciprocity, and the setting of specific outcomes and benefits for all stakeholders) and through conducting research activities in the NC.

The results of the NC document analysis demonstrated that the original work processes of Indonesian NCs have failed to provide a clear position on, and relationships among, CHN services, education, and research. Therefore, a new conceptual model (see Figure 6.1) is proposed in order to clarify the relationships between these three components of the NC. Figure 6.1 shows the tri-partite relationships between CHN services, education, and research in the NC model, as well as the external factors that influence the functionality of the model. CHN services and education using service learning are at the bottom of the triangle because these are the fundamental activities that support research and community service activities, which are placed at the tip of the triangle. CHN services consist of inside the NC facility as well as outreach activities. Nursing education includes both CHN and family nursing courses. The gerontology nursing course can be added as an option because some of the nursing education institutions also integrate this course into the NC activities, which are integrated into the NC model as they are interrelated within the community. The identification of health problems and community needs during the integration of CHN services and education could become a topic of further research and community service activity for lecturers by involving

nurses and students in the NC in order to maintain the ongoing integration of CHN services, education, and research in the NC.

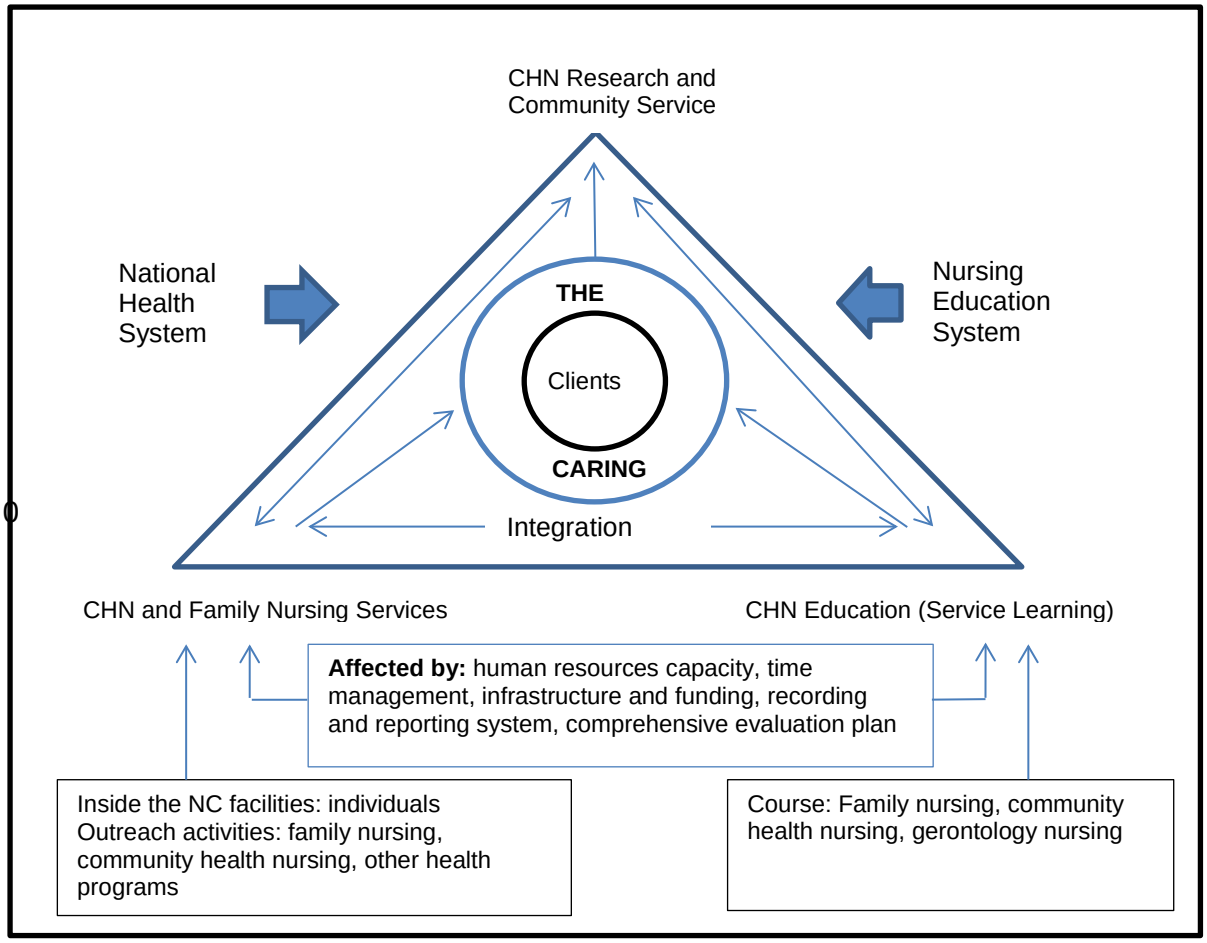


Figure 6.1 The proposed new conceptual model of the NC

The findings from Chapters 4 and 5 are combined, in which the identified components of the NC model will be put together into a logical sequence which will graphically represent the main issue, the strategies and outcomes as the overall program theory of the NC model (see Figure 6.2 in this chaper page 185). This program theory will serve as a 'blueprint' for the Indonesian NC model, which may also be applicable to NCs in other countries, a need that has been identified in the literature (Levine-Brill, Lourie & Miller 2009).

The following two sections will discuss the applicability of the proposed conceptual model and the program theory as the evaluation framework of the NC for the Indonesian context, along with how program theory can work as an evaluation framework for the NC in the wider context.

6.3 The Proposed Conceptual Model of the Nursing Centre

The findings from this study have contributed to a new understanding of the components of integration in the Nursing Centre (NC) model. These components can be used to refine the conceptual basis of the NC and to clarify the relationships between these components in order to maintain the continuous and consistent operation and evaluation of the NC model as a collaborative approach to service learning. This study has identified that there are four main components of the NC as perceived by the participants and outlined in the documents. These components are: 1) clients (individual, families, and the community) as the shared common ground in relation to the purpose of the NC, 2) Community Health Nursing (CHN) and family nursing services, 3) nursing education using service learning approach, and 4) research and community services. It is argued that all of these components need to be undertaken in a caring environment within the NC in order to develop the caring behaviour of nurses and students who are involved in the NC. These components are used to construct the proposed conceptual model of the NC as shown in Figure 6.1. This proposed conceptual framework is different from other NC models. As mentioned in Chapter 2, there were various models and approaches that have been used by NCs in a number of countries, starting with community-based services (Lundeen 1993), primary care services (Lundeen 1997), the Betty Neuman model (Newman 2005), the evidence-based model (Oros et al. 2001), the business plan model (Miller et al. 2004), and the service learning model (Yeh et al. 2009). These publications, however, did not show a clear learning approach and integration used by stakeholders in applying these models. This proposed conceptual framework adds new knowledge in terms of the integration of CHN services, education, and research in the NC.

In addition, this proposed conceptual framework is also different from the original Indonesian NC model proposed by Samba (2002). In the original conceptual model (see Figure 1 in Appendix 1, page 219), there are six concepts of the NC, as described in Chapter 4. These concepts do not create a clear shared common ground between the stakeholders, and the six concepts are linked to each other without any clarity around the responsibilities and roles of nursing education and health service stakeholders. Furthermore, there are no clear steps and working mechanisms to show how the NC would produce the quality of service and client independence outlined in the original conceptual model of the Indonesian NC.

In this new proposed conceptual model (see Figure 6.1), the clients, who consist of individuals, families, and the community, are the core of the NC model as the shared common ground for both nursing education and health service stakeholders to integrate CHN services, education, and research. A shared mission, values, goals, and measurable

outcomes are important to maintain a collaborative approach (Berkowitz 2000). In this way, all stakeholders actively and jointly establish roles, norms, and processes based on contributions from, and the consensus of all stakeholders. This consensus would lead to effective interaction among the stakeholders and would ultimately produce better outcomes (Foss et al. 2003). A shared common ground is crucial for inter-sectoral collaboration to strengthen primary and community care, as well as to better coordinate care around people's needs (Walley et al. 2008). This would lead to increased access to comprehensive and high quality health services (WHO 2015).

Service learning is proposed as a replacement for adult learning as the learning approach in the proposed conceptual framework of the NC, which has been derived from the pattern matching analysis in Chapter 4. I argue that service learning is an appropriate educational approach for the NC because it aims to integrate service in the real-life setting with formal education in the higher education sector (Berry & Chrisholm 1999; Voss et al. 2015). This current study shows that service learning has the potential to be used as a learning approach in the NC which are similar with the findings from other publications (Connolly, C. et al. 2004; Lough 1999; Lutz, Herrick & Lehman 2001; Marek, Rantz & Porter 2004; Yeh et al. 2009) which reported service learning as a specific approach to student education in the NC alongside service provision for clients and research.

The findings in this study show that there are a number of themes which relate to the service learning approach, such as stakeholders' responsibility to maintain and improve the quality of CHN services, community services, reciprocity, knowledge-sharing, and the need for discussion and reflection on the NC model. In the NC model, nursing students learn from the experience of providing CHN services to individuals, families, and people in the community within the NC coverage area. Students need learning experiences that stimulate their curiosity, integrate and accumulate all the course subjects, and that link theory and practice to address the needs of the community (Bassi 2011; Downes, Murray & Brownsberger 2007). By integrating the service learning approach within the NC model, students learn to work collaboratively with people in the community, nurses, and other health professionals to produce better outcomes for all stakeholders (Nokes et al. 2005).

The proposed conceptual model in Figure 6.1 shows the clear roles and responsibilities of both the nursing education and the health service stakeholders. The roles and responsibilities of the nursing education stakeholders are to provide service learning, research, and community service, while the roles of the health service stakeholders are to provide family nursing services, CHN services, and other health programs in the community health centre. The roles and responsibilities of these two organisations are integrated

through a collaborative approach which is co-located in the NC. In this proposed model, there is a link between the nursing education and the community health service stakeholders that enables greater collaboration and integration in the NC. Such collaboration and integration is 'a far more effective way of meeting the diverse and complex needs of individuals and communities' (Zannettino 2007, p. 9).

The health service stakeholders are leaders in the provision of family nursing services, CHN, and other health programs in the NC. However, this study has found that health decision-makers and nurses have a misunderstanding of CHN practice as simply consisting of home visits or family nursing practice. This is further shown through the use of the 'Family Independence Level' as the performance indicator of the CHN program by the Indonesian Ministry of Health. As a result, nurses do not view these activities as part of their role as community health nurses when conducting, for example, Tuberculosis (TB) and integrated management of childhood illness programs, because they perceive CHN as family nursing only. However, community health nursing is different from family nursing. Community health nurses improve and maintain the health of the community through the family; however, the priority is on the health of the community, while the focus of family nurses is the family as the unit of service (Allender, Rector & Warner 2010). Accordingly, community health nurses focus on nursing activities that are part of essential public health services, such as conducting community assessments to identify the determinants of health and disease, providing health education in the community, developing programs and services for the population, and participating in continuing education (Anderson & McFarlane 2011). Clearly, the activities of nurses in community health centres, whether conducting health education in the NC or implementing programs, are part of CHN activities. Through the NC model, nurses are encouraged to integrate a range of programs using the CHN approach as well as to conduct family nursing activities.

Apart from collaboration between health service and nursing education institutions, Figure 6.1 also shows that the NC model is influenced by other external factors including from the National Health System and the Nursing Education System. For example, a change in health sector financing and resources may directly influence the operation of the NC, or a change in the nursing education curriculum could also influence the involvement of nursing education institution NC. The integration of programs in Indonesian community health centres (*Puskesmas*) using the CHN approach within the NC model is a highly challenging task. This is because of the complex nature of the context that influences CHN practice and the long history of fragmented healthcare services in *Puskesmas* in Indonesia.

In Indonesia, CHN was compulsory from 1975 to 1999 as the seventh basic program of the *Puskesmas*. During this period, the Indonesian government emphasised the importance of conducting home visits to vulnerable families at least four times a year as part of the CHN services. The research evidence about healthcare access in Indonesia during this period shows that nurses were the most efficient health workforce option for health education and health promotion activities to substitute for the traditional health practitioner (Chernichovsky & Meesook 1986; Gish, Malik & Sudharto 1988). As nurses are considered as the most efficient option for community health, the Indonesian government placed a large number of nurses in the *Puskesmas* to provide primary healthcare services to the community, particularly to increase the number of contacts between the health professional and the community. Even though the CHN (*Perkesmas*) program was viewed as an ideal form of practice in *Puskesmas*, research evidence from Sciortino (1995), who studied nursing activities in three *Puskesmas* in Central Java, showed that the actual performances of the nurses in *Puskesmas* were far from ideal:

> *In daily practice, regular nurses refuse their formal community care role. In tune with the rest of the staff, they totally neglect their educative and promotive tasks. They entrust these 'unwanted' tasks to the auxiliary nurses or simply do not carry them out. Probably the clearest example of total negligence of community activities is the Perkesmas. This main manifestation of the "new" community care orientation in nursing, has been abandoned by the health centre nurses (Sciortino 1995, p. 170).*

The fact that the current study has also found a similar situation in relation to the actual performance of nurses 20 years ago is very concerning. Among the nurses from the three NCs examined, only nurses in NC 3 showed improvement in *Perkesmas* activities, although not to an optimal level. This evidence shows that nurses' activities are not conducted according to nursing competencies. Most nurses undertake medical activities because the majority of medical doctors are not available for their patients for a number of reasons, such as having to attend meetings in the Health Office or undertaking other work outside of the *Puskesmas*. In this situation, nurses were delegated to replace the doctors for the examination of patients or to help the doctors to see more patients, because many patients came to the *Puskesmas* to seek treatment and could not be turned away (Sciortino 1995). As this practice has been happening for a lengthy period of time, nurses appear to have come to enjoy these curative tasks instead of conducting CHN activities, a pattern which is also evident in the current study.

These practices by nurses in the *Puskesmas* continued to happen until the Indonesian economic crisis in 1998. Following the economic crisis in 1998, the Indonesian government shifted from a centralised to a decentralised model of government in which the Provincial and City/Regency governments had the right to choose and manage their own regional

development, including in the healthcare sector. During this time, local governments implemented a range of programs in the health sector, while some of the older programs were left behind, including the CHN program. This situation became even worse when the CHN program was removed from the basic set of programs for the *Puskesmas* by the Indonesian Ministry of Health in 2004 (KMK number 128/MENKES/SK/II/2004). Since then, nurses and other health professionals in the *Puskesmas* have worked in programs silos in order to achieve the performance targets for the six basic programs.

Another factor that has influenced CHN practice in Indonesia is the funding they received from international donor and health organisations. There was a concern that "the influence of inter-governmental agencies is being crowded out by donor-driven funding patterns that may not be fully responding to country needs" (The Lancet 2009, p. 2083). These donor organisations often required the government to undertake specific programs, such as the TB, malaria, and HIV/AIDS programs, rather than providing general health support (Ravishankar et al. 2009), which led to the fragmentation of healthcare services. An illustrative example is the TB program. This study has found that nurses who coordinated the TB program did not consider it to be part of CHN activities apart from the home visits.

The poor state of community health nursing practice also affects the quality of the nursing education process in Indonesia. Aitken (2008) who conducted a research on nursing education in Central Java, Indonesia has found that there are four critical interdependent problems related to the clinical component of nursing education as follows:

> *"…an overwhelming number of students competing for field practice experiences; laboratory experiences failing to compensate for the lack of context-specific learning; clinical experiences (when available) focusing on skill acquisition, as opposed to the integration of theoretical knowledge and evidence-based practice; and the few consequences facing providers who fail to facilitate technical proficiency in a framework of evidence-based practice" (Aitken 2006, p. 136).*

These problems were also evident in the community setting, which created a gap in CHN education. The gap between CHN practice and education in Indonesia decreases the quality of nursing graduates. Hence, it is more likely that graduating nursing students will have low competency in CHN, and will also have only a low contribution towards the improvement of the health status in the community.

In the NC, students learn to deliver CHN and family nursing care in the *Puskesmas* coverage area through partnerships and collaboration with the NC stakeholders. The clients receive services in a caring environment. In the NC model, students learn how to solve problems in real-life situations in the community, so that they develop a sense of caring for their clients in the community as well as in the hospitals when they graduate. These insights into caring

develop when the students and the nurses engage directly with patients, families, and the community (Morse et al. 2006). Caring behaviours also develop when the conditions within the placement setting are supportive of students (Sikma 2006). Students, nurses, and lecturers who work together in the NC engage with clients at the individual, family, and community levels. Through these forms of engagement, students not only learn about the topic matter, but also enhance their understanding of the meaning of being a nurse, a citizen, and a member of the community (Seifer & Vaughn 2002). Service learning is an effective pedagogy to improve caring behaviours, providing a caring environment for students and nurses, as well as for people in the community (du Plessis, Koen & Bester 2013; Hunt, R. J. & Swiggum 2007; Seifer & Vaughn 2002). Thus, it is argued that caring behaviour is a fundamental element for the overall NC model.

Despite the potential benefits of integration in the NC, the current study shows that partnerships and collaboration between the health services and the nursing education institutions in the NC were facing a number of challenges due to differences in the organisational cultures of these institutions. For example, there were different working hours, workloads, and organisational policies in these institutions that made it difficult for the stakeholders to meet and communicate on a regular basis. In order to achieve a successful partnership to aid the integration of CHN services, education, and research, the NC stakeholders need to develop an organisational culture that moves beyond the cultural norms of each of the organisational partners (Lundeen, Harper & Kerfoot 2009). Organisational culture can be defined as:

> *"a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein 2006, p. 17).*

Cultural patterns in well-established organisations are not easy to change; however, Lundeen, Harper and Kerfoot (2009) further suggested that collaborating organisations need to address complex issues, move beyond organisational boundaries, have a shared culture of integration, and implement a shared governance structure in the partnership. This shows that the NC is a complex organisation that needs to be managed carefully because such a complex model requires a specific level of practice and expertise in order to implement the model successfully (Funnel & Rogers 2011).

In Figure 6.1, the graphic representation of the relationships between all components of the NC model is made as simple as possible to enable stakeholders to understand the complex nature of the NC model. However, this model needs to be tested in the real-life setting in

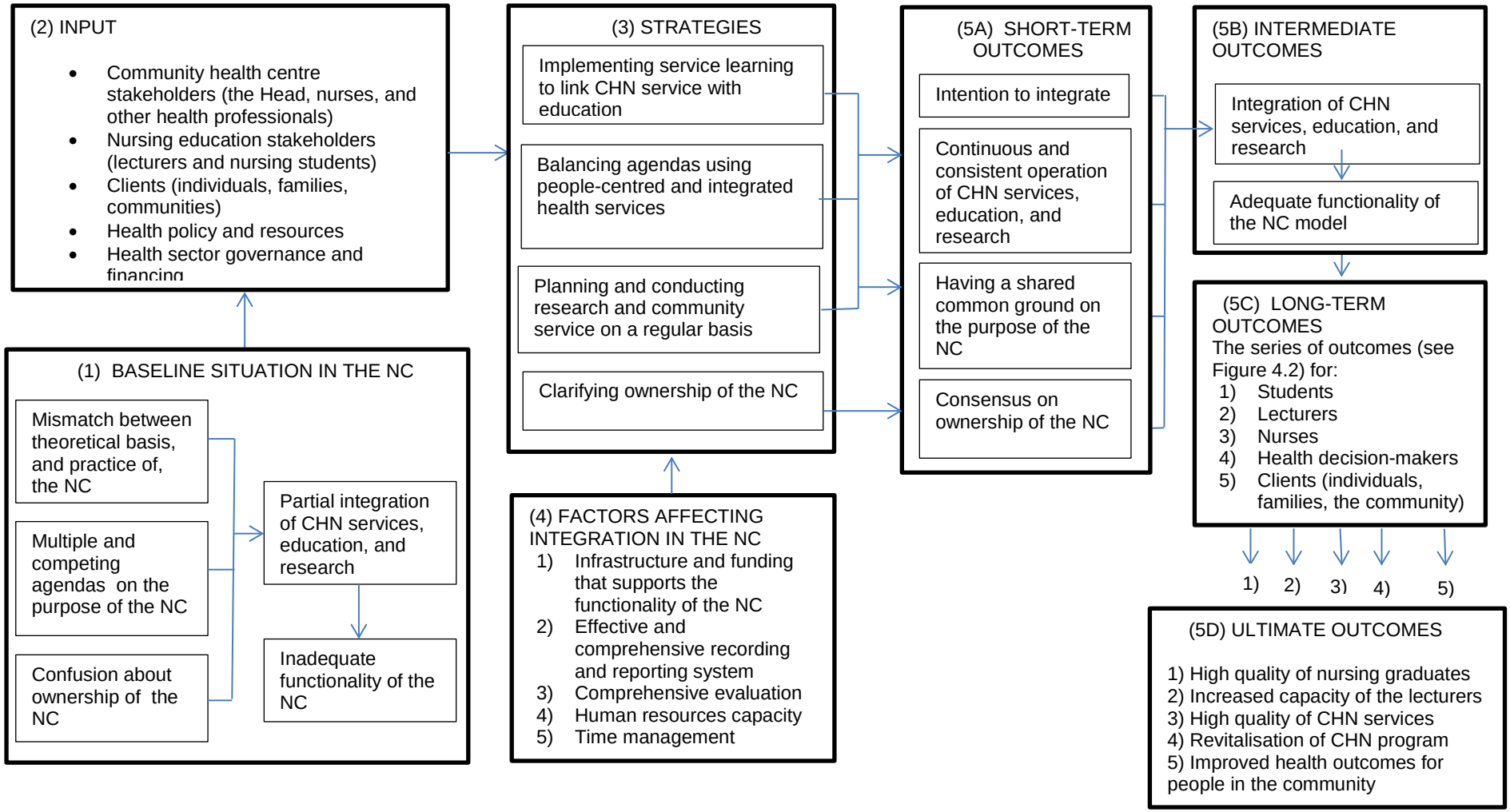
order to identify its applicability for improving stakeholders' understandings of the NC model. A more detailed program theory of the NC model will be presented in the following section.

6.4 The Program Theory as an Evaluation Framework for the Nursing Centre

The graphical representation of the program theory will enable the effective communication of the main message that will engage the stakeholders who use it (Funnel & Rogers 2011). The program theory could also be used as an evaluation framework for the overall NC model in order to ensure that it addresses current problems and produces positive outcomes for CHN practice and education. Figure 6.2 depicts the program theory as the evaluation framework for the NC in fulfilment of research objective two, which has been inductively derived from the interviews and the document analysis presented in Chapters 4 and 5. The straightforward connection previously assumed in the original Indonesian NC model (see Figure 1 in Appendix 1, page 219), is now transformed into a detailed pathway to represent the relationship between the problems that need to be addressed and the actions required to achieve change in the NC model. Adequate representation of the program theory is needed to test, improve, and disseminate the program theory so that it can be useful for the stakeholders (Davies 2004).

This representation of the NC program theory consists of five major parts. The first part presents the baseline situation which showed that there was inadequate functionality of the NC due to a partial integration in the Indonesian NC. The second part consists of the inputs for the NC model, including human resources, health policies and governance, and other sectors. The third part consists of strategies to overcome the problem of partial integration in the NC as well as to address the factors that affect this integration. The fourth part consists of five factors that affect the integration of CHN services, education, and research in the NC which include human resources capacity, time management, infrastructure and funding, a recording and reporting system, and a comprehensive evaluation plan. The last part consists of short-, medium-, long-term, and ultimate outcomes of the NC model. In Figure 6.2, these outcomes are presented only briefly. For complete details, refer to the outcomes chain diagram presented in Figure 4.2 in Chapter 4 (see page 129). The program theory of the NC is presented in as simple a form as possible, but also in a comprehensive manner that covers all aspects of the NC model identified in this study. As Funnel and Rogers (2011, p. 70) stated, the representation of the program theory should be "as simple as possible, but no simpler". The overall program theory of the NC is presented in Figure 6.2 and will be followed by a detailed explanation of the program theory.

Figure 6.2 The program theory of the Indonesian NC model



6.4.1 Baseline Situation and Input

The context surrounding the establishment and operation of the NC is highly complex because it involves healthcare delivery, nursing education, and community systems. Understanding the baseline situation is important in order to provide insight into the current problems of the NC model. The current study shows that there is a mismatch between the theoretical basis and the practice of the NC that leads to the partial integration in the NC. The theoretical basis explains why and how an intervention works, and so is important for determining the effectiveness of the intervention (Walshe 2007). The mismatch between the theoretical basis and the operation of the NC is influenced by the broad concepts used in the NC and there is no operational concept that links the services with nursing education in the NC. Ideally, there should be a link between theory and practice (Bailey, P., Carpenter & Harrington 2002) in which the theory informs practice and the practice can be used as a way of gaining insight and explaining the theory (Breunig 2005). This mismatch also leads to the development of poor evaluation systems because there is no link between the characteristics of the NC and the instruments used to evaluate it. This problem is found not only in Indonesia, but also in other countries where many international aid agencies face difficulties in evaluating their achievements due to the inability of the organisation to "know what it is doing" (Davies 2004, p. 102). As discussed in Section 6.3, service learning could be used to link CHN theory and practice in the NC.

Another factor that contributes to partial integration in the NC is the multiple and competing agendas surrounding the purpose of the NC. Multiple and competing agendas in organisations are not new; however, there is only a limited literature on how to manage this issue (Sundin, Granlund & Brown 2010). Stakeholders need to be prepared to share records and to communicate with the wider team in order to manage this issue (Howarth, Holland & Grant 2006). The multiple and competing agendas also lead to low levels of accountability of stakeholders who work together in the NC due to confusion and turf-wars in relation to the responsibilities of the nursing education and health service stakeholders. The nursing education stakeholders perceived that the *Puskesmas* stakeholders should be more active and take responsibility for running the NC, while the *Puskesmas* stakeholders perceived that the nursing education stakeholders should be more involved and provide benefits to the *Puskesmas*. This situation clearly influences the levels of psychological ownership of, and belongingness to, the NC. A lack of self-efficacy, sense of belonging, and accountability would contribute to a lack of self-identity as a community health nurse. All of these factors contribute to the partial integration of CHN services, education, and research in the NC, which further leads to the inadequate functionality of the NC as identified in the current study.

Confusion regarding the ownership of the NC has also been identified as one of the factors that contribute to the partial integration of CHN services, education and research in the NC. Indonesian NCs are quite different other NCs because they are co-located in community health centres as part of a collaborative approach between health services and nursing education institutions. Therefore, the ownership of the NC is held by both institutions. Ownership in this case means both physical and psychological ownership. In terms of physical ownership, there is a need for a written policy to explain where the NC sits within the community health system. Psychological ownership for stakeholders is also important because if they feel as though they own the NC, they will be more likely to show awareness, thoughts, and beliefs towards integration in the NC. Psychological ownership is defined as "the state in which individuals feel as though the target of ownership or a piece of that target is theirs, and reflects an individual's awareness, thoughts, and beliefs regarding the target of ownership" (Avey et al. 2009, p. 174). When stakeholders feel a psychological sense of ownership towards the NC, they will tend to work collaboratively to achieve the common ground.

Psychological ownership is also related to a sense of belongingness (Avey et al. 2009). According to Levett-Jones et al. (2007), belongingness is:

> *the need to be and perception of being involved with others at differing interpersonal levels ... which contributes to one's sense of connectedness (being part of, feeling accepted, and fitting in), and esteem (being cared about, valued and respected by others), while providing reciprocal acceptance, caring and valuing to others' (Levett-Jones et al. 2007, p. 211).*

This study has found that there was a lack of stakeholders' sense of belonging to the NC, as some nurses separated their CHN practice from their role as *Puskesmas* staff which led to low involvement in NC activities. As a consequence, the students also felt that they did not belong to the NC because they attempted to fit in with the *Puskesmas* activities in order to be accepted as part of the member of the placement setting. In this way, the students had a tendency to conform to community nursing practices regardless of whether the nurses performed ideal practice or not (Levett-Jones et al. 2007). This help to explanation of why CHN practice in Indonesia has not changed despite CHN now being taught in higher education. The psychological ownership in, an organisation such as the NC, can be described as a feeling that one belongs in an organisation by 'having a place' to fulfil their social and psychological needs (Avey et al. 2009). Even though some of the participants stated that the NC gave them 'a place' to be nurses in the *Puskesmas*, co-location was not sufficient to increase psychological ownership and belongingness to the NC, because there were other factors that also contributed to psychological ownership, such as self-efficacy

which relates to people's belief in their capability to perform a task, accountability, and self-identity (Avey et al. 2009).

The current study, however, adds new knowledge about the stakeholders' confusion around the ownership of the NC that contributes to the inadequate functionality of the NC. Therefore, in order to help prevent the failure of the NCs, the key stakeholders need to evaluate whether there is a mismatch between the theoretical basis and the practice of the NC, the multiple and competing agendas about the purpose of the NC, and the stakeholders' confusion about the ownership of the NC. It is important for such an evaluation to be conducted on a regular basis to identify potential problems and to take possible action to maintain the sustainability of the NC. The program theory that has been developed in the current study can be used as an evaluation framework to identify these problems and to maintain the long-term vision of the NC.

6.4.2 Strategies to Improve the Integration in the Nursing Centre

Nurses and students can learn about best practice in the Community Health Nursing (CHN) and family nursing in the Nursing Centre (NC) through a service learning approach. This study has identified a number of phases in the operation of the NC model, consisting of the preparation, orientation, working, pre-termination, termination, and adoption phases. These findings have similarities to the process of service learning found in the literature, particularly the preparation, working, and termination phases (Gupta 2006; Perry, Gabe & Metcalf 1998; Riedford 2011). Gupta (2006) used the PARE (Preparation, Action, Reflection, and Evaluation) model to achieve service learning goals. Preparation has been emphasised as a key phase for successful service learning (Larson et al. 2011). Furthermore, Narvasage et al. (2002) suggested that planning for evaluation in the preparation phase can provide clear expectations for faculty and community partners.

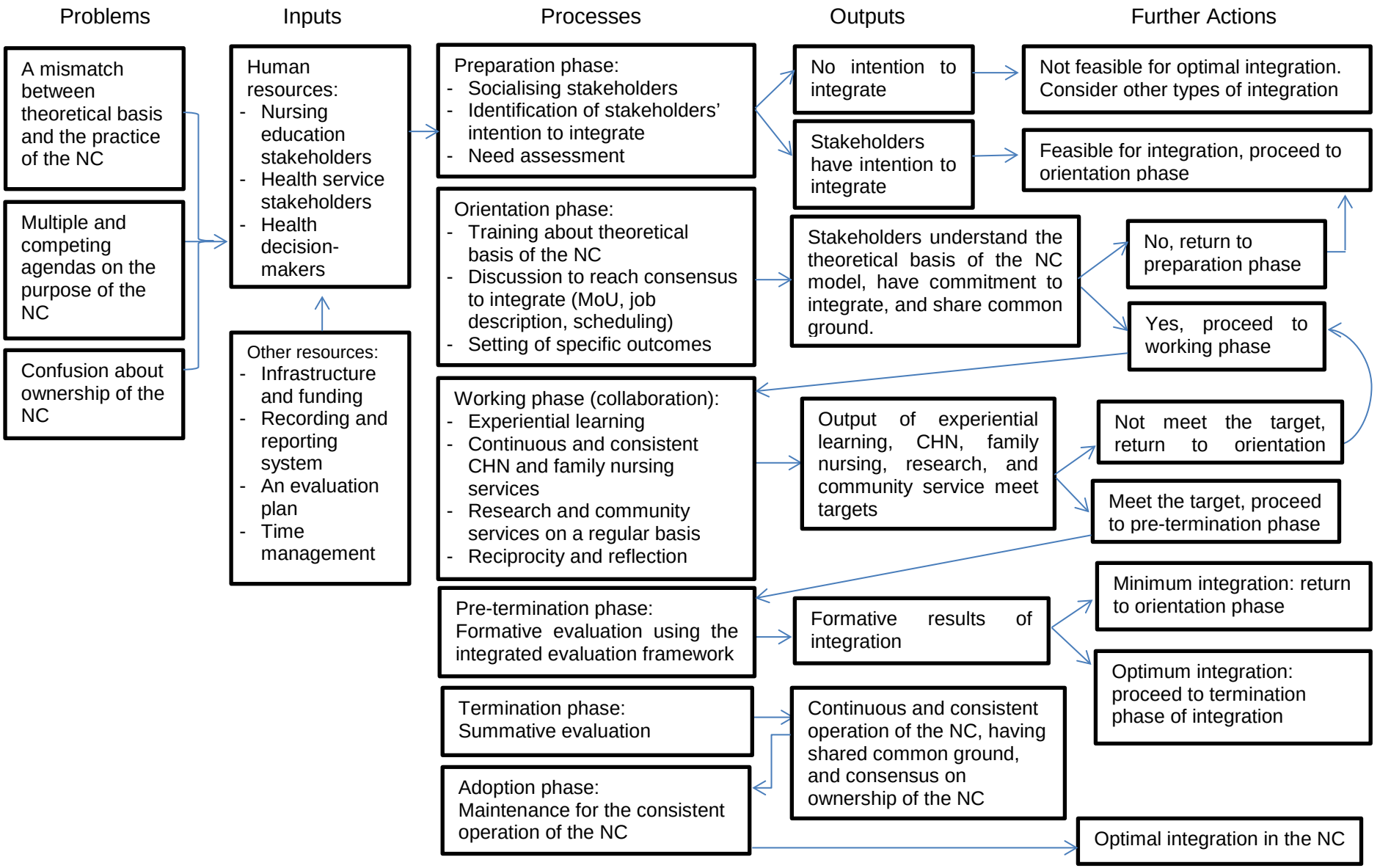
The findings in this current study have identified three different phases that have not been identified in other studies, the orientation, pre-termination, and adoption phases. In the orientation phase, students are guided by their lecturer to familiarise themselves with the NC environment. The pre-termination phase is where the formative evaluation takes place to identify the level of integration in the NC and to prepare for the termination phase. The characteristics of the pre-termination and termination phases are still debatable between the stakeholders. The termination phase is when the collaboration between the nursing education institution and the Community Health Centre (*Puskesmas)* is ended. In this phase, the NC is evaluated, strengthened, and modified based on the results of the evaluation. However, these phases warrant further research to determine whether the benefits outweigh the shortcomings for both *Puskesmas* and nursing educationi institutions.

The adoption phase is where optimal integration has been achieved, all the stakeholders share systems and facilities in a seamless way, consumers and providers have the same expectations of the collaboration, there is an in-depth appreciation of roles and cultures in the NC, collaborative routines are regular and smooth, and there is conscious knowledge sharing based on the situation and levels of expertise (Heath, Wise & Reynolds 2013). Collaboration is a powerful tool to integrate primary healthcare into the academic system in order to improve the quality of education through knowledge-sharing and synergies between the health services and education institutions (Frenk et al. 2010). The major challenge for such integration is to provide a learning environment that can support professional growth (Frenk 2009) through engagement with local communities to promote health and disease prevention in the population (Frenk et al. 2010). The current study indicates that if the NC model functions adequately, it would have the potential to provide an environment that could foster the integration of primary healthcare using the CHN approach with the nursing education system to produce high quality nurses who will contribute to the health status of people in the community. In order to achieve the fullest potential of the NC, the seamless integration of CHN services, education, and research needs to become a priority to be addressed by the NC stakeholders.

Collaboration between CHN services and nursing education stakeholders in a *Puskesmas* could provide integrated and continuous healthcare services to people in the community. Such integration could also improve the client experience of care, improve the health of families and the population, and in the end, reduce healthcare costs per capita because the CHN emphasises health promotion and disease prevention activities (Heath, Wise & Reynolds 2013). However, the results of the document analysis showed that the working mechanism of the original model of the Indonesian NC failed to facilitate integration in the NC because the founder used four separate flowcharts (see Figures 3, 4, 5, and 6 in Appendix 1) to show the working mechanisms for CHN services, education, and research; however, there was no direct connection between these flowcharts to show how the overall framework would fit together. This lack of integration within the Indonesian framework led to the disintegration of the operation of the NC. The flowcharts of the operation of the Indonesian NC need refinement in order to facilitate the integration in the NC. Therefore, in the current study, a new working mechanism for the NC has been proposed to show the connections and the phases in the operation of the NC in the form of a logic model. The logic model is used to display input, processes, and outputs in a systematic and simple visual way in order to understand the linkages between these elements (Cooksy, Gill & Kelly 2001; Kellogg Foundation 2004).

Figure 6.3 outlines the NC logic model to address the problem of partial integration in the NC which is caused by the mismatch between the theoretical basis and the practice of the NC; multiple and competing agendas on the purpose of the NC; and the confusion about the ownership of the NC. The logic model has been created which consists of inputs, processes, outputs, and further actions. The inputs consist of human resources including nursing education stakeholders (lecturers and students), community health centre stakeholders (the head of the community health centres, nurses, and other health professionals in the community health centre), health decision-makers in the Health Offices, and clients. These human resources are also influenced by other resources, such as infrastructure and funding, a reporting and recording system, an evaluation plan, and time management. These resources would be processed through six phases of activities, including the preparation, orientation, working, pre-termination, termination, and adoption phases. Each of these phases has different outputs, which include four key indicators of or the success criteria for integration in the NC. These key indicators: the stakeholders' intention to integrate; continuous and consistent operation of CHN services, service learning, and research; having a shared common ground on the purpose of the NC; and reach consensus on the ownership of the NC. These inputs, processes, and outputs are depicted in Figure 6.3. Following this diagram, a detailed discussion of the logic model will be presented.

Figure 6.3 Logic model to address the problems related to partial integration in the NC



The following sections will provide a detailed discussion of the six phases outlined in the logic model in Figure 6.3.

6.4.2.1 Preparation Phase

The preparation phase, as seen in Figure 6.3, focuses on socialising stakeholders in the functioning of the NC, the identification of stakeholders' intentions to integrate, and the needs and agendas of each stakeholder. As mentioned in Chapter 5, there are four key elements of integration in the NC. One of these elements is the stakeholders' intention to integrate, which consists of attitudes, subjective norms, and perceived behavioural control (see the definition on page 135 of this thesis) towards integration. Stakeholders who have a favourable attitude, positive subjective norms, and strong perceived behavioural control towards integration would be likely to move ahead with the integration; however, not all stakeholders have a high intention to integrate CHN services, education, and research. Therefore, these key elements and their attributes need to be identified in the preparation phase.

It is also important to conduct a needs assessment in the preparation phase. There is a possibility that the stakeholders in a NC will have an organisation-centred viewpoint, which means that each organisation may only be concerned with achieving its own agenda and may only have minimal intention to integrate CHN services, education, and research. In such a situation, optimal integration is not feasible and stakeholders might consider other types of integration such as 1) integration of nursing education and CHN services (with an emphasis on student education); 2) integration of the lecturers' community services or research activities and CHN services (with an emphasis on the lecturers' activities); and 3) integration of CHN services and nursing education (with an emphasis on CHN services). These types of integration are similar to the types of service learning found in the literature in which there are three major approaches. These are service experience for the community (with an emphasis on the community), specific learning experiences for students through service (with an emphasis on the students), and both service and learning for students and the community (Foss et al. 2003). However, the current study adds new knowledge that emphasises the lecturers' activity in the service learning process. These alternatives can be chosen by nursing education institutions to start building new forms of collaboration. At some stage, both institutions could perform a formative evaluation to identify whether there is a need and an intention to integrate at the optimal level. When the need and intention to integrate increases, then the NC can proceed to the orientation phase.

6.4.2.2 Orientation Phase

In the orientation phase (see Figure 6.3), all stakeholders receive training on the theoretical basis of the NC from resource persons in the Provincial Health Office and experts in the NC field. After the training, all the stakeholders self-assess their understandings about the theoretical basis of the NC, and their commitment to ensuring optimal integration and to identify the specific outcomes that they expect to achieve through the integration and collaboration processes. These are important steps in achieving a shared common ground on the purpose of the NC. The shared common ground is determined by the knowledge-sharing process, the type of collaboration, the focus of the NC, and the reciprocity and leveraging power of both organisations. In order to create a shared common ground, the stakeholders require a knowledge-sharing process. In the orientation phase, all the participants share their knowledge and set specific outcomes and benefits for all stakeholders. The level of knowledge-sharing indicates the eagerness of people in an institution to share the knowledge they have with others (Bock et al. 2005). In this way, all stakeholders come to understand the agenda and capacities of both the health service and nursing education institutions which can be used to increase reciprocity and the leveraging power of the NC.

In the current study, knowledge-sharing has been identified as one of the short-term outcomes of the NC, although this was not operating at an optimal level. Knowledge-sharing can be achieved through reflection and reciprocal activities, which are components of service learning, to achieve a shared common ground on the purpose of the NC. Peterson and Schaffer (1999) also reported the need for faculty involvement both at the planning and implementation stages in order to arrange experiences for student learning without ignoring the needs of the community partner. In this way, service learning functions not only as a structured educational approach for students, but also as a tool for other stakeholders to share knowledge and to take part in reciprocal activities in order to achieve consensus on the ownership of the NC. Clear, open, and accessible communication can also be used to increase reciprocity (Blouin & Perry 2009; Foss et al. 2003; Hudson, Gaillard & Duffy 2011; William-Barnard et al. 2006). Furthermore, the listening component of communication should be emphasised, using a common language and clear terms (Foss et al. 2003). Another important factor is the commitment of all stakeholders, particularly the key leaders from all the organisational partners, to develop mutual trust and respect, and to invest time and effort into maintaining the program (Dunlap et al. 2011; Foss et al. 2003).

Apart from shared common ground, a consensus on the ownership of the NC is another key indicator in determining the success of the integration of CHN services, education, and

research. The analysis of interview data and documents shows that this key indicator has four attributes: 1) a written policy for the NC; 2) a Memorandum of Understanding (MoU) for the collaborative process; 3) a clear job description for nurses, students, and lecturers; and 4) recognition of the contribution of all stakeholders through comprehensive documentation and reporting. These attributes are expected to increase the sense of belonging because, with the above attributes in place, the stakeholders would feel that they are an integral part of the system (Levett-Jones et al. 2007). Psychological ownership can produce desired outcomes, increase work performance, and provide other benefits for the organisation which can be measured, developed, and managed (Avey et al. 2009).

In the orientation phase, stakeholders need to advocate for the NC to the City or Regency Health Office in order to produce a written policy to deal with the legal aspects of the operationalisation of the NC. A clear written policy is important because it has the capacity to change healthcare service provision within healthcare organisations (Grant, Parry & Guerin 2013). Apart from the written policy, stakeholders need to establish an MoU to identify the rights, responsibilities, and job descriptions for all stakeholders involved in the NC. The written policy, an MoU, and clear job descriptions would increase the sense of physical and psychological ownership to the NC because these would provide evidence that the stakeholders are valued, needed, and accepted within the NC. A greater sense of psychological ownership and belongingness would be developed through individuals perceiving that their involvement and experience are valued and when they feel that they are needed and accepted by the organisation (Levett-Jones et al. 2007).

When stakeholders have a good understanding of the NC, a strong commitment, have a sense of psychological ownership of the NC, are eager to share knowledge and set specific outcomes, they can then proceed to the working phase.

6.4.2.3 Working Phase

The working phase involves students, nurses, and lecturers collaborating on experiential learning activities, CHN and family nursing services, and research and community service activities in a continous and consistent way. The continuous and consistent operation of the NC determines the success of the integration of CHN services, education, and research in the NC. The consistent learning experience for both the students and the nurses in an NC which has implemented ‘best practice’ for CHN services is very important for increasing the professionalism and quality of nursing graduates.The continuous operation of the NC throughout the year and the consistent application of the theoretical basis of the NC are crucial during the working phase. This finding is similar to a study conducted by Hamner,

Wilder and Byrd (2007) which showed that there were the needs for a consistent set of faculty members to present at all clinical activities, having a regular and predictable presence in the service, and continuous community-based partnership which requires persistence and perseverance by all the parties involved.

This study has also identified a need for research and community service activities by lecturers, nurses, and decision-makers. Nurses can participate in research in various ways including at the independent, interdependent, and dependent levels (Taylor, Kermode & Roberts 2006). Nurses who work in primary healthcare are more likely to have the opportunity to become involved in research activities alongside their health service duties. The current study has found that research and community service activities in the operation of the NC were conducted at the independent level where lecturers or students undertook research and community service without the involvement of health service stakeholders. To improve the NC model in the future, research and community service activities could involve nurses at the dependent level, which means that they would be involved in the data collection process, or at an interdependent level where nurses and decision-makers are involved in the conceptualisation, implementation, evaluation, and dissemination of the research (Taylor, Kermode & Roberts 2006). The involvement of nurses in research and community service could also increase their sense of belongingness to the NC while increasing the capacity of the lecturers to undertake research and community service. As a result, these collaborative activities could help to maintain the consistent application of the theoretical basis of the NC, and as well, to create a shared common ground between health service and nursing education stakeholders in the NC.

In the working phase, stakeholders conduct collaborative activities that aim to achieve a people-centred and integrated health service using systematic reflection activities with both education and health service organisation stakeholders, and conducting collaborative research and community service activities. In addition, stakeholders need to create and adhere to a schedule for all their activities. Apart from scheduling, other important activities include recording, reporting, valuing, and recognising the involvement of all stakeholders. In this way, the stakeholders feel that they are being valued and that they belong to the NC. Moreover, stakeholders would perceive that their characteristics complemented the system or the environment (Levett-Jones et al. 2007). Accordingly, the feeling of being valued would create a work culture that would be conducive for collaboration and integration, through the recognition of the contributions of all stakeholders. Recording, reporting, valuing, and recognising the contributions of all stakeholders would also reflect the fact that every stakeholder fits into the system and that they complement the NC model, which would lead to

an increasing sense of psychological ownership of the NC. Both organisations could identify the outputs produced by reciprocity and the leveraging power of both organisations, which would then determine whether the NC needed to return to the orientation phase or if it could proceed to the pre-termination phase.

At the end of the working phase, the stakeholders should record and report all the outputs from their activities in a systematic and comprehensive way to identify the quality of the outputs. If the outputs are dissapointing, the stakeholders would then return to the orientation phase to identify the problems and to undertake 'refreshment training' about the NC. However, when the outputs of all the activities are of a satisfactory standard for all the stakeholders, they can then proceed to the pre-termination phase.

6.4.2.4 Pre-Termination Phase

In the pre-termination phase, stakeholders from both organisations conduct a formative evaluation to identify whether the problems of the mismatch between the theoretical basis and the actual practice of the NC, the multiple and competing agendas on the purpose of the NC, and the confusion around the ownership of the NC have been resolved. The formative evaluation is conducted using the integration evaluation framework presented in Table 5.1 in Chapter 5.

The evaluation framework for integration in the NC that has been developed in this study (see Table 5.1) is quite different from other frameworks in the integrated health service field, particularly in terms of the cultural and process aspects of the evaluation, a need that is suggested by Strandberg-Larsen and Krasnik (2009) to fill the gap in the evaluation of integrated health services. To my knowledge, this is the first evaluation framework for integration of CHN services, education, and research, particularly in the NC and the service learning fields. Various evaluation strategies for NCs and service learning have been reported in the literature. Most evaluation strategies for NCs reported upon in the literature focused on the evaluation of services (Andresen & McDermott 1992; Barkauskas et al. 2006; Hildebrandt et al. 2003; Hong & Lundeen 2009; Kent & Keating 2013; Lundeen 1999; Pohl et al. 2006; Resick et al. 2011), and the evaluation of student outcomes (Aponte & Egues 2010; Connolly, P. M. 1991; Thompson & Feeney 2004; Van Zandt, Sloand & Wilkins 2008), while only three studies evaluated both service and student outcomes (Lough 1999; Lutz, Herrick & Lehman 2001; Yeh et al. 2009). There is an evaluation of service learning which is developed by Voss et al. (2015), however, they did not include the indicators for integration of services and education.

A systematic review of the measurement of integrated healthcare delivery has shown that there were 24 different measurement methods, almost all of which were based on a theoretical model, which indicates a need for the development of evaluation criteria that are simple and based on empirical evidence (Strandberg-Larsen & Krasnik 2009). The evaluation framework for integration in the current study is relatively simple and is based on the findings from the empirical qualitative case study research. The evaluation framework produced from the current study can add knowledge to the NC, service learning, and integrated healthcare fields. However, further research is needed to develop this evaluation framework into an instrument to determine its effectiveness for measuring integration in a range of different settings.

Using this evaluation framework for integration as a formative evaluation in the pre-termination phase will allow the stakeholders to identify the status of integration in their NC. If the integration is not evident, the NC would then return to the orientation phase to address the problems identified through the formative evaluation. When integration has been achieved at an optimal level, then the NC can enter the termination phase.

6.4.2.5 Termination Phase

In the termination phase, the problems in the NC have been resolved and the integration of CHN services, education, and research has achieved its optimal level, and nurses are expected to run the NC independently. This phase is characterised by a strong intention to integrate; continuous and consistent operation of CHN services, education, and research; the sharing of common ground between all stakeholders; and a consensus on the ownership to the NC. The document analysis showed that the collaboration between *Puskesmas* and nursing education institution will be ended in this phase. This termination phase was applied because in the CHN field, the setting of the boundaries of community health practice is one of the characteristics of collaboration in which the conditions and time limits for the termination of the collaboration are clearly outlined (Allender, Rector & Warner 2010). There is a time when the objectives of collaboration have been accomplished, and the collaboration is no longer necessary and can be terminated (Allender, Rector & Warner 2010; Freeth 2001). Therefore, the founder of the NC and some lecturers expected that they need to determine the time limit for the termination phase once these outcomes have been achieved. However, there are some ongoing collaborations that may not need to be terminated, such as the collaboration between a department of nursing in a university and a community health centre to provide clinical experiences for students (Allender, Rector & Warner 2010).

The current study suggests that the collaboration and integration between the nursing education institution and the community health centre within the NC needs to continue, despite the intentions of some nursing education stakeholders to terminate it. When the NC has reached the termination phase, it does not mean that the NC should be closed. The community health centre can enter into new collaborations with different education institutions that have not established their own NCs. In this way, the NC will sustain and provide benefits for all stakeholders. The termination phase can also become a stage for reflection and evaluation to prevent all stakeholders from returning to their previous practices. When the NC indicates that no further intervention is required, it can then enter the adoption phase.

6.4.2.6 Adoption Phase

The adoption phase is where the stakeholders conduct a summative evaluation of the problems they have solved throughout the phases using the integration evaluation framework, and act to maintain continuous and consistent CHN services, education, and research in the NC. In this phase, the nurses are delivering CHN services efficiently and effectively, and the community health centres either maintain or renew their collaborative agreement, or develop new collaborations with other nursing education institutions if needed. This contributes to the optimal integration in the NC. An NC in a community health centre that has reached the adoption phase could become a teaching community health centre for nurses and academics from a newly established NC, or for students in nursing education institutions that had not yet established an NC for community placements. In this way, the sustainability of the NC could be maintained.

6.4.3 Factors that Affect Integration in the Nursing Centre

This study has found five factors that affect the integration of CHN services, education, and research in the NC: 1) human resources capacity; 2) time management, 3) infrastructure and funding; 4) a comprehensive and effective recording and reporting system; 5) a comprehensive evaluation plan.

A lack of human resources, both in numbers and in capacity, is a major barrier to overcome in the NC. The heads of the community health centres (*Puskesmas*) have to manage their staff through tight scheduling, and expect that the nursing education institutions may help to overcome the human resource challenges in the centre. The nursing education institution has students and lecturers that can take part in the activities of the NC; however, time constraints do not allow for the full and continuous involvement of students and lecturers in the NC. Nurses' contributions to the NC are also limited because most have multiple

responsibilities in the *Puskesmas.* A similar issue was also identified by Foss et al. (2003) who reported that the structure of the partnership, the contributions of agency staff, and the pattern and flow of the relationship between nursing education and the organisational partner affect the collaborative nature of the partnership. Most of the participants in the current study suggested that there should be a specific nurse on standby in the NC who can arrange and manage all the NC activities. Further research is needed in this area to identify the most effective way to manage the pattern and flow of the relationship through appropriate human resource allocation in the NC to maximise the contribution of the nurses, students, and lecturers.

Another issue is the human resource capacity of the nurses and students who work in the NC. The capacity of the nurses vary considerably which is due to variations in the educational level of the nurses in the *Puskesmas*, starting from the High School level, through to Diploma 3, Bachelor's, and Master's degrees in nursing. Nurses with High School level qualifications felt that delivering CHN and family nursing services was quite challenging because they did not learn about these topics in their education. These variations also lead to difficulties for nurses in keeping up with students who are undertaking Diploma 3 and Bachelor degree education, and often results in the nurses' refusal to be involved in the NC. Thus, there is a need to identify and share knowledge about 'best practice' guidelines for, and evaluation of, CHN services including service provision for individuals, families, groups, communities, and entire populations for all level of nurses in *Puskesmas*. 'Best practice' for CHN and family nursing services and education can be achieved through the involvement of nurses in evidence-based practice and research (Ploeg et al. 2007).

Apart from the nurses' capacities, the students' attitudes and capacities also affect collaboration in the NC. The current study has found that some students were not ready to practice in the NC and they did not want to complete the tasks given by the *Puskesmas* staff. This resulted in tension and conflict between students and staff. A similar finding was reported by Blouin and Perry (2009) who identified issues with student conduct and commitment, particularly the lack of professionalism and work ethic, unwillingness to work hard, and an inability to take the initiative. On the other hand, the students felt stressed in relation to ensuring that everything was organized, as well as being too busy, and many were confused about how the activities were set-up (Reising et al. 2008). Similar findings were also reported by Rash (2005), that most students were unfamiliar with service learning concepts, and many were anxious about their interactions with community partners. However, it was difficult to determine the level of tasks that could achieve student learning

needs, while at the same time encouraging professional nursing practice (Peterson & Schaffer 1999).

Another issue found in this current study is time management of human resource issue identified in this study is the availability of the lecturers. The main dilemma was to determine the level of supervision provided for students at all stages of the project due to the wide coverage area of the NC, the limited number of lecturers, and the time constraints faced by the lecturers as they had other teaching and administrative responsibilities in the education institution. Time constraints are a major challenge for nurses, lecturers, and students. Awkward scheduling was also mentioned as a drawback of the service learning program (Reising et al. 2008). Therefore, stakeholders need to be aware that partnership and collaboration is an evolving process which needs time and commitment from all stakeholders (Foss et al. 2003).

Clearly, the limited human resource and time management issues represent the most difficult barriers that warrant specific attention from both health service and nursing education institution stakeholders to find the best solution to address these factors. Stakeholders also need to come to a consensus on the best time allocation for service learning, whether it be year-specific or ongoing, and the intensity of the service learning over this period (Berry & Chrisholm 1999). Thus, the lecturers' experiences and levels of support are critical (Gupta 2006; Narvasage et al. 2002). Lecturers invest an excessive amount of time managing the multifaceted aspects of service learning, including contacting and having meetings with other stakeholders, discussing the needs of both organisations and the clients, and considering ways of adding or improving services through student involvement (Dunlap et al. 2011; Perry, Gabe & Metcalf 1998; Riedford 2011)

Infrastructure and funding can affect the operation of service learning in relation to the costs and challenges for community partners. Blouin and Perry (2009) identified the cost risks to an organisation as being due to uncompliant students and the consumption of organisational resources such as time, energy, or other resources without producing equal benefit. Thus, Foss et al. (2003) suggested that collaboration is built on identified strengths and assets in order to balance and share control over the usage of resources. In terms of funding, most NCs used grants and Schools of Nursing (SONs) as the most common sources of funding (Pohl et al. 2007). This leads to some NCs finding it very difficult to survive when the grant money runs out. Therefore, the NCs need to find other sources of funding in order to maintain sustainability of the centres.

Another important part of the infrastructure for the NC is its location. In the US, the location of NCs is mostly within another agency (38.8%), followed by in a free-standing building (21.4%), while only 12% were located within Schools of Nursing (SONs) (Pohl et al. 2007). The NCs that were free-standing or were located within SONs did not have the problem of ownership; however, NCs that were located in another agency, such as in community health centres or other agencies, faced the problem of ownership of the NC. Therefore, the current study has identified that stakeholders need to clarify the details of ownership of the NC in the preparation phase.

This study has also found that the lack of a comprehensive recording and reporting system is another barrier to integration in the NC, especially for the recognition of each stakeholder's contribution to the improvement of the community health centres' and nursing educations' work performances. Sharing the credit for accomplishments among stakeholders is important in maintaining close collaboration and partnership (Foss et al. 2003). Pohl et al. (2007) further suggested that NC teams need to document their best practices and the outcomes of the care they provide, and to identify the important factors in establishing and maintaining an NC so that the SON can reap the benefits of the services, education, and research in the NC.

Also identified in this study is the lack of a comprehensive evaluation plan to measure outcomes, which can also affect integration in the NC model. Other studies have used evaluation as the one of the phases of partnership and collaboration (Gupta 2006; Larson et al. 2011; Riedford 2011); however, the current study has found that the lack of a comprehensive evaluation plan at the preparation phase is also important as a factor that affects integration. This is because the lack of a comprehensive evaluation plan can lead to difficulties in measuring the effectiveness of the NC. As a consequence, it would be difficult to convince decision-makers to provide funding and resources (Davies 2004) to support the operation of an NC; hence, this would lead to unsustainable NCs.

This study has found that one of the difficulties with providing high-quality CHN services in an NC is the misunderstandings about CHN and family nursing practice. Even though the Indonesian Ministry of Health has produced a set of practice guidelines for the CHN program, these have not been implemented at an optimal level. Moreover, there is also a gap in the guidelines as the family independence level is the only evaluation indicator used. This leads nurses to believe that there are only family nursing activities included in the CHN program. As well, CHN focuses on population-based nursing (Anderson & McFarlane 2011), while family nursing focuses on seeking and valuing strengths and competencies within the family unit that may, for example, lack the capacity to overcome its own health problems (Watkins, Edwards & Gastrell 2003).

6.4.4 Outcomes

This study has identified short-, medium-, long-term, and ultimate, outcomes. As shown in Figure 6.2 (page 185), short-term outcomes consist of the consistent application of the theoretical basis of the NC, a shared common ground, and a consensus on the ownership of the NC. The achievement of short-term outcomes would lead to the achievement of medium-term outcomes, which include the optimal integration of CHN services, education, and research that will lead to the adequate functionality of the NC model. These medium-term outcomes will then produce long-term outcomes that consist of outcomes for students, lecturers, nurses, health decision-makers, and clients, including individuals, families, and the community. Together, these long-term outcomes could improve the quality of CHN services and education, as well as producing better health outcomes for people in the community as the ultimate outcomes of the NC (see Figure 4.2, page 129, in Chapter 4 for the Outcomes Chain of the NC). However, the achievement of the ultimate outcomes will be influenced by other healthcare programs, the national health system, and the nursing education system, and this needs to be taken into consideration by the NC stakeholders.

These outcomes are presented in an outcomes chain to provide a comprehensive picture of the NC model as a long-term vision and mission for NCs that would enable a comprehensive evaluation of this model. This study advances knowledge in the evaluation of the NC field by providing an outcomes chain as the heart of the evaluation framework for this model. This is the first study so far that has provided a detailed overview of five series of outcomes for all stakeholders in the NC.

This study has found that participants perceived that the NC could produce outcomes for stakeholders, including students, lecturers, community health service stakeholders (including the Head of the *Puskesmas*, nurses, decision-makers, leaders of the Provincial Health Offices and the City/Regency Health Offices), and clients (individuals, families, and the community). While the needs of NC clients are central, the NC also needs to meet a number of important needs of other stakeholders. To be sustainable, NCs need to create win-win solutions so that the relationships among the stakeholders need to be recognised. Each stakeholder would have a particular role to produce each outcome in the outcomes chain in order to improve the functionality of the NC model to engender high quality CHN services and education, as well as to improve health outcomes for people in the community. A discussion of the roles of each stakeholder to produce long-term outcomes will be presented in the following sections.

6.4.4.1 Students' Roles

In terms of achieving the outcomes of high quality Community Health Nursing (CHN) placements, the students' role is to undertake service learning activities within the Nursing Centre (NC) coverage area in a responsible manner. As mentioned previously in Chapter 2, unreliable students, or students not complying with the organisation's policies, would produce undesirable outcomes for clients as well as for the organisational partners (Blouin & Perry 2009). In order to overcome this issue, support from academics is critical (Gupta 2006; Narvasage et al. 2002) so that students can understand the concept of service learning and feel confident about their interaction with the community partners (Rash 2005). In this way, students would have clear direction about how the placement activities were set-up, which would then reduce stress levels during the placement period (Reising et al. 2008).

When students are confident and have clear direction about their placement, they can learn and attain important skills when undertaking CHN, family nursing, and gerontology nursing placements within the NC. Through performing activities in the NC facility and outreach activities, students could learn the skills that are necessary for CHN competencies, such as undertaking community and family assessments, identifying nursing diagnoses, planning interventions, implementing care, and evaluating care for individuals, families, and communities (Friedman, Bowden & Jones 2003; Stanhope & Lancaster 2012). The outcomes for students that have been identified in this study were that they gained a greater understanding of CHN and family nursing and also learned from experience to communicate with, and solve problems in, the community. Similar outcomes have been reported in other studies where the students gained further understanding of the course content, a broader appreciation of the discipline, improved their interpersonal skills, and built a sense of responsibility while making meaningful contributions to the community (Baker et al. 2004; Bassi 2011; Julie, Daniels & Adonis 2005; White et al. 1999). The attainment of such skills can produce success in students' future careers (Heckman & Kautz 2012).

6.4.4.2 Lecturers' Roles

Lecturers play a major role in producing long-term outcomes within the NC model. Lecturers need to prepare and plan the service learning program very carefully, and they also need to maintain contact with the community, review course objectives, develop the design of, and communication process for, the rotation (Hudson, Gaillard & Duffy 2011), explore the needs of the clients, and consider various ways in which services could be added or improved through student involvement (Dunlap et al. 2011; Perry, Gabe & Metcalf 1998; Riedford 2011).

Incorporating service learning within the NC model is a very challenging task because service learning is a labour-intensive form of teaching (Cohen & Milone-Nuzzo 2001). However, this study has found that the NC model was very useful for lecturers for undertaking community service activities, particularly in NC 2. Lecturers could benefit from practicing in the NC in order to maintain their nursing skills and then using these skills to improve their teaching quality (Miller et al. 2004). The high quality of teaching would increase the visibility of nursing academics and would open new opportunities for research and collaboration with organisational partners (Baker et al. 2004; Bassi 2011). Academic staff may use the experience as a facilitator in the NC to improve the progress of their own scholarship, because involvement with a partner organisation may help to identify opportunities for empirical research, other forms of scholarship, or consultation or for securing of the continued funding (Baker et al. 2004; Cohen & Milone-Nuzzo 2001; Francis-Baldesari & Williamson 2008; Miller et al. 2004; Simoni & McKinney 1998). Cohen and Milone-Nuzzo (2001) further suggested that academics need to create a synergy between their teaching and their professional development to obtain the best return for their own careers, as well as to increase the quality of CHN education for their students. This would also improve the maturation and scholarship of the faculty (White et al. 1999; Yeh et al. 2009). Research that is embedded within a variety of primary healthcare activities, such as in the NC, could help to create integrated, long-term, and sustainable health systems (Walley et al. 2008).

6.4.4.3 Nurses' Roles

This study has found that nurses gain benefit from knowledge-sharing and collaborative learning in the Nursing Centre (NC) so that they can update their knowledge of current 'best practice' in Community Health Nursing (CHN) and family nursing. In order to gain optimal benefits from this process, nurses need to play a role in reciprocal learning with the students and the lecturers. Reciprocity is a process in which every stakeholder involved in service learning functions as "both a teacher and a learner" (Laplante 2009, p. 6).

In order for reciprocity to be enhanced in the NC, it is important for nurses, lecturers, and students to understand the need to develop a community-academic partnership (Voss et al. 2015). Service learning emphasises the concept of reciprocity (Bailey, P., Carpenter & Harrington 2002) which is a trust relationship that leads to forming a strong bond between nurses and students so that they can work together, and have the opportunity to learn about, and give back to, society at the same time (Laplante 2009). In this way, nurses would increase their self-esteem and self-confidence to undertake activities as community health nurses which would produce positive outcomes for people in the community.

Nurses can have a positive impact on increasing the self-reliance of people in the community and empowering them to maintain their health through health education and disease prevention, which then reduces morbidity and hospitalisation in the community (Swiadek 2009). This would lead to the recognition of the CHN profession in the community setting.

6.4.4.4 Health Decision-Makers' Roles

Health decision-makers at City/Regency and Provincial Health Offices have a role to provide favourable health policy that supports the revitalisation of the CHN (*Perkesmas*) program through the operation of NCs in community health centres (*Puskesmas*). This revitalisation is not only beneficial for nurses and nursing education, but also for the achievement of the Health Office targets for primary healthcare in the community, because nurses comprise the largest proportion of the health workforce in most countries, including Indonesia, and they provide approximately 90% of all healthcare services in primary healthcare (WHO 2008). This significant presence has enormous potential for improving the health status of people in the community (Kurtzman & Kizer 2005), because nurses as health providers could strengthen the governance and accountability of health service delivery by involving people in the community to develop a population-oriented health policy (WHO 2015). In this way, the double burden of communicable and chronic diseases in Indonesia could be reduced, which also means reducing the country's economic burden for providing medication and treatment of these diseases. Therefore, more funding could be allocated to improve the CHN program so that nurses can provide high quality CHN services for people in the community. This is a win-win situation for both the nursing profession and the government which would have a positive impact on people in the community.

6.4.4.5 Clients' (Individuals, Families, and Communities) roles

This current study has found that clients (individuals, families, and the community) are the core of the NC model. Thus, they also play roles in the achievement of long-term outcomes. In order for the NC to function adequately, clients' willingness to receive services within the NC model is crucial. Zachariah and Lundeen (1997) asserted that the successful integration of research in the NC is determined by community trust towards academic institutions, so that the community would support and use the NC services (King 2008). People as resources need to be empowered, engaged with, and involved in the production of healthcare in equal and reciprocal relationships between health professionals and people who use the service (WHO 2015). Influential community leaders need to be involved in a range of activities such as advisory boards for the NC, and people need to be informed of NC activities through various community events such as health fairs, arts programs, or teens

groups in order to increase the visibility of the NC in the community (King 2008). People in the community also need to be involved in the participatory research agenda of the NCs to build reciprocity and to maintain trusting relationships with the community (Zachariah & Lundeen 1997). Such trusting relationships need to be maintained over the long-term to ensure the sustainability of the NC (King 2008).

Clients' willingness to be involved in the NC would also improve their knowledge, attitudes, and behaviours towards health promotion and disease prevention. Resick et al. (2011) reported that health promotion and disease prevention services in a NC have the potential to reduce health disparities in the community. Their study demonstrates that the knowledge, behaviour, and health status of residents were statistically higher at NC sites (Resick et al. 2011). Other studies also reported health improvements (Erickson 2004) and increased access and utilization of health promotion and screening services (Dunlap et al. 2011; Hamner, Wilder & Byrd 2007) as the outcomes of service learning for clients. Health promotion and disease prevention is the main focus of community health nurses (Anderson & McFarlane 2011). In this way, the NC model can improve health outcomes for the community.

These long-term outcomes would be achieved when integration in the NC has taken place. Even though the current study has identified a series of outcomes for all stakeholders in the NC model, the discussion of the key elements of the evaluation of outcomes in this thesis focuses on short-term outcomes that lead to the achievement of medium-term outcomes. The priority outcome in this thesis is the integration of CHN services, education, and research in order to improve the functionality of the NC model. This prioritisation of outcomes is important for determining which problems a program might focus on in order to set specific strategies to overcome these problems (Renger 2006). In addition, limited resources and comprehensive lists of problems require prioritisation to determine which problems will be addressed to achieve the intended outcomes (Keller et al. 2002). Moreover, prioritisation of short- and medium-term outcomes is necessary because the long-term outcomes would be less likely to be achieved if the short- and medium-term outcomes had not been achieved (Funnel & Rogers 2011). Further research is needed to develop and test the key indicators and evaluation instruments for adequate functionality of the NC as well as each of these long-term outcomes to identify the effectiveness of the NC model. The program theory of the NC that has been developed in this study can be used as a framework to assist further development of key indicators and evaluation instruments for the NC model.

6.5 Summary

The components of the NC model were understood in a range of different ways by the participants. Therefore, this chapter has gathered together all of these components into a conceptual model to improve the Nursing Centre (NC) model in Indonesia. The NC is a complex model that involves various types of stakeholders with multiple agendas. The overall finding from this study shows that the integration of CHN services, education and research could improve the functionality of the NC model. The proposed conceptual framework of the NC identifies the knowledge that clients (individuals, families, and communities) need to be placed at the centre of the model so that they can receive healthcare services in a caring environment within the NC. This becomes the common ground for all stakeholders in the NC. Health services and nursing education stakeholders share this common ground to assist with the integration. As well, the NC need to focus on activities to maintain a continuous and consistent application of the theoretical basis of the NC, develop a shared common ground among the stakeholders, and to create a consensus on the ownership of the NC. These practices would improve integration in the NC, which could produce a series of outcomes for each stakeholder.

Following the proposed conceptual model, the program theory as an evaluation framework for the NC was identified. This program theory outlined the baseline situation of the Indonesian NC which is basically the inadequate functionality of the NC due to the partial integration of CHN services, education, and research in the NC. This problem needs to be addressed using various inputs and strategies that would produce short-, medium-, long-term, and ultimate outcomes for all stakeholders. This program theory can be used as the basis for the evaluation framework of the Indonesian NC model, and can also inform the development of NCs in other countries. In this chapter, the phases of activities that need to be undertaken in the NC have also been identified. These phases could guide stakeholders to set up the NC and evaluate the integration in order to achieve optimal functioning of the NC.

The next and final chapter revisits the purpose of the research, summarises the contribution of the thesis, outlines implications of the conceptual model and the evaluation framework of the NC, and highlights the strengths and limitations of this study. A final conclusion will be provided alongside recommendations for future CHN practice, education, and research in the NC.

CHAPTER 7 CONCLUSION

7.1 Introduction

In this thesis, I have set out to examine how the components of the Nursing Centre (NC) model as a collaborative approach to service learning in West Java, Indonesia, can be understood to inform the development of an evaluation framework for the NC in Indonesia, and also on a global basis. The findings of this research have led to the development and discussion of a proposed conceptual model and program theory as an evaluation framework for the NC model, which was presented in Chapter 6. In the first section, the contributions of the thesis to new knowledge will be presented. This section will explore whether the original research question and objectives have been successfully addressed in this study.These have a number of implications for Community Health Nursing (CHN) practice, education, and research, which will be discussed in the second section of this chapter. Following an exploration of these implications, the strengths and limitations of the study will be addressed in the third section. A final section that includes a number of recommendations arising from this study will conclude the thesis.

7.2 Contribution of the Thesis

The main contribution of this thesis to new knowledge is to overcome the lack of a meaningfull and effective evaluation framework for the NC as an example of an academic-practice service-learning collaboration. In order to develop a meaningful and effective evalution framework, the components of the NC model need to be understood. The findings have shown that the NC model as a collaborative approach to service learning in West Java, Indonesia, can be understood through four conceptual components that are integrated in the caring environment within the NC. These components are: 1) clients (individuals, families, and the community); 2) service learning; 3) research and community service; 4) CHN and family nursing services. These components have been used for the development of the conceptual framework of the NC as the fulfilment of the first research objective.

The overall findings also showed the inadequate functionality of the NC model. This finding is understood to be due to a mismatch between the original theoretical basis and the practice of the NC, the multiple and competing agendas on the purpose of the NC, and confusion about the ownership of the NC. A mismatch between the original theoretical basis and the practice is due to the lack of clarity of the scope of the NC for both the nursing education and the community health centre stakeholders. This study shows that the concept of adult learning

failed to facilitate optimal integration and collaboration between the education and health service stakeholders in the NC. Service learning is proposed to replace the concept of adult learning for the NC model. Service learning in this study is defined as a structured form of intra-curricular experiential learning that engages students in service and learning through real-life experiences, using reflection and reciprocity as tools to achieve the specified outcomes and benefits for all stakeholders. The service learning approach is suitable for a model that integrates education and health service institutions because it links the services with the learning process and this serves to address the interests of both institutions.

The multiple and competing agendas in relation to the purpose of the NC occurred because of the lack of effective communication and reciprocity in the NC. Multiple and competing agendas need to be identified and made explicit so that stakeholders can work towards creating common ground for close collaboration to achieve the integration of CHN services, education, and research at an optimal level. The integrated approach using components of service learning (i.e. reciprocity and the setting of specific outcomes) could be used to reduce the multiple and competing agendas in the NC, as well as to reach a consensus on the ownership of the NC.

The findings show that there are four key indicators of or success criteria for the integration of CHN services, education, and research in the NC. These are the intention to integrate, continuous and consistent operation of CHN services, education, and research, having a shared common ground, and having a consensus on the ownership of the NC. However, there are a number of factors that affect integration in the NC model, including human resources capacity, time management, infrastructure and funding, a comprehensive and effective recording and reporting system, and a comprehensive evaluation plan. In order to address these factors, this study has proposed the application of a structured approach for setting up and evaluating the NC, components of service learning (structured intra-curricula experiential learning, reflection, reciprocity, and the setting of specific outcomes and benefits for all stakeholders) and research as the main strategies that can be conducted in order to integrate CHN services, education, and research at an optimal level in the NC.

The program theory of the NC can be used as an evaluation framework for the NC model in Indonesia, and on a global basis, as the accomplishment of the second objective in this study. The program theory that was produced from the findings also shows the baseline situation of Indonesian NCs, the inputs, the strategies that include people-centred and integrated health services, service learning, CHN and family nursing interventions, and research and community services. These strategies produce the integration in the NC and improve the functionality of the NC to produce better outcomes for students, lecturers,

nurses, community health centres, health decision-makers, and clients (individuals, families, and the community). While the needs of the NC clients were central, the NC should also meet a number of important needs of the other stakeholders. In order to be sustainable, the NC needs to provide a win-win solution so that the relationships and collaboration among the stakeholders can be maintained. Each stakeholder should have particular responsibilities for each outcome in the outcomes chain in order to engender psychological ownership and improve the functionality of the NC model.

Overall, this conclusion has answered the research question: 'How can the various components of the NC model as a collaborative approach to service learning in West Java, Indonesia, be understood to inform the development of an evaluation framework for the Nursing Centre in Indonesia and also more globally?' The components of the NC have been understood to develop a proposed conceptual model of the NC (see Figure 6.1 in page 177), an evaluation framework of integration in the NC model (see Table 5.1 in page 145), and the program theory as an evaluation framework for the NC (see Figure 6.2 in page 185). These have shown that the research aim and all the objectives in this study have been successfully achieved. The following section will present a set of implication for CHN practice, education, and research.

7.3 Implications

This study has proposed an evaluation framework for the integration of CHN services, education, and research (see Table 5.1), a proposed conceptual framework of the NC (see Figure 6.1), and a program theory (see Figure 6.2), as an overall 'blueprint' and evaluation framework for NCs in Indonesia as well as in other countries that have a similar context to Indonesia. The applicability of these frameworks for CHN practice, education, and research will be discussed.

7.3.1 Implications for Community Health Nursing Practice

This study has a number of implications for CHN practice arising from the articulation of the components of the NC in the proposed conceptual model based on participant perspectives. The conceptual model of the NC identified in this study can provide a clear scope of practice for CHN practice and education in the NC model leading to a situation in which nurses and students would have a 'place' in the community health centres to perform CHN practice. This would increase the visibility of the roles of community health nurses in community health centres, and could also become a venue for professional socialisation in the CHN field for nurses, students, and lecturers. In this way, other health professionals in community health centres and people in the community would recognise the existence of CHN practice within

the community health centre and in the community. Recognition of the existence of CHN roles in the community setting will enable the optimal utilisation of community health nurses to provide community care that emphasises health promotion and disease prevention activities in the community.

The proposed conceptual framework of the NC will clarify the responsibilities of education and health service stakeholders in NCs. Through the model, nurses could move towards an understanding that CHN and family nursing are two different areas of nursing that could be integrated in the NC, and all the health programs in the community health centres could also be integrated using the CHN approach to provide comprehensive primary healthcare for people in the community. In addition, the collaboration between the nursing education institution and the community health centre stakeholders in the NC model would also help to solve the problem of nursing shortages in the community health centres. Students and lecturers' involvement in service learning activities in the NC would improve the human resource capacity in the community health centres for delivering comprehensive primary healthcare services that would produce a leveraged power towards the achievement of targets in the community health centres. These comprehensive primary healthcare services could also provide benefits for people in the community in terms of health education and health promotion activities to prevent the spread of communicable diseases, such as Tuberculosis in the community, as well as to address the problems of chronic and non-communicable diseases in the community.

The interaction between nurses, students, and lecturers within the NC would reduce the gap between CHN services and education through the process of knowledge-sharing towards best practice in the community health centres. Knowledge-sharing that is related to evidence-based practice and research would also increase the likelihood of these best practices being applied in the NC by students and nurses. Best practice will also increase the quality of CHN service provision for individuals, families, and people in the community which will produce better health outcomes overall. The program theory that has been developed in this study can become an evaluation framework that can give guidance for the NC stakeholders to undertake systematic evaluation of the NC outcomes. This is important to identify problems and contributing factors that might lead to the inadequate functionality of the NC. Identifying these problems would help stakeholders to use appropriate strategies to achieve the short-, medium-, long-term, and ultimate, outcomes for all stakeholders. The identification of the program theory would also enable a comprehensive evaluation of the NC as a collaborative approach to service learning in community health. The evaluation framework for integration in the NC that has been identified in this study (see Table 5.1 in Chapter 5, page 145) could

also be used to develop an evaluation instrument to measure the level of integration of CHN services, education, and research in the NC, as well as to identify the areas that need improvement. The integration of CHN services, education, and research would also increase the success of the operationalisation of the integrated people-centred health service approach in community health centres. This would lead to the increased effectiveness of CHN practice to produce better health outcomes for people in the community and to produce high-quality nursing graduates to enter the health workforce in the future. The implications of this work have the potential to support policies that will improve the health of individuals and communities world-wide as well as provide support to advance the education of nurses.

7.3.2 Implications for Community Health Nursing Education

Understanding the components of the NC using the proposed conceptual model could assist nursing education institutions to provide high quality CHN placements for students, as well as providing opportunities for the lecturers to fulfil their needs for research and community service activities. In addition to this, the conceptual model would inform the lecturers about service learning methods and evaluation that could then be used in nursing education so that both students and clients will benefit from the learning experiences.

For student placements in the NC, the proposed conceptual model would provide clarity about the NC, so that students can understand the importance of the integration of health programs in the community health centres into CHN and family nursing practices. Accordingly, students will graduate as nurses who have the capacity to perform people-centred and integrated health services that are needed to meet the challenges being faced by health systems around the world (WHO 2015). Therefore, placements within the NC model would facilitate more meaningful experiential learning for students. The clarity of the conceptual model of the NC could improve the students' skills in delivering CHN and family nursing services which would also provide benefits for clients (individuals, families, and the community) who the students are working with. The skills that students gain through the service learning experience would enhance the level of engagement with the community and their caring behaviours when they graduate and enter the nursing workforce. They would also gain an understanding of community health nurses' roles and would deliver best practice CHN and family nursing that they learned through the service learning experience in the NC model. Through service learning, students learn to use reflective practice and reciprocal learning that is important for the students and nurses' professional development. In this way, the quality of both CHN practice and education can be gradually improved.

An understanding of the components of the NC also informs the development of the program theory that could become a 'blueprint' for the NC in Indonesia and other countries, a need

that has been identified by Levine-Brill, Lourie and Miller (2009). Through the representation of the program theory, the NC stakeholders would understand the baseline situation, the inputs and strategies, the factors affecting integration, and the outcomes of the NC. These understandings are needed for a better and more meaningful evaluation of NCs that takes into account the integration of health services, education, and research. The conceptual framework for service learning that was identified in Chapter 2 (see Figure 2.1, page 27) would provide an opportunity for nursing education institutions to maintain continuous and consistent operational methods and an evaluation of service learning in Indonesia, as well as in other countries, that would use this educational approach in their CHN education. The conceptual framework of service learning could fill the gap of inconsistent operating methods and evaluation identified by Stallwood and Groh (2011). Integrating the service learning approach into the NC model would provide a better link between the health service and student learning so that it can provide benefits for both sets of stakeholders.

The NC model provides a unique opportunity to integrate CHN services, education, and research; however, this model requires a full commitment and support from the key stakeholders in nursing education institutions to maintain a close relationship and collaboration with the community health centre. Thus, the nursing education stakeholders should assess their current situation (human resources capacity, time availability, infrastructure and funding, the recording and reporting system, and an evaluation plan) very carefully before deciding to apply this model in their institution to prevent the unsustainability of the NC in the future. The unsustainability of the NC does not only provide disadvantages for the nursing education institution, but could also increase resistance from nurses in the community health centre to deliver CHN services. The conceptual model and evaluation framework identified in this study could further inform and guide the roll-out and development of new NCs in Indonesia, and in other countries that have a similar context to Indonesia in relation to CHN education.

7.3.3 Implications for Community Health Nursing Research

This study has added new knowledge to the NC and service learning fields by providing a clear understanding of the conceptual model and the evaluation framework of the NC as a ‘blueprint’ for the integration of CHN services, education, and research. However, there is a need for further research that encompasses the applicability and suitability of the proposed conceptual model and the program theory in other NC settings. The proposed conceptual model of the NC would provide clarity for other researchers who would like to apply this model to address a specific health issue in the community. The application of the NC model to address specific health issues in the community would strengthen the conceptual model

and the evaluation of the framework for the NC and to increase its applicability in different community settings in Indonesia and across the globe.

The program theory as an evaluation framework of the NC model in this thesis has included a series of outcomes for stakeholders (see Figure 4.2, the Outcomes Chain of the NC, page 129) that could be evaluated to identify the effectiveness of the model. However, this thesis has only presented a detailed evaluation framework for the integration of CHN services, education, and research. There are 20 more outcomes in the outcomes chain that require further research to develop the evaluation instruments needed to identify the key elements that can be used to measure the achievement of the short-, medium-, long-term, and ultimate, outcomes of the NC. These evaluation instruments would further provide evidence of the effectiveness of the NC model as a collaborative approach to service learning in community health to produce better outcomes for all stakeholders and to strengthen the leverage power of this model. This sound conceptual model and evaluation framework and instruments would provide an opportunity for collaborative research internationally to identify the potential applicability and further refinement of this NC model in the international setting.

7.4 Strengths and Limitations of the Thesis

The main strength of this study is that it provides a comprehensive perspective from seven sets of NC stakeholders, including the founder of the NC, the Provincial Coordinator of the CHN program, students, lecturers, heads of Indonesian community health centres, nurses, and clients. Perspectives from these stakeholders provided a comprehensive picture for understanding the components of the NC that were then used to develop the proposed conceptual model for the NC. This conceptual model also informed the development of the program theory as an evaluation framework and a 'blueprint' for this model which adds new knowledge to both the service learning and NC fields in order to increase certainty about what will and will not work in the NC model.

The program theory that has been generated from this study is the first one to outline a comprehensive evaluation framework of the NC model as a collaborative approach to service learning in the community health field. This is the first study that explores the Indonesian NC in a comprehensive way, starting from the definition and analysis of the components of service learning, and understanding the components of the NC model including the theoretical basis and the factors that affect integration in the NC, through to the development of the proposed conceptual model and the program theory as the evaluation framework for the NC model. The program theory from this study will make a practical contribution to the

strengthening of the function and performance of the NC in Indonesia, as well as in other countries that have similar healthcare systems to Indonesia.

The main limitation of the study is that it is an embedded single case study conducted in a city in the region of West Java, which may have a different context from other regions in Indonesia, or from the wider global community. The health units being studied were three NCs in a single city and therefore the context may be limited to this particular region, and might not be able to be generalised to the entire population. However, as Yin (2014) pointed out, the lessons learned from one case study can be used to inform other models beyond the sites investigated in a particular case study. Therefore, the conceptual model and evaluation framework that have been identified in this study might inform other NCs in different settings to make adjustments and improvements based on their own specific contexts.

Another acknowledged limitation of the study was the lack of observation. An observational perspective would have added extra richness to the data. Unfortunately, due to time constraints, observation was not possible to undertake. Another limitation was that this study relied on interview data based on the participants' retrospective experiences from a time when they were involved in the NC. Thus, there might be some bias in recalling their experiences during the interviews. In order to reduce these limitations, this study also used a document analysis to add richness to the data and to support the information provided by the participants in their interviews.

7.5 Recommendations

The implications for CHN practice, education, and research presented in the previous section serve as a basis for future recommendations for the NC model as a collaborative approach to service learning in community health in West Java, Indonesia. This study has produced a number of recommendations for future CHN practice as well as for education and research in the NC.

7.5.1 Recommendations for Community Health Nursing Practice

It is recommended that the Provincial Health Office applies the proposed conceptual model and the evaluation framework of the NC to all NCs in West Java, Indonesia. The use of the conceptual model and the evaluation framework would need to be written into a formal policy so that all the NC stakeholders would understand the legal aspects of the operation of this model in the community health centre. In addition to a written policy, the Health Office also needs to provide training for all existing NC stakeholders in order to reduce the mismatch between the theoretical basis and the operation of the NC model. Consensus on the

ownership of the NC at the provincial level is also important to facilitate close collaboration and to increase the sense of belonging to the NC. The Provincial Health Office also needs to evaluate the baseline situation of all NCs in West Java prior to the implementation of the proposed conceptual model, and then to evaluate outcomes after its implementation. The evaluation framework of integration in the NC (see Table 5.1 page 145) identified in this study could be used to develop an evaluation instrument to measure the integration levels in these NCs. This instrument could be tested and further refined to ascertain its applicability for the NC model. In this way, the effectiveness of the proposed conceptual model and the evaluation instrument of integration in the NC can be measured.

At the community health centre level, the NC stakeholders need to meet regularly in order to develop best practice guidelines for CHN services and their evaluation, including service provision for individuals, families, groups, communities, and populations within the NC coverage area. Best practice for CHN and family nursing services and education can be achieved through evidence-based practice and research in the NC. In addition, the heads of the community health centres need to encourage and facilitate the operation of CHN and family nursing services by increasing the capacity of nurses through training and reflexive practice, providing infrastructure and allocating funds, maintaining a comprehensive recording and reporting system, developing an evaluation plan for the NC, and managing time scheduling for all nurses so that they have the opportunity to deliver CHN and family nursing practices in the NC. Nurses should be involved in reflection and reciprocal learning practices with the nursing education stakeholders to improve their capacity to integrate the health programs in the community health centre into CHN and family nursing practices.

7.5.2 Recommendations for Community Health Nursing Education

Service learning and people-centred and integrated health services are recommended as strategies to improve and reduce barriers to the operation of the NC model. This study also adds new knowledge around the idea that important fundamentals for the optimal functioning of the NC in Indonesia include key education stakeholders' understandings about the theoretical basis, the common ground on the purposes of the NC, and the ownership of the NC in the form of a formal policy of the NC.

Therefore, in order to prevent the failure of the NCs, the key stakeholders need to evaluate whether there is a mismatch between the theoretical basis and the practice of the NC, multiple and competing agendas on the purpose of the NC, and confusion about ownership of the NC. It is important for such an evaluation to be conducted on a regular basis to identify potential problems and to take possible action to maintain the sustainability of the NC. Lecturers are the key stakeholders for ensuring that components of service learning

(structured intra-curricular experiential learning, reflection, reciprocity, and the setting of specific outcomes for all stakeholders) are conducted in a consistent way. In order to achieve this, the lecturers need to have a sound knowledge of service learning and other concepts within the NC model, and then to transfer this knowledge to students, nurses, health service leaders, and decision-makers.

7.5.3 Recommendations for Community Health Nursing Research

This study has contributed to the knowledge around the integration of CHN services, education, and research that remains a gap in the NC and the integrated health service literature. Further research is needed to examine the applicability of the refined evaluation framework for this integration to other community health settings both nationally in Indonesia and internationally. Further research is also needed to test the program theory that has been developed in this study to improve its effectiveness to measure integration in other NC settings.

This study has found that the reflective components of service learning, such as analysis and synthesis of learning experiences and service provision would need to be explored further in the NC model. This would strengthen the conceptual framework for service learning that has been identified in Chapter 2, which would then also improve the effectiveness of the NC model to produce positive outcomes for all stakeholders. Further research is also needed to identify the most effective way to manage the pattern and flow of relationships through better human resource allocation in the NC to maximise the contribution of nurses, students, and lecturers in the NC.

APPENDICES

APPENDIX 1. THE ORIGINAL MODEL OF THE INDONESIAN NURSING CENTRE

This appendix outlines the original model of the Indonesian Nursing Centre that is based on three publication of the model from Samba (2002, 2007, 2012). There are six underlying concepts for the NC model in Indonesia, which are community health nursing (CHN) sevices as a system, adult learning (education), organisation of profession, caring, research and the community (Samba 2007, 2012). Figure 1 reflects the six components of the NC model in Indonesia, followed by brief explanation of the components.

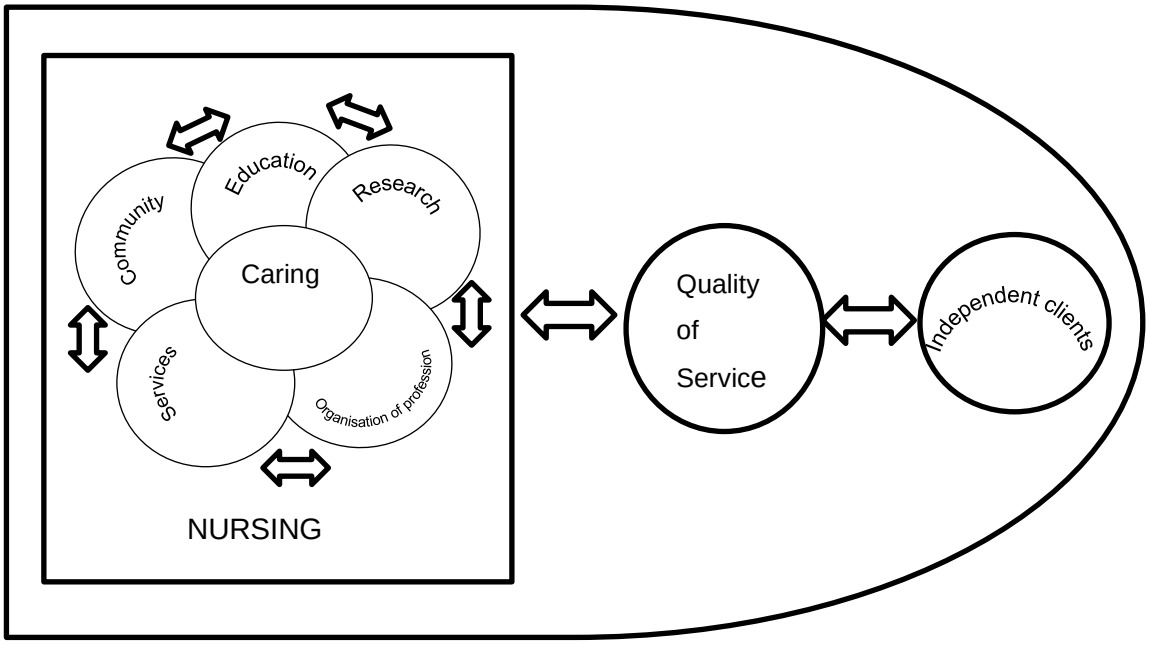


Figure 1 Conceptual Model of the NC in Indonesia (Samba 2007, 2012)

Community Health Nursing Services as a System

In CHN, community is the basic structure or core of the system. The community consists of individuals, family, and groups. The sub-systems consist of nursing education institutions, health services, nursing organisation, and research. Nursing education plays an important role to produce quality nurses that will work in community so that students should know and learn about the community that they will serve as nurses when they graduated. In order to learn about the community, faculty member should provide learning experiences for students and prepare a suitable method of teaching and learning in community (Samba 2012).

Health services are also one of sub-systems in the community because it is important to help maintain the community basic structure. Nursing organisation is also part of subsystems in

CHN because it can maintain quality of community nursing practice through training or continuing education for community health nurses so that the community would get benefits from nursing services(Samba 2007). Nursing research is also important to improve the quality of services and nursing education that could give benefit for community (Samba 2002).

Adult Learning in Nursing Education

Nursing Education is an important part of health system. Faculty members have responsibility to develop nursing curriculum within nursing education institution (Samba 2012). Samba (2012) proposed both adult learning and active learning as the learning approaches in the NC:

> *Everybody has an individual paradigm that shapes their experiences, interpretations, and understandings of their world. In order to learn effectively, nursing students need a learning method that is active, integrative, cumulative, and consistent. Active learning demands creativity, independent thinking, collaboration, and learning directing by the student (Samba 2012, p.19).*

Organisation of Profession

As a profession, nursing needs an organisation that can unite all members to face problems and challenges of nursing profession in the future in order to improve the quality of nursing care for people in the community (Samba 2002).

Caring

Caring is essential for nursing profession because caring is the essence of nursing, and the unique and unifying focus of the profession and with caring nurses can help their client to achieve the highest level of Maslow's basic human needs which is self-actualization (Samba 2002). It is important to all nurses to have sense of caring so that they can give the best possible service to clients. In order to develop "caring" attitude, it has to be started from educational level (Samba 2012). With nursing centre model, students are introduced to the real life of community, live together and learn how to solve the problem in community, so that students will have sense of caring to their surrounding community as well as to their patients in hospital (Samba 2002).

Nursing Research and Development

Nursing as a profession has accountability to provide a high quality of nursing care to clients. Therefore, nurses need to do research activities which can be used to describe, explain, predict, and manage phenomena of research (Samba 2002).

The Community

Community plays an important role in people's life because humans are social creatures that need a good social network supports. Involving community as a partner is one of key successes towards better health status in the community (Samba 2012). The NC Indonesia also incorporates education, services, research and nursing profession organisation as sub-system (Samba 2007).

The Aim and Objectives of the Nursing Centre in Indonesia

The aim of the NC Indonesia is to give high quality services and nursing education in an effective and efficient way (Samba 2002). In order to achieve the aim, there are six objectives of the NC including:

1. Identification of the actual or potential needs of clients and nursing students.
2. Developing an integrated plan for services and learning experiences based on the needs of clients.
3. Implementing the integrated learning experiences and nursing services as planned.
4. Monitoring and evaluating the learning experiences and nursing services.
5. Developing and implementing nursing research plan.
6. Planning for further development based on the scientific method.
   (Samba 2002).

Indicators of the Nursing Centre in Indonesia

According to Samba (2007), a nursing centre is considered good if it can achieve the following criteria:

1. It can fulfil the needs of community health nursing services and learning experiences of students.
2. It can give direction for the nursing assessment.
3. It can give direction for the analysis and planning.
4. It can give direction for the implementation.
5. It can facilitate an evaluation.
6. It is included in nursing curriculum of nursing education institutions.
7. It has a framework or plan for research and development of theories and practices.

In 2006, The Ministry of Health published decree number 279 year 2006, the 'Guidelines of the Implementation of Community Health Nursing in *Puskesmas*', which used a different set

of criteria for family independence level to measure the effectiveness of community health nursing activities in the health centres, as shown in Table 1. This family independence level is also used to measure the performance of the NC.

Table 1. Family-Independence Level from Ministry of Health Indonesia

Family Behaviour	Family Independence Level			
	I	II	III	IV
Accept the nurses	V	V	V	V
Accept the health services as planned	V	V	V	V
State the problem correctly		V	V	V
Use health facilities as recommended		V	V	V
Perform simple care as recommended		V	V	V
Perform prevention activities actively			V	V
Perform health promotion activities actively				V

Outcomes of the Indonesian Nursing Centre

The main target of the NC is nursing students and clients (individuals, families, specific groups and the general population). Nurses who work in the NC have roles as care provider, educator for clients and students, manager, and developer of nursing knowledge and practices. The focus of intervention of the NC is an effort to facilitate, advocate and coordinate all the NC activities to achieve the high quality nursing services and education in community setting (Samba 2007). Figure 2 shows the outcomes of the NC model in Indonesia, which is to obtain high quality graduates and community health nursing service in order to achieve healthy community and healthy cities and regencies.

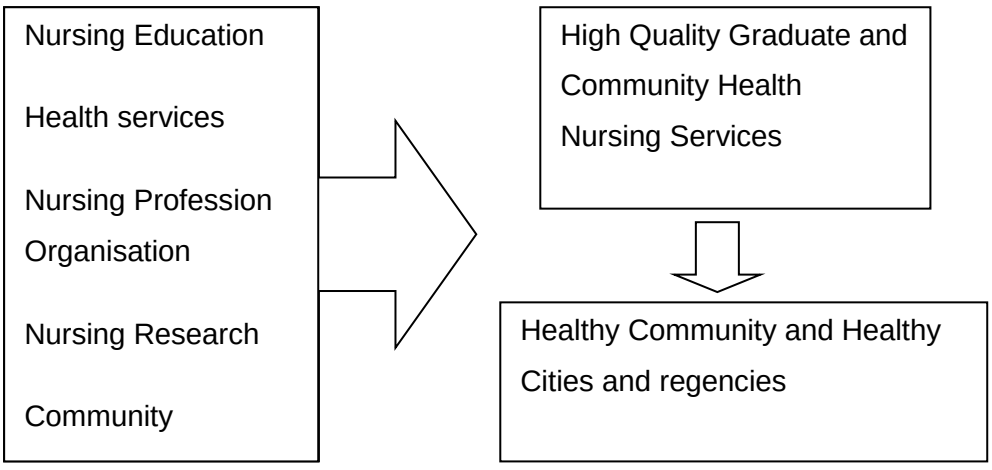


Figure 2. Outcome of the Nursing Centre Model Indonesia

Working mechanisms of the Indonesian NC

Documents of the NC clearly outlined the working mechanisms of the NC model include activities inside the facility and outreach activities using the nursing process as an approach, nursing education and reseach activities (Samba, 2002; 2007; 2012).

1) Activities inside the NC facility

The CHN services inside the building consist of direct care, case detection, health education, and counselling based on the needs of individual and or group, referral from and to other healthcare service organisation, and nursing documentation (Samba 2012). The flowchat of client referral to receive CHN services inside the building is outlined in Figure 3. In the figure, clients can go directly to the NC after the registration and go back and forth from the clinics to the NC, or before and after clients receive their medication.

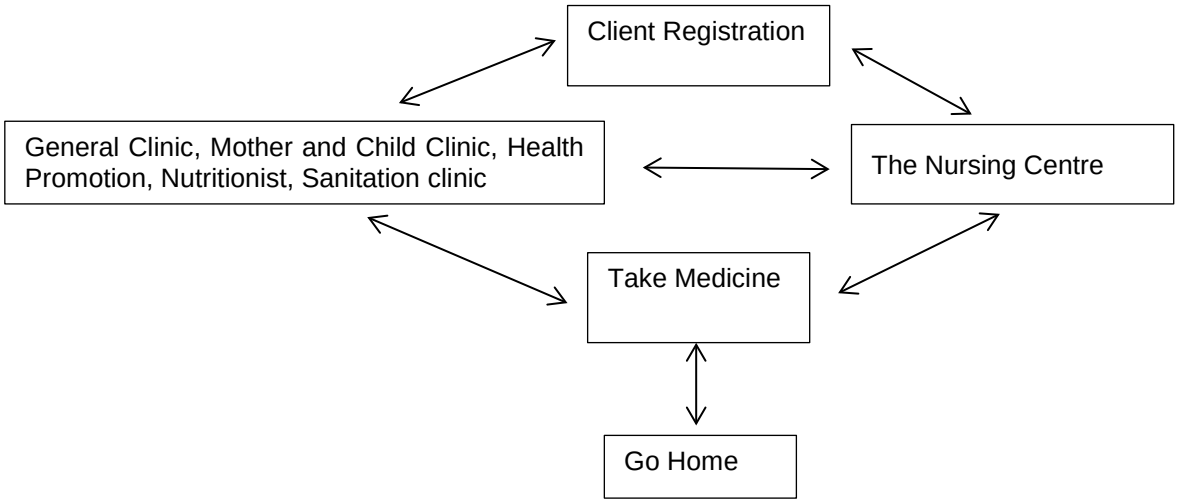


Figure 3. Flowchart of the CHN service inside the building (Samba, 2007; 2012)

2) Outreach CHN services in the NC

The outreach CHN services are conducted in the target area by nurses or students with supervision from lecturers. The CHN services outside the building consist of follow-up care from individual cases in the *Puskesmas*, family nursing, and gerontology nursing, specific group and community health nursing in the target area (Samba 2002, 2007, 2012). The intended flow of CHN services outside the building is outlined in Figure 4.

Figure 4. Working Mechanism of CHN services outside the building (Samba, 2007; 2012)

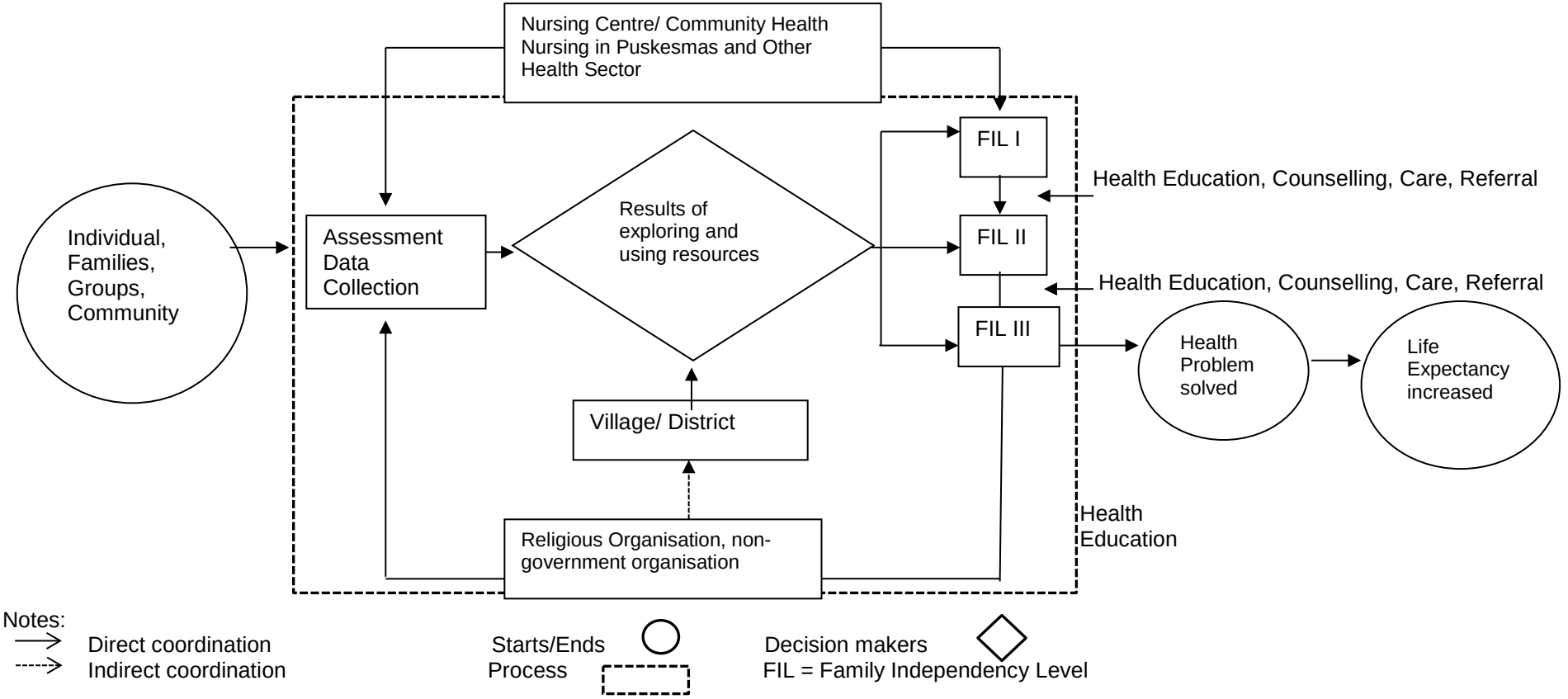


Figure 4 shows that target clients for CHN services outside the building are individuals, families, groups, and people in the community. Students and nurses conduct assessment together with community organisation or other sectors in the community. The results of this assessment are presented to the head of village or sub-district. The results from this assessment would lead to decision making to determine families with various independency levels that might have health problems and need interventions. The interventions could be health education, counselling, direct care or referral. These families then will receive nursing care from students and nurses. At the end of the nursing care, it is expected that the families' health problem is resolved. These activities are expected to increase life expectancy of people in the community.

Community Health Nursing Education

Flowchart for the implementation of education in the NC is presented in Figure 5. Figure 5 shows that the education process started from the assessment of students' learning needs in terms of knowledge, skills and attitude. Students who are passed the assessment can do placement in the NC, while students who fail need to go to nursing skills laboratory to learn more and then do the assessment again (Samba 2007, 2012).

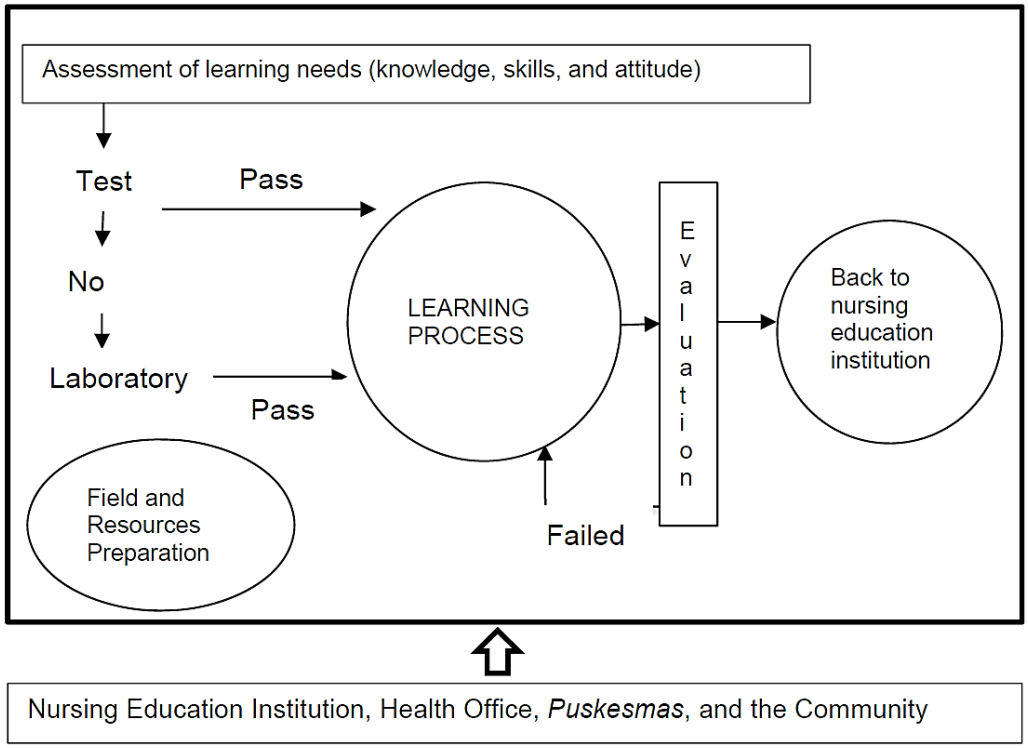
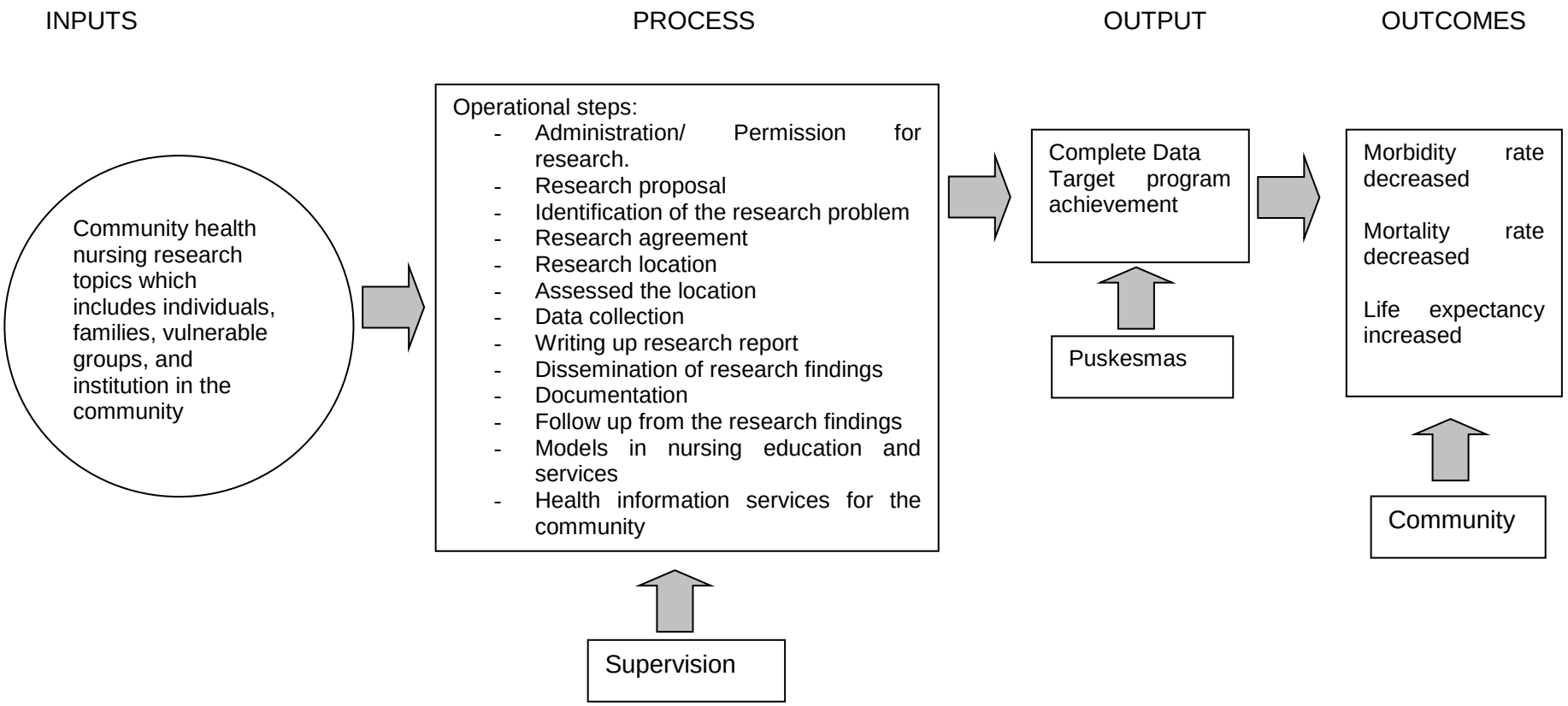


Figure 5. Flowchart of field learning experience process of the education/training program in the NC (Samba, 2007; 2012)

Community Health Nursing Research

Figure 6 shows the process of research in the NC that has been outlined in the NC document published by the Provincial health office (Dinas Kesehatan Propinsi Jawa Barat 2003). This flow chart starts from input of research, which shows that the CHN research topics are related to individuals, families, vulnerable groups, and institution in the community. The operational steps in research activities consist of 13 steps starting from administration/ permission for research until health information services for the community. The output from the research is a complete data of target program achievement for *Puskesmas*, and the expected outcomes are the decreased of the morbidity rate and the mortality rate, and the increased of the life expectancy.

Figure 6. The Process of Research in the NC (Dinas Kesehatan Propinsi Jawa Barat, 2003)



APPENDIX 2A. REVIEW METHOD OF SERVICE LEARNING AND PAPERS USED IN THE REVIEW

Review method

The integrative review method of Whittemore and Knafl (2005) was used for this review. Integrative reviews are part of the group of research review methods which include both quantitative and qualitative research in order to enhance the rigour of the evaluation of a phenomenon of interest (Evans 2007; Whittemore & Knafl 2005). A 12-step structured approach to document a search strategy for publication from Kable, Pich and Maslin-Prothero (2012) was also used in this review. The structured approach includes providing a purpose statement, documenting the databases or search engines used, specifying the limits applied to the search, listing the inclusion and exclusion criteria for the search, listing the search terms used, assessing retrieved articles for relevance using the inclusion and exclusion criteria, documenting a summary table of the included articles, providing a statement specifying the number of search results, conducting a quality appraisal of the retrieved literature, undertaking a critical review of the literature, and checking the reference list for accuracy.

A purpose statement

There are a variety of purposes of an integrative review, including defining concepts and reviewing theories, evidence, and methodological issues (Whittemore & Knafl 2005). The purpose of this review is to develop a functional definition of service learning from a wide range of research designs.

Databases or search engines used to locate studies

A two-step approach to locate relevant studies was used. The first step was a preliminary search in CINAHL to identify the optimal search terms through consultation with a librarian. The second step comprised a comprehensive database search using these optimal search terms through a range of electronic databases, including CINAHL, MEDLINE, ERIC, Scopus, and the Web of Science from the earliest retrievable records of each database to June 23, 2015. The search terms used in this review were (Nursing students OR nursing education OR nursing school OR Community health nursing OR community mental health nursing OR health education) AND (service learning OR community based education).

Specifying limits applied to the search and inclusion and exclusion criteria

For studies to be included in a review, Evans (2007) suggested that they need to meet a set of inclusion criteria. The criteria for this review include:

- Subjects/Participants – nursing students including those at undergraduate or postgraduate level.
- Phenomenon of Interest – studies needed to use the specific term 'service learning'.
- Study design – descriptive studies, qualitative studies, and mixed-methods research papers published in peer-reviewed journals.
- Outcomes – qualitative and quantitative descriptions of service learning outcomes. Qualitative studies need to have clear reporting themes and labels that focus on service learning.
- Other criteria such as language, geographical location, or time-frame. Non-English language studies were excluded due to difficulty and costs of translating qualitative research reports. Other exclusion criteria were online service learning and international service learning, meaning that the location of the service learning was outside the country of the nursing education institution. The international service learning studies were excluded from this review because the nature of this type of service learning is different from service learning in which the education institution and the community partner are located in the same region.

Assessing and documenting a summary and the number of included retrieved articles

The literature search was conducted systematically using a number of databases, hand searching of hardcopy journals, and the snowball technique (Kable, Pich & Maslin-Prothero 2012). The results are documented in Table 1 as a summary of the number of included retrieved articles. A total of 42 studies were included in the review. A flowchart of the search results is presented in Figure 1.

Table 1 Summary of number of included retrieved articles

Literature Search	# Retrieved papers	# Met inclusion criteria
CINAHL	218	18
MEDLINE	257	12
ERIC	3,905	3
SCOPUS	497	6
Web of science	152	3
Hand searching and snowball technique	5	3
Total	5,034	42

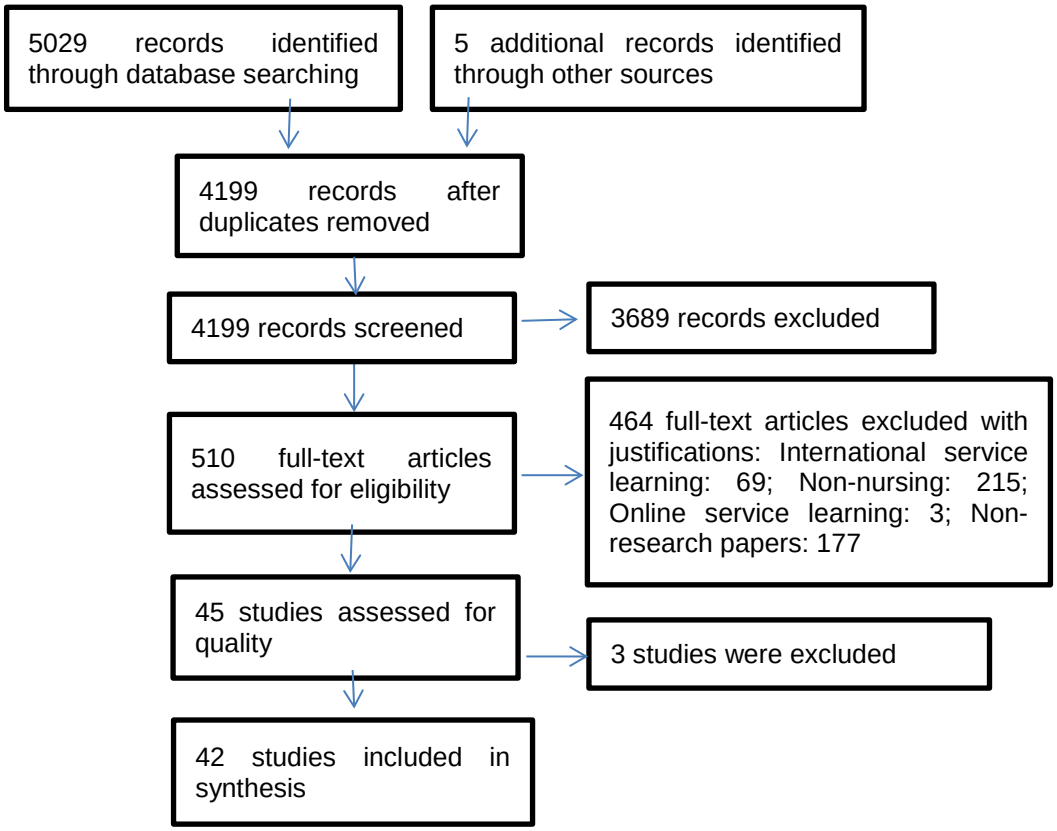


Figure 1 Flow chart of search results

Conducting a quality appraisal of the retrieved literature

A total of 45 studies were assessed using the general critical appraisal tool suitable for assessing qualitative, quantitative, and mixed-methods studies (Crowe & Sheppard 2011). Total scores for each study ranged from 30% to 97.5% (see Table 2). Three studies with scores under 50% were excluded based on this critical appraisal; therefore, 42 studies were included in the review.

Data analysis

All the articles were systematically analysed to identify the components of service learning. The definitions of service learning were firstly identified in each study, and then a concept analysis was conducted to examine the level of concept maturity. In addition, each concept was identified through its structural features consisting of a definition, its characteristics, boundaries, and pre-conditions, and its outcomes (Morse et al. 1996). After the articles had been gathered, the synthesis process consisted of three phases (Evans 2002):

1. Identification of the key findings by reading and re-reading the articles to develop a sense of the studies as a whole. During this process of reading, attention was paid to the content of each study, followed by a collection of findings taken from each individual study, and the recording of the demographic characteristics of the studies and a listing of the major findings.
2. The differences and commonalities in the lists of major findings across the studies were compared and contrasted. The themes were then collated by grouping and categorising them into structural features consisting of definitions, components, antecedents, attributes, characteristics, and outcomes (Morse et al. 1996; Whittemore & Knafl 2005). Related terms were identified to propose relationships between service learning and its outcomes. The resulting components were discussed with supervisors.
3. Data display matrices were developed to display all the coded data from each report by category and then were iteratively compared. These categories were used to develop a functional definition of service learning. The product of the synthesis was then written up, describing all the components and the sub-components at higher levels of abstraction in the form of a table and a model (Whittemore & Knafl 2005) to comprehensively portray the components of service learning in nursing education.

Table 2 Summary of Components of Service Learning (n=42)

Study	Appraisal Score (%)	Research design	Country	Structured experiential learning		Reflection			Reciprocity		Specified Outcomes and Benefits for Stakeholders				Total
				TS	SE	PS	AE	SLE	T&L	P&C	S	C	OP	OR	
Amerson (2010)	67.5	Pre-post tests	USA	V	V	-	-	-	-	-	V	-	-	-	3
Baker et al. (2004)	57.5	Qualitative	USA	V	V	V	V	V	V	-	V	-	V	V	9
Bassi (2011)	70	Qualitative	USA	V	V	V	V	V	-	-	V	-	-	-	6
Baumberger-Henry, Krouse and Borucki (2006)	60	Case study	USA	V	V	-	-	-	V	-	V	-	-	-	4
Bentley and Ellison (2005)	62.5	Evaluation research	USA	V	V	V	V	-	-	-	V	-	-	-	5
Bonner et al. (2007)	65	Single group repeated measure	USA	V	V	-	-	-	-	V	-	V	-	-	4
Brown (2009)	87.5	Evaluation research	USA	V	V	-	-	-	-	-	V	-	-	-	3
Chen et al. (2012)	92.5	Experimental	USA	V	V	V	-	-	-	-	V	-	-	-	4
Downes, Murray and Brownsberger (2007)	70	Intervention	Ethiopia	V	V	V	-	-	-	V	V	V	-	-	6
du Plessis, Koen and Bester (2013)	97.5	Phenomenology	South Africa	-	-	-	-	-	-	V	V	V	-	-	3
Eymard, Crawford and Keller (2010)	70	Qualitative	USA	V	V	V	-	-	V	-	V	-	-	-	5
Eymard, Breaux and Dozar (2013)	50	Qualitative	USA	V	V	V	V	V	-	-	V	V	-	-	7
Francis-Baldesari and Williamson (2008)	67.5	Case study	USA	V	-	-	-	-	-	V	V	-	-	-	3
Foli et al. (2014)	85	Pre-post test	USA	V	-	V	-	-	V	-	V	-	-	-	4
Groh, Stallwood and Daniels (2011)	95	Pre-post test	USA	V	V	V	-	-	-	-	V	-	-	-	4
Hunt, R. J. (2007)	75	Qualitative	USA	V	-	V	-	-	-	-	V	-	-	-	3
Hunt, R. J. and Swiggum (2007)	77.5	Phenomenology	USA	V	-	V	V	V	V	V	V	-	-	-	7
Hwang, Wang and Lin (2013)	92.5	Quasi-experimental	Taiwan	V	V	V	-	-	-	-	V	-	-	-	4
Hwang et al. (2014)	97.5	Pre-post test	Taiwan	V	-	V	-	-	V	-	V	V	-	-	5
Jarosinski and Heinrich (2010)	97.5	Qualitative	USA	V	V	-	-	-	V	V	V	-	-	-	5
Jarrell et al. (2014)	97.5	Pre-post test	USA	V		-	-	-	V	V	V	-	-	-	4
Julie, Daniels and Adonis (2005)	87.5	Qualitative	South Africa	V	V	V	V	V	V	V	V	V	-	-	9
Kazemi, Behan and Boniauto (2011)	87.5	Mixed method	USA	V	V	-	-	-	V	-	V	-	V	-	5

Laplante (2009)	90	Qualitative	USA	V	V	V	V	-	V	-	V	-	-	-	6
Larson et al. (2011)	85	Survey	USA	V	-	-	-	-	V	-	-	V	-	-	3
Loewenson and Hunt (2011)	80	Pre-post test	USA	V	-	V	-	-	-	-	V	-	-	-	3
Metcalfe and Sexton (2014)	70	Survey	USA	V	-	V	-	-	V	V	V	V	-	-	6
Mthembu and Mtshali (2013)	90	Grounded theory	South Africa	V	V	V	V	V	-	V	V	-	-	-	7
Narvasage et al. (2002)	80	Pre-post test	USA	V	V	V	-	-	-	-	V	-	V	-	5
Nokes et al. (2005)	92.5	Pre-post-test intervention	USA	V	V	-	-	-	V	-	V	-	-	-	4
Peterson and Schaffer (1999)	67.5	Evaluation research	USA	-	-	V	-	-	V	V	V	-	-	-	4
Reising, Allen and Hall (2006a)	70	Prospective descriptive	USA	V	V	V	-	-	V	-	V	-	-	-	5
Reising, Allen and Hall (2006b)	57.5	Prospective descriptive	USA	V	-	-	-	-	V	-	-	V	-	-	3
Reising et al. (2008)	95	Pre-post test	USA	V	V	V	-	-	V	-	V	V	-	-	6
Schaffer, Mather and Gustafson (2000)	77.5	Survey	USA	V	-	V	-	-	V	V	-	V	-	-	5
Schofield et al. (2013)	80	Qualitative	Canada	V	V	V	V	V	-	V	V	-	-	-	7
Sedlak et al. (2003)	82.5	Qualitative	USA	V	V	-	-	-	-	-	-	V	-	-	3
Simoni and McKinney (1998)	77.5	Mixed method	USA	V	V	-	-	-	V	-	V	-	-	-	4
Voss et al. (2015)	85	Evaluation research	USA	V	V	V	V	-	-	V	-	V	V	-	7
White et al. (1999)	65	Qualitative	USA	V	V	V	-	-	V	-	V	-	V	V	7
Worrell-Carlisle (2005)	65	Evaluation research	USA	V	V	V	-	-	-	-	V	-	-	-	4
Yeh et al. (2009)	75	Action research	Taiwan	V	-	-	-	-	V	-	V	V	-	-	4
Total				40	28	27	10	7	22	14	36	14	5	2	

Abbreviations:
TS: Teaching strategy using experiential learning in academic coursework
SE: Students engaging in service and learning in real-life experiences that address human and community needs
PS: Perceptions of stakeholders about what they had learned and achieved in the service learning activities
AE: Analysis of the experience through conversation and discussion
SLE: Synthesis of the learning experience as the basis of future applications
T&L: Stakeholders function as both a teacher and a learner
P&C: Partnership and collaboration toward mutual goals
Specified outcomes and benefits:
S: Students' competency and insights into certain values
C: Health-related outcomes for clients and the community
OP: Cost-effectiveness in providing services for the partner organisation
OR: Opportunities for empirical research, other forms of scholarship, or consultation

APPENDIX 2B. REVIEW METHOD OF ACADEMIC NURSING CENTRE AND PAPERS USED IN THE REVIEW

Review method

The integrative review method of Whittemore and Knafl (2005) was used for this review. Integrative reviews are part of the group of research review methods which include both quantitative and qualitative research in order to enhance the rigour of the evaluation of a phenomenon of interest (Evans 2007; Whittemore & Knafl 2005). The literature search was conducted systematically using a number of databases, and the snowball technique (Kable, Pich & Maslin-Prothero 2012). The results are documented in Table 1 as a summary of the number of included retrieved articles. A total of 39 studies were included in the review. A flowchart of the search results is presented in Figure 1.

Table 1 Summary of number of included retrieved articles

Literature Search	# Retrieved papers	# Met inclusion criteria
CINAHL	2454	21
MEDLINE	723	8
Snowball technique	15	10
Total	3192	39

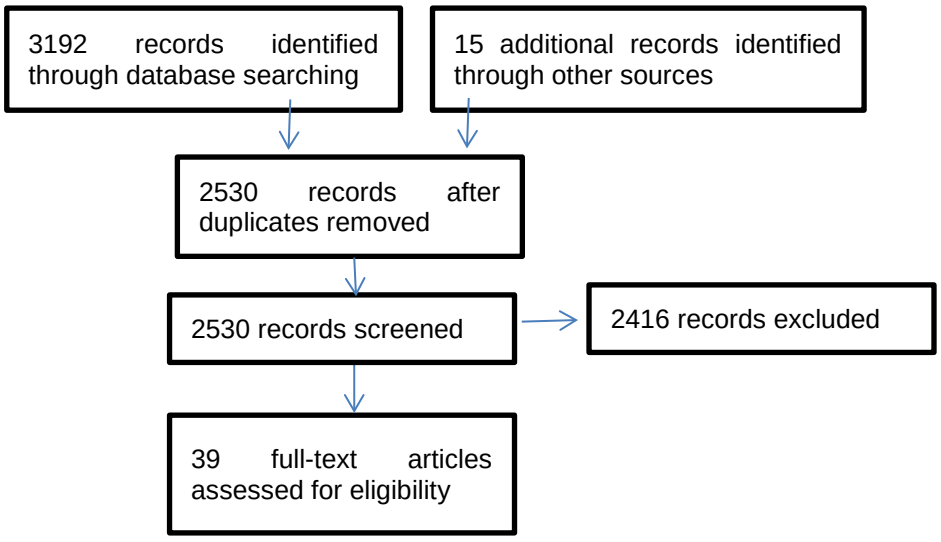


Figure 1 Flow chart of search results

Conducting a quality appraisal of the retrieved literature

Studies were not appraised individually as it is anticipated that the findings of the review will come from a diverse range of literature. As a result, it is anticipated that quality will be highly variable. While this is a limitation of the review, given that the aim is to develop a description of the phenomena of interest rather that to evaluate a specific treatment, it was anticipated the findings would still provide important information regarding the academic NC model.

Data analysis

After the articles had been gathered, the synthesis process consisted of three phases (Evans 2002):

1. Identification of the key findings by reading and re-reading the articles to develop a sense of the studies as a whole.
2. The differences and commonalities in the lists of major findings across the studies were compared and contrasted.
3. Data display matrices were developed to display all the coded data from each report by category and then were iteratively compared. These categories were used to develop a functional definition of service learning. The product of the synthesis was then written up in the form of a table and a model

Table 2 Summary of Academic Nursing Centre Model (n=39)

No	Study (n=39)	Research design	Country	Model	Integration	Evaluation
1.	Acord et al. (2010)	Not mentioned	USA	The Wisonsin centre for nursing	V	-
2.	Andresen and McDermott (1992)	Descriptive	USA	-	V	V
3.	Aponte and Egues (2010)	Survey	USA	Wellness centre and SoN partnership	V	V
4.	Barger (2004)	Not mentioned	USA	Four era of academic NC	V	-
5.	Barkauskas et al. (2006)	Cross-sectional survey	USA	Academic nurse-managed centre	-	V
6.	Branstetter and Holman (1997)	Not mentioned	USA	Business oriented NC	V	-
7.	Connolly, P. M. et al. (2006)	Practice exemplars	USA	Academic-nurse managed centre	V	V
8.	Connolly, P. M. (1991)	Pilot project	USA	A nurse managed centre for the chronically mentally ill	V	-
9.	Glick (1999)	Discussion paper	USA	Community as client	V	V
10.	Henry (1997)	Descriptive	USA	Community nursing centre and service learning	V	-

11.	Hildebrandt et al. (2003)	Retrospective review	USA	Academic community NC	V	V
12.	Hong and Lundeen (2009)	Descriptive	USA	The Lundeen's comprehensive community-based primary healthcare model	V	V
13.	Humphreys et al. (2004)	Not mentioned	USA	Nurse-managed academic health centre for children and adolescents	V	V
14.	Kent and Keating (2013)	Descriptive	Australia	Student-led inter-professional clinic	V	-
15.	King (2008)	10 years review of 10 academic NCs	USA	Business model	V	V
16.	Krothe et al. (2000)	Descriptive	USA	Community development model	V	V
17.	Lough (1999)	Descriptive	USA	Academic-community partnership	V	V
18.	Lundeen (1992)	Not mentioned	USA	Community NC	-	-
19	Lundeen (1993)	Not mentioned	USA	Community NC	V	-
20.	Lundeen (1997)	Not mentioned	USA	Community NC	-	V
21.	Lundeen, Harper and Kerfoot (2009)	Not mentioned	USA	Lundeen Community NC	V	V
22.	Lutz, Herrick and Lehman (2001)	Not mentioned	USA	NC for older adults and service learning	V	-
23.	Marek, Rantz and Porter (2004)	Descriptive	USA	-	V	V
24.	Miller et al. (2004)	Not mentioned	USA	Business plan	V	V
25.	Neff et al. (2003)	Retrospective descriptive	USA	Academic community based nurse-managed centre	-	V
26.	Newman (2005)	Descriptive	USA	Neuman Systems model	V	-
27.	Oros et al. (2001)	Not mentioned	USA	Community-based NC	V	-
28.	Persily (2004)	Practice exemplars	USA	Academic nursing practice	V	-
29.	Pohl et al. (2006)	Survey	USA	Nurse-managed health centres	V	V
30.	Pohl et al. (2007)	Survey	USA	-	V	V
31.	Pohl et al. (2010)	Survey	USA	Primary care nurse-managed centre	-	V
32.	Resick et al. (2011)	Retrospective	USA	Nurse-managed wellness centre	-	V
33.	Shiber and D'Lugoff (2002)	Descriptive	USA	Academic-community partnership	V	V
34.	Stewart, Coulon and Kavanagh (1997)	Feasibility study	Australia	Nurse-managed healthcare centre	-	-
35.	Thompson and Feeney (2004)	Not mentioned	USA	Academic nursing centre/CHN clinical setting	V	-
36.	Tuaoi et al. (2011)	Discussion paper	Australia	-	V	-
37.	Van Zandt, Sloand and Wilkins (2008)	Case study	USA	Academic nurse managed centre	V	-
38.	Yeh et al. (2009)	Action research	Taiwan	NC and service learning	V	V
39.	Zachariah and Lundeen (1997)	Descriptive	USA	Community NC	V	V

APPENDIX 3A. INTERVIEW QUESTIONS MATRIX

Objective	Key information/ indicators	Interview Schedule	Client	Nursing Students	Nurses	The Founder of The NC	Coordinator of Provincial Public Health Nursing Program	The head of public health centres	Lecturers
To identify the theoretical basis and purpose in the establishment of the NC.	The reason in establishing the NC model	Why do you initiate the NC model at the first place?				V	V		
	Concepts or theories for the NC model	What are the concepts that underlying the establishment of the NC?				V	V	V	V
	Public health nursing practice in Public Health Centre (Puskesmas)	Compared to Puskesmas without the NC, do you think the nurses' involvement in the NC will assist them in their future career? – please explain			V		V	V	
	Nursing education practice in the NC	Compared to a usual clinical placements, do you think that students involvement in the Nursing Centre will assist them in their future career (such as in terms of knowledge and skills) – please explain?		V	V	V	V	V	V
		Compared to a usual clinical placements, do you think that lecturers involvement in the Nursing Centre will assist them in their future career (such as in terms of knowledge and skills) – please explain?				V	V		V
To describe the policy and resources context that has influenced the establishment of the NC	Policy of the public health nursing in Indonesia	What is the role of provincial health office and district health office to the development of the NC?					V	V	
		Why provincial and district health office support the establishment of the NC?					V		
	Policy of establishment of the Nursing Centre	What is the policy from provincial health office and Ministry of Health regarding the NC?					V		
	Resources that influencing the	What are the factors (internal or external) that influencing the establishment and				V	V	V	

Objective	Key information/ indicators	Interview Schedule	Client	Nursing Students	Nurses	The Founder of The NC	Coordinator of Provincial Public Health Nursing Program	The head of public health centres	Lecturers
	establishment and operationalisation of the NC model	operationalization of the NC model?							
To describe the implementation of three NCs within existing public health centres in West Java.	The process and implementation of the NC model	What are factors that influencing the process and implementation of the NC model?	V	V	V			V	V
		Based on your experience, are there any NC that is not working well? If yes, why do you think this happen?							
		How is the relationship between nurses and students in the NC?							
To explore the stakeholders' perception of the NC as a model of service learning.	Perceptions of consumer	What do you think are the strength and weaknesses of the Nursing Centre, to nursing students, to the nurses who work in the Centre, to the community? Do you have suggestion about how to improve the Nursing Centre model in the future? Is there anything else that you would like to say about the Nursing Centre?	V	V	V	V	V	V	V
	Perceptions of care providers		V	V	V	V	V	V	V
	Perceptions of managers		V	V	V	V	V	V	V
	Perceptions of other stakeholders		V	V	V	V	V	V	V
To develop a program theory model that will enable the evaluation of the NC as a model of service learning in community health in Indonesia	Based on all the interview data above.	What is the design for evaluating the NC, and who is doing the evaluation? What are the outcome measures being used, and what outcomes have been identified to date? What rival explanations have been identified and explored?			V	V	V	V	V

Appendix 3B. Interview Schedule

A. INTERVIEW SCHEDULE FOR CLIENTS

1. What services have you used at the Nursing Centre? Please describe your experience in receiving care in the Nursing Centre?
2. Have you been satisfied with the care that you have received from the Nursing Centre – please explain why or why not?
3. Were you aware that nursing students are involved in learning activities in Nursing Centre? If so, was a nursing student involved in your care? If yes, do you think that this make a difference to the care that was provided to you?
4. What do you consider are the strength and weaknesses of the Nursing Centre for clients?
5. If you would come again to the Nursing Centre, what do you think that can make your experience better in the future?
6. Is there anything else that you would like to say about the Nursing

B. INTERVIEW SCHEDULE FOR NURSING STUDENTS

1. What learning experience have you had in the Nursing Centre – has this experience differed from other clinical placements?
2. What course objectives have you met by participating in the Nursing Centre?
3. What is your experience in giving service and care for clients in the NC and community health centre? Please explain.
4. Do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt : such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements).
5. How do nurses and students work and learn together in the NC?
6. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in the Centre, to the community? Prompt 2 : compared to community health centre without the NC)
7. What do you think that are working well and not working well in the NC?
8. Do you have suggestion about how to improve the Nursing Centre model in the future?
9. Is there anything else that you would like to say about the NC?

C. INTERVIEW SCHEDULE FOR NURSES

1. What is your experience in giving care for clients in the NC and community health centre? Please explain.
2. What is your role in the community health centre with the Nursing Centre? (Prompt: how does this role differ to nurses working in other community health centres without Nursing Centre?)
3. What learning experience doe nursing students have in the Nursing Centre – does this experience differed from other clinical placements?
4. Do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements)
5. How do you think that nurses' involvement in the Nursing Centre will assist them in their career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual community health centre)
6. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in the Centre, to the community? Prompt 2: compared to community health centre without the NC)
7. What do you think that are working well and not working well in the NC?
8. Do you have suggestion about how to improve the Nursing Centre model in the future?
9. Is there anything else that you would like to say about the Nursing Centre?

D. INTERVIEW SCHEDULE FOR THE FOUNDER OF THE NC

1. Why do you initiate the NC model at the first place?
2. What do you think the concepts that underlying the establishment of the NC?
3. What are the factors (internal or external) that influencing the establishment and operationalization of the NC model?
4. Do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements)
5. How do you think that nurses' involvement in the Nursing Centre will assist them in their career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual community health centre)
6. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in

the Centre, to the community? Prompt 2: compared to community health centre without the NC).

7. What do you think that are working well and not working well in the NC?
8. What is the design of evaluation of the NC? What are the outcome measures that intended to use when you established the NC?
9. Do you know if the NC is currently being evaluated? If yes, how is it being evaluated? Is this how you originally intended it to be evaluated?
10. If it is not being evaluated, are there other documents or reports that would show how well the NC is working? If so, what do these documents tell you about how well the NC is working?
11. Do you have suggestion about how to improve the Nursing Centre model in the future?
12. Is there anything else that you would like to say about the Nursing Centre?

E. INTERVIEW SCHEDULE FOR COORDINATOR OF COMMUNITY HEALTH NURSING PROGRAM AT PROVINCIAL HEALTH OFFICE

1. Why do you interested to initiate the NC in all districts and cities in West Java?
2. What is the role of provincial health office and district health office to the development of the NC?
3. Why provincial and district health office support the establishment of the NC?
4. What is the policy from provincial health office and Ministry of Health regarding the NC?
5. What do you think the concepts that underlying the establishment of the NC?
6. What are the factors (internal or external) that influencing the establishment and operationalization of the NC model?
7. Do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements)
8. Do you think that nurses' involvement in the Nursing Centre will assist them in their career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual community health centre)
9. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in the Centre, to the community? Prompt 2: compared to community health centre without the NC)
10. What do you think that are working well and not working well in the NC?

11. Is the NC being evaluated? If yes, how and what measured being used? (Prompt: what outcomes have been identified to date?)
12. If it is not being evaluated, are there other documents or reports that would show how well the NC is working? If so, what do these documents tell you about how well the NC is working?
13. Do you have suggestion about how to improve the Nursing Centre model in the future?
14. Is there anything else that you would like to say about the Nursing Centre?

F. INTERVIEW SCHEDULE FOR THE HEAD OF COMMUNITY HEALTH CENTRE

1. What is the role of the head of community health centre in the NC?
2. What do you think the concepts that underlying the establishment of the NC?
3. What are factors that influencing the process and implementation of the NC model?
4. Do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements)
5. Do you think that nurses' involvement in the Nursing Centre will assist them in their career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual community health centre)
6. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in the Centre, to the community? Prompt 2: compared to community health centre without the NC)
7. What do you think that are working well and not working well in the NC?
8. Is the NC being evaluated? If yes, how and what measured being used? (Prompt: what outcomes have been identified to date?)
9. If it is not being evaluated, are there other documents or reports that would show how well the NC is working? If so, what do these documents tell you about how well the NC is working?
10. Do you have suggestion about how to improve the Nursing Centre model in the future?
11. Is there anything else that you would like to say about the Nursing Centre?

G. INTERVIEW SCHEDULE FOR LECTURERS

1. What is the role of the lecturers in the NC?
2. What do you think the concepts that underlying the establishment of the NC?
3. What are factors that influencing the process and implementation of the NC model?
4. How do you think that students' involvement in the Nursing Centre will assist them in their future career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual clinical placements)
5. How do you think that nurses' involvement in the Nursing Centre will assist them in their career (Prompt: such as in terms of knowledge and skills) – please explain? (Prompt: Compared to a usual community health centre)
6. What do you consider are the strength and weaknesses of the Nursing Centre? (Prompt 1: to client, to nursing students, to the nurses who work in the Centre, to the community? Prompt 2: compared to community health centre without the NC)
7. What do you think that are working well and not working well in the NC?
8. Is the NC being evaluated? If yes, how and what measured being used? (Prompt: what outcomes have been identified to date?)
9. If it is not being evaluated, are there other documents or reports that would show how well the NC is working? If so, what do these documents tell you about how well the NC is working?
10. Do you have suggestion about how to improve the Nursing Centre model in the future?
11. Is there anything else that you would like to say about the Nursing Centre?

APPENDIX 4. ETHIC APPROVAL

FINAL APPROVAL NOTICE

Project No.:	**5887**
Project Title:	The Nursing Centre Model as a Collaborative Approach to Service Learning in Community Health in Indonesia
Principal Researcher:	Ms Neti Juniarti
Email:	juni0011@flinders.edu.au
Address:	Nursing and Midwifery
Approval Date:	27 November 2012
Ethics Approval Expiry Date:	**30th June 2016**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently.

Appendix 5. Information Sheets and Consent Form

A. Information sheet (English)
B. Information sheet (Indonesian language)
C. Consent Form (English)
D. Consent Form (Indonesian language)

Ms. Neti Juniarti
School of Nursing and Midwifery
Faculty of Health Sciences
Level III North Wing
Sturt Road, Bedford Park SA 5042
GPO Box 2100
Adelaide SA 5001
Tel: +61 8 82013452
Juni0011@flinders.edu.au
CRICOS Provider No. 00114A

APPENDIX 5A. INFORMATION SHEET

Title: The Nursing Centre (NC) as a collaborative approach to service learning in community health in Indonesia.

Investigators:

Ms. Neti Juniarti
School of Nursing and Midwifery
Flinders University
Ph: +61 8 82013452 (Australia) /+62811 xxxx xxx (Indonesia)

Description of the study:

This study is part of the project entitled "The Nursing Centre (NC) as a collaborative approach to service learning in community health in Indonesia". This project will investigate the perception of Clients who have used the nursing centre. This project is supported by Flinders University School of Nursing and Midwifery, Adelaide South Australia.

Purpose of the study:

This project aims to explore the perceptions of stakeholders who have involvedin the Nursing Centre services in order to improve the nursing centre service in the future.

What will I be asked to do?

You are invited to attend a one-on-one interview with the researcher who will ask you questions about your experiences of using the nursing centre to address TB and its effects on your children and family. The interview will take about 30 to 45 minutes. The interview will be recorded using a digital voice recorder to help with looking at the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file and then destroyed once the results have been finalised. Your participation is completely voluntary. Your identity will be kept confidential and anonymous in the thesis and any other publications.

What benefit will I gain from being involved in this study?

You will not directly benefit from being involved in this study, but your experiences may help to improve the planning and development of future programs in the nursing centre.

Will I be identifiable by being involved in this study?

You will be anonymous in this study. Once the interview has been typed-up and saved as a file, the voice file will then be destroyed. Any identifying information will be removed and the typed-up file stored on a password protected computer that only the coordinator (Ms. Neti Juniarti) will have access to. Your comments will not be linked directly to you.

Are there any risks or discomforts if I am involved?

There will be no risk or discomforts if you are involved. However the group members may be able to identify your contributions even though they will not be directly attributed to you. The investigator anticipates few risks from your involvement in this study. If you have any concerns regarding anticipated or actual risks or discomforts, please raise them with the investigator.

How do I agree to participate?
Participation is voluntary. You may answer 'no comment' or refuse to answer any questions and you are free to withdraw from the interview at any time without effect or consequences. If you agree to participate please sign the Consent Form before the start of the interview.

How will I receive feedback?
If you think you would like to review your interview transcript (what you said during the interview in writing), please let me know how you would like me to contact you about this on the consent form, which you will be asked to sign when you come for the interview. I will then contact you a few weeks after the interview to organise the most secure way of sending you a copy of the transcript. If there is anything you said in the transcript that you don't like, you can ask us to change it or to leave it out altogether.

Thank you for taking the time to read this information sheet and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 5887). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

Ms. Neti Juniarti
School of Nursing and Midwifery
Faculty of Health Sciences
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GPO Box 2100
Adelaide SA 5001
Tel: +61 8 82013452
Juni0011@flinders.edu.au
CRICOS Provider No. 00114A

APPENDIX 5B. INFORMATION SHEET (INDONESIAN LANGUAGE)

LEMBAR INFORMASI
(Translation of Indonesian Language)

Judul: Model Sentra Keperawatan (Nursing Centre) sebagai pendekatan kerjasama untuk "Service Learning" dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia

Peneliti:

Neti Juniarti

School of Nursing and Midwifery

Flinders University

Ph: +61 8 82013452 (Australia) /+62811 xxxx xxx (Indonesia)

Deskripsi penelitian:

Penelitian ini merupakan bagian dari kegiatan penelitian yang berjudul 'Model Sentra Keperawatan (Nursing Centre) sebagai pendekatan kerjasama untuk "Service Learning" dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia'*'.* Penelitian ini bertujuan untuk mengetahui persepsi ibu mengenai model Sentra Keperawatan. Penelitian ini didukung oleh Flinders University School of Nursing and Midwifery, Adelaide South Australia.

Tujuan Penelitian:

Penelitian ini bertujuan untuk mengetahui persepsi pemangku kepentingan yang terlibat di Nursing Centre dalam rangka meningkatkan pelayanan sentra keperawatan di masa yang akan datang.

Apa yang harus dilakukan?

Anda diundang untuk menghadiri wawancara dengan peneliti yang akan menanyakan beberapa pertanyaan terkait pengalaman anda menggunakan Nursing Centre. Wawancara akan berlangsung sekitar sampai 30-45 menit. Wawancara akan direkam menggunakan digital voice recorder untuk membantu mengetahui hasil penelitian. Setelah direkam, wawancara akan diketik dan disimpan dalam file computer dan akan dihapus setelah penelitian selesai. Keterlibatan dalam penelitian ini bersifat sukarela. Identitas anda akan tetap dirahasiakan dan nama anda tidak akan muncul dalam tesis saya.

Apa manfaat yang saya dapatkan dengan terlibat dalam penelitian ini?

Dengan berbagi pengalaman dalam penelitian ini akan meningkatkan dan memperbaiki program nursing centre untuk meningkatkan kesehatan masyarakat. Kami sangat ingin memberikan pelayanan yang terbaik bagi mahasiswa dan masyarakat.

Apakah saya akan dapat diidentifikasi dalam penelitian ini?

Kami tidak membutuhkan nama anda, dan anda akan tetap anonym. Setelah interview diketik dan disimpan dalam file, rekaman suara anda akan dihapus. Semua informasi yang mengidentifikasikan anda akan dihapus dan file anda akan disimpan dalam computer yang dilindungi dengan password. Hanya peneliti saja (Neti Juniarti) yang dapat mengakses informasi tersebut. Komentar anda tidak akan dihubungkan secara langsung pada anda.

Apakah ada risiko atau ketidaknyamanan jika saya terlibat?

Tidak ada risiko atau ketidaknyaman jika anda terlibat. Anggota kelompok yang lain mungkin dapat mengetahui kontribusi anda dalam penelitian ini, akan tetapi mereka tidak akan dapat menghubungkan langsung pada anda. Peneliti mengantisipasi sangat sedikit risiko dari keterlibatan anda dalam penelitian ini. Jika anda memiliki masalah terkait risiko dan ketidaknyamanan yang diantisipasi atau actual, silakan sampaikan hal tersebut pada peneliti.

Bagaimana saya setuju untuk berpartisipasi?

Partisipasi dalam penelitian ini sukarela. Anda boleh menjawab ‘tidak ada komentar” atau menolak untuk menjawab setiap pertanyaan dan anda bebas ntuk mengundurkan diri dari interview setiap saat tanpa menimbulkan efek atau konsekuensi. Jika anda setuju untuk berpartisipasi mohon katakana ‘Saya Setuju’ pada saat saya tanya kesediaan anda untuk berpartisipasi sebelum wawancara dimulai. Pernyataan anda akan direkam dalam audiotape.

Bagaimana saya menerima umpan balik?

Hasil penelitian ini akan dirangkum dan diberikan pada anda oleh peneliti jika anda ingin mengetahuinya. Silakan beritahu saya jika anda ingin dihubungi lebih lanjut tentang hal ini ketika anda menandatangani lembar persetujuan. Saya akan menghubungi anda beberapa minggu setelah wawancara untuk mengatur metoda pengiriman yang paling aman. Jika ada hal-hal yang anda katakan dan tidak ingin dimasukkan dalam transkrip, anda dapat menggantinya atau menghapusnya.

Terima kasih untuk waktu anda dalam membaca lembar informasi ini dan kami harap anda anda dapat menerima undangan ini untuk terlibat dalam penelitian ini.

Penelitian ini sudah mendapatkan persetujuan dari Flinders University Social and Behavioural Research Ethics Committee (Project number 5887). Untuk informasi lebih lanjut mengenai persetujuan etik pada penelitian ini , Executive Officer dapat dihubungi melalui telefon +61 8201 3116, fax: +61 8201 2035

APPENDIX 5C. CONSENT FORM FOR PARTICIPATION IN RESEARCH

(by interview)

The Nursing Centre (NC) model as a collaborative approach to service learning in community health in Indonesia

I ….....

being over the age of 18 years hereby consent to participate as requested in the …… for the research project on ……

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.

5. I understand that:

   - I may not directly benefit from taking part in this research.
   - I am free to withdraw from the project at any time and am free to decline to answer particular questions.
   - While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential.
   - Whether I participate or not, or withdraw after participating, will have no effect on any treatment or service that is being provided to me.
   - I may ask that the recording/observation be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.

6. I agree/do not agree* to the transcript being made available to other researchers who are not members of this research team, but who are judged by the research team to be doing related research, on condition that my identity is not revealed. ** delete as appropriate*

7. I have had the opportunity to discuss taking part in this research with a family member or friend.

Participant's signature……Date……...

I certify that I have explained the study to the volunteer and consider that she/he understands what is involved and freely consents to participation.

Researcher's name…….....

Researcher's signature……..Date……

APPENDIX 5D. CONSENT FORM (INDONESIAN LANGUANGE)

FORMULIR PERSETUJUAN UNTUK BERPARTISIPASI DALAM PENELITIAN

(DENGAN WAWANCARA)

Model Sentra Keperawatan (Nursing Centre) sebagai pendekatan kerjasama untuk “Service Learning” dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia’

Saya…..

Berusia di atas 18 tahun dengan ini menyatakan persetujuan untuk berpartisipasi sebagai mana diminta dalam surat pengantar dan lembar informasi untuk penelitian yang berjudul “Model Sentra Keperawatan (Nursing Centre) sebagai pendekatan kerjasama untuk “Service Learning” dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia”.

1. Saya telah membaca informasi yang diberikan.
2. Rincian prosedur dan risiko telah dijelaskan dengan memuaskan.
3. Saya setuju untuk merekan informasi dan partisipasi saya.
4. Saya mengetahui bahwa saya harus menyimpan salinan Lembar Informasi dan Formulir Persetujuan ini jika dibutuhkan untuk masa yang akan datang.
5. Saya mengerti bahwa :
    - Saya tidak akan mendapatkan manfaat secara langsung dengan berpartisipasi dalam penelitian ini.
    - Saya bebas untuk mengundurkan diri dari penelitian ini kapan saja dan bebas untuk menolak menjawab pertanyaan tertentu.
    - Jika informasi dalam penelitian ini akan dipublikasikan, Saya tidak akan teridentifikasi dan informasi individual akan tetap dirahasiakan.
    - Dengan berpartisipasi atau tidak, atau mengunduran diri setelah berpartisipasi, tidak akan mempengaruhi perlakuan atau pelayanan yang diberikan pada saya.
    - Saya boleh meminta untuk menghentikan rekaman/observasi kapan saja saya inginkan, dan saya dapat mengundurkan diri kapan saja dari penelitian tanpa mengalami kerugian.

6. Saya setuju/tidak setuju* untuk transkrip ini diberikan bagi peneliti lain yang bukan anggota peneliti, tetapi yang dinilai oleh tim peneliti untuk melakukan penelitian terkait, dengan kondsisi bahwa identitas saya tidak akan ditampilkan. **pilih salah satu*
7. Saya telah memiliki kesempatan untuk mendiskusikan partisipasi saya dalam penelitian ini dengan anggota keluarga atau teman.

Tandatangan Partisipan…….Tanggal ……...

Saya menyatakan bahwa saya telah menjelaskan penelitian ini pada sukarelawan dan mempertimbangkan bahwa ia mengerti apa dijelaskan dan bebas menyetujui untuk berpartisipasi.

Nama Peneliti.....…….....

Tanda tangan Peneliti……..Tanggal……..

APPENDIX 6. INFORMATION ABOUT THE THREE NCs AS EMBEDED CASES

The following table presents data in the study sites within a designated time period.

Table 1. Cross-Case Synthesis Data of three NC sites

ELEMENTS	PUSKESMAS 1 AND NC 1	PUSKESMAS 2 AND NC 2	PUSKESMAS 3 AND NC 3
Numbers and types of staff members in *Puskesmas*	General physician : 2 Specialist doctors: 5 Nurses: 6 Midwifes: 6 Sanitarian: 1 Nutritionist: 1 Administrative staff: 3	General physician : 2 Specialist doctors: 0 Nurses: 4 Midwifes: Sanitarian: 1 Nutritionist: 1 Administrative staff:	General physician : 2 Specialist doctors: 0 Nurses: 4 Midwifes: 6 Sanitarian: 1 Nutritionist: 1 Administrative staff: 3
Numbers and types of staff members in the NC	The NC mostly run by students. Nurses do not work in the NC regularly	The NC was run by lecturers only	The NC mostly run by nurses (n=4) with involvement of students when there is placement
Numbers of clients seen within a designated time period	The number of clients seen in the NC was widely varied and depended on the availability of students and nurses. When there was student placement the numbers of clients seen increased, but when there was no student placement, the number of clients seen decreased sharply	There is no data available because the record of clients seen in the NC is held by lecturers.	50 clients per month
Specific service provided,	• Individual health education • Counselling • Home visit • School Health Nursing • Occupational health nursing	• Individual health education • Counselling • Home visit • School Health Nursing • Occupational health nursing	• Individual health education • Counselling • Home visit

Numbers of lecturers providing services and the estimated FTE of their participation,	No lecturers providing services (FTE: 0)	47 lecturers, Monday to Thursday, 4 hours per day (FTE: 0.4)	3 lecturers, once a week, 4 hours per week (FTE: 0.1)
Numbers of nursing students assigned for a designated time period and amount of time in the centre per student placement	The number of nursing students was 150 students. The amount of time in the centre per student placement was 7 weeks	The number of nursing students was 110 students but students focus on outreach activities in the families and the community. They did not get any opportunity to practice in the NC facility. The amount of time in the centre per student placement was 4 weeks	The number of nursing students was 64 students, however only female students were allowed to have placement in the NC facilities. The amount of time in the centre per student placement was 4 weeks

APPENDIX 7. LETTER OF PERMISSION

PEMERINTAH [redacted]
BADAN KESATUAN BANGSA, PERLINDUNGAN DAN PEMBERDAYAAN MASYARAKAT
[redacted]

Nomor : 070/3005/BKPPM/Mhs/2012
Lampiran : -
Perihal : ***Pemberitahuan Survey/ Penelitian/Praktek Kerja***

Bandung, 17 Oktober 2012
Kepada Yth Bapak/Ibu/Sdr :
1. Kepala Dinas Kesehatan
2. [redacted]
3. [redacted]
Kota [redacted]
di
[redacted]

Memperhatikan :
1. Surat Keputusan Gubenur Provinsi Jawa Barat Nomor : 124/A-I/2/SK/1974 tanggal 1 Januari 1974 tentang Pedoman tata cara peredaran dan pelaksanaan Survey/Penelitian/Praktek Kerja dan semacamnya.
2. Surat Edaran [redacted] Nomor 7 tanggal 11 Februari 1975.

Bersama ini disampaikan dengan hormat, bahwa :

Berdasarkan surat dari : [redacted]

No./tanggal : 2429/UN6.L/TU/2012

Sehubungan hal tersebut diatas, kami hadapkan :

Nama : NETI JUNIARTI, S.Kp., M.Kes., M.Nurs

Tempat Tanggal Lahir : [redacted]

Alamat : [redacted]

Pekerjaan, NRP/NPM : [redacted]

Yang bersangkutan telah menghadap kami tanggal : 17 Oktober 2012

Dengan memperlihatkan identitas serta untuk kelancaran memperoleh bahan yang diperlukan, pada prinsipnya kami tidak keberatan yang bersangkutan melaksanakan Survey/Penelitian/Praktek Kerja, sepanjang tidak mengganggu tugas yang menyangkut rahasia jabatan masing-masing Intansi/SKPD.

Untuk Melakukan : Penelitian

Dengan Judul " Evaluasi Efektifitas Nursing Center untuk Meningkatkan Kesehatan Anak dengan TB dan Masyarakat di Jawa Barat " .

Dari tanggal : 17 Oktober 2012 s.d 17 Januari 2013

Demikian, atas kerjasamanya kami ucapkan terima kasih.

An. KEPALA BADAN KESATUAN BANGSA, PERLINDUNGAN DAN PEMBERDAYAAN MASYARAKAT
[redacted]
Kepala Bidang Hina Ideologi dan Wasbang

[redacted]

Catatan :

PEMERINTAH [redacted]

DINAS KESEHATAN

[redacted]

SURAT IZIN

Nomor: 800.2/581/ SDK / 2013

TENTANG:

PENDIDIKAN PENELITIAN DAN PRAKTEK LAPANGAN
DI LINGKUNGAN DINAS KESEHATAN [redacted]

Dasar :
1. Surat dari Badan Perencanaan Pembangunan Daerah Nomor: 070/10-Litbang/Bapp/2013, Tanggal 25 Januari 2013 perihal Pemberian Izin Penelitian.
2. Surat dari [redacted] Nomor : 184/UN6.L/TU/2013 Tanggal 22 Januari 2013 perihal Permohonan Izin Penelitian.

MENGIZINKAN

Kepada:

Nama : **Neti Juniarti, S.Kep., M.Kes., MNurs**

Judul : "*An Evaluation of Effectivenees of Nursing Centre Models as a Service Learning Approach in Improving the Health Outcomes for Children with Tuberculosis (TB) and their Communities in West Java Indonesia.*"
(Evaluasi Efektivitas Model Sentra Keperawatan dengan Pendekatan Service Learning dalam meningkatkan Derajat Kesehatan Anak dengan Tuberkulosis dan Masyarakat di Jawabarat, Indonesia)

Waktu : 30 Januari s.d 28 Pebruari 2013

Untuk : Melaksanakan Penelitian di Lingkungan Dinas Kesehatan [redacted]

Dengan ketentuan :
1. Selama yang bersangkutan mengikuti ketentuan pelaksanaan penelitian yang berlaku di Kabupaten Sumedang.
2. Hasil penelitian tersebut diharapkan menjadi bahan masukan bagi perencanaan program di Dinas Kesehatan.
3. Menyerahkan hasil penelitian melalui Bidang Sumber Daya Kesehatan C.q Seksi Sumber Daya Kesehatan

[redacted]

PADA TANGGAL : 30 JANUARI 2013
KEPALA DINAS KESEHATAN

[redacted]

Tembusan :
1. [redacted]
2.
3. Yang Bersangkutan
4. Arsip

MINISTRY OF EDUCATION AND CULTURE

[redacted]

16 October 2012

Dear Prof. Jeffrey Fuller

I hereby give permission for Ms Neti Juniarti, PhD student in the School of Nursing and Midwifery at Flinders University with student number 2088683, to undertaking research leading to the production of a thesis or other publications in Faculty of Nursing University of Padjadjaran on the subject of "**An Evaluation of Effectiveness of Nursing Centre Model as a Service Learning Approach in Improving the Health Outcomes for Children with Tuberculosis (TB) and their Communities in West Java Indonesia**".

Ms. Juniarti should provide a report after the completion of the research to the Faculty [redacted] Thank you for your attention.

Yours sincerely

Dean Faculty of Nursing

[redacted]

[redacted]

PEMERINTAH KOTA [redacted]
BADAN KESATUAN BANGSA
DAN PEMBERDAYAAN MASYARAKAT
[redacted]

Bandung, 18 Oktober 2013

Nomor : 070/3147/BKBPM
Lampiran : 1 Lembar
Perihal : ***Pemberitahuan Penelitian / Survey /Praktek Kerja***

Kepada Yth. Bapak/Ibu/Sdr :
Terlampir

Kota [redacted]
di
[redacted]

1. Yang bertanda tangan di bawah ini :

   Kepala Badan Kesatuan Bangsa dan Pemberdayaan Masyarakat [redacted]

   Berdasarkan surat dari : [redacted] Nomor: 1925/UN6.L/TU/2013 Tanggal,30 September 2013

   Schubungan hal tersebut di atas, kami harapkan :

Nama	:	NETI JUNIARTI, S.KP
Tempat tanggal lahir	:	[redacted]
Alamat	:	[redacted]
HP/E-Mail	:	[redacted]
Peserta	:	-
Pekerjaan, NRP/NPM	:	[redacted]
Untuk Melakukan	:	Penelitian

   Dengan Judul " Sentra Keperawatan sebagai Pendekatan Kolaboratif dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia ".

2. Yang bersangkutan telah menghadap kami tanggal 18 Oktober 2013 dan Surat Keterangan ini berlaku sampai dengan tanggal **17 April 2014.**
3. Dengan memperlihatkan Identitas serta untuk kelancaran memperoleh bahan yang diperlukan, pada prinsipnya kami tidak keberatan yang bersangkutan melaksanakan Penelitan/Survey/Praktek Kerja, sepanjang tidak mengganggu tugas yang menyangkut rahasia jabatan masing-masing Instansi/SKPD.
4. Demikian atas kerjasamanya kami haturkan terimakasih.

a.n. KEPALA BADAN KESATUAN BANGSA DAN PEMBERDAYAAN MASYARAKAT [redacted]
Sekretaris
u.b.
Kepala Bidang Pina Ideologi dan Wasbang

[redacted]

PEMERINTAH [redacted]

DINAS KESEHATAN

[redacted]

SURAT KETERANGAN
Nomor : 070 / 8964 - Dinkes

1. Yang bertanda tangan di bawah ini :
   a. Nama : [redacted]
   b. Jabatan : [redacted]

   Dengan ini menerangkan bahwa :
   a. Nama : Neti Juniarti, S.Kp., M.Kes., MNurs
   b. Tempat/Tgl Lahir : [redacted]
   c. Alamat : [redacted]
   d. Maksud : Pengambilan Data di Lingkungan [redacted] yang terkait dengan Sentra Keperawatan sebagai Pendekatan Kolaboratif dalam Praktik Keperawatan Kesehatan Komunitas di Indonesia
   e. Waktu Pelaksanaan : Terhitung mulai tanggal 18 Oktober 2013 s.d 17 April 2014

   Surat keterangan ini dibuat atas dasar :
   a. Surat pengantar dari Kepala Badan Kesatuan Bangsa dan Pemberdayaan Masyarakat Nomor: 070/3147/BKBPM, Tanggal 18 Oktober 2013
   b. Surat permohonan dari [redacted] 1926/UN6.L/TU/2013 Tanggal 30 September 2013
2. Berhubungan dengan maksud bersangkutan, diminta agar unit kerja yang terkait memberikan bantuan serta fasilitas seperlunya sepanjang tidak mengganggu kelancaran dan menyangkut rahasia jabatan.

Bandung, 24 Oktober 2013

[redacted]
Sekretaris

[redacted]

CATATAN
- Agar membuat laporan hasil kegiatan melalui Kepala Bidang Bina Program Kesehatan

APPENDIX 8. SEMINAR, CONFERENCE AND PUBLICATION ARISING FROM THIS THESIS

Seminar and Conference:

Juniarti, N., Zannettino, L., Fuller, J.D. and Grant, J.M. 2014. The nursing centre as a collaborative approach to service learning in community health in Indonesia. The 2014 ASMR SA Scientific Meeting. Adelaide, Australia. 4th June 2014.

Juniarti, N., Zannettino, L., Fuller, J.D. and Grant, J.M. 2015. The nursing centre as a collaborative approach to integrate community health service and nursing education in Indonesia. 15th International Conference on Integrated Care. Edinburgh, UK. 23-27 March 2015.

Juniarti, N., Zannettino, L., Fuller, J.D and Grant, J.M. 2015. Theoretical basis and purpose of the Nursing Centre model as a collaborative approach in community health nursing in Indonesia: A case study. 6th International Conference on Community Health Nursing Research (ICCHNR) Seoul, Korea. 19-21 August 2015.

Publication:

Juniarti, N, Zannettino, L, Fuller, J.D & Grant, J.M 2015, 'The Nursing Centre as a Collaborative Approach to Integrate Community Health Service and Nursing Education in Indonesia', *International Journal of Integrated Care*, vol. 15, no. 5.

Juniarti, N, Zannettino, L, Fuller, J & Grant, J 2015, 'Improving community nursing care service through the academic Nursing Centre model', *Australian Nursing and Midwifery Journal*, vol. 23, no.6, p.39.

Forth coming international workshop:

Juniarti, N. 2016. The nursing centre as a collaborative approach to service learning in community health: Why and how. The 5th Padjadjaran International Nursing Conference Bandung, Indonesia. 16-18 March 2016.

Juniarti, N. 2016. Service earning in Indonesian nursing education: A case study. Symposium of Local Global Learning Network, Sydney, Australia 9-10 June 2016.

Manuscript for journal publication:

Juniarti, N, Zannettino, L, Fuller, J & Grant, J, Defining service learning: an integrative review.

International Journal of Integrated Care ISSN 1568-4156
Volume 15, 27 May 2015
Publisher: Uopen Journals
URL: http://www.ijic.org
Cite this as: Int J Integr Care 2015; Annual Conf Suppl; URN:NBN:NL:UI:10-1-117082

Poster Abstract

The Nursing Centre as a Collaborative Approach to Integrate Community Health Service and Nursing Education in Indonesia

Neti Juniarti, *PhD Candidate Flinders University, Universitas Padjadjaran Indonesia*

Lana Zannettino, *Flinders University, South Australia*

Jeffrey Fuller, *Flinders University, South Australia*

Julian Grant, *Flinders University, South Australia*

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Abstract

Introduction: The Nursing Centre (NC) Indonesia was established from a collaboration between the nursing education institutions, health services and the local government in West Java Indonesia. Its purpose is to integrate health services, nursing education and research through the optimal usage of a diverse range of potential resources in the community health system. Despite running since 2002, it has been difficult to measure the effectiveness of the NC because of a lack of consistent concepts and instruments. This research sought to establish the theoretical basis and operational components of the NC in Indonesia and to develop a framework for how this can be evaluated.

Methods: This study used qualitative case studies to examine three NCs attached to Community Health Centres (CHC) in Bandung City, Indonesia, using semi-structured interviews. Participants included the founder of the NC, the coordinator of Community Health Nursing, the heads of the three CHCs, mothers, nurses, lecturers, and students participating in the three different NCs.

Results: The results showed that there is a mismatch between the theoretical basis and the practice of the NC in the three centres examined; thus, the intended integration of community health services and nursing education could not be achieved at an optimal level as two NCs focus more on academic activities while one NC focus more on the health service. This is due to the broad concepts used in the NC and the fact that there is no operational theory or concept linking the general concepts of the NC with the strategies used to implement it. This disconnection also leads to poor evaluation systems because there is no consistency between the concepts of the NC and the instruments used to evaluate the NC.

Discussion: A shared understanding among stakeholders of the concepts of the NC model is an important factor in building a fully integrated system in which nursing education and health care personnel in community health centres share the same sites, vision, and system. We argue that the discourse and implementation of a service learning approach, which includes experiential

learning, reflection, reciprocity, and getting agreement on specified outcomes with the key stakeholders, will allow for the development of an integrated system and will enhance reciprocity in the implementation of the NC.

Conclusion: Service learning can be used as a theoretical basis of the NC to facilitate communication between stakeholders. This communication would increase understanding between stakeholders of the benefits of integrating health care services in the community and nursing education in the NC. The theoretical basis of the NC, which include the concept of system, caring, service learning community health nursing, organization of profession, and research, can also be used to develop instruments for the evaluation of the NC.

Lesson Learned: Collaboration in a fully integrated system will enable the best outcomes for patients and their families as well as other stakeholders involved in the program but such collaboration depends on the development of connections and consistency between the theoretical basis, operation, and evaluation of the NC.

Limitations: This research used qualitative case study design, so the results could not be generalized, however within similar settings the findings are likely to be applicable to other NCs operating in Indonesia.

Suggestions for Future Research: The NC model may be improved by using the service learning approach. Conducting trials of the model in multiple sites may answer questions about the effectiveness of the NC model as a collaborative approach to integrate community health services and nursing education.

Keywords

nursing centre; service learning; community health service; case study

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