# PUBLIC HEALTH LEADERSHIP IN NEPAL: DEVELOPMENT, ENACTMENT AND COMPETENCIES

**By**

**Sudarshan Subedi**

*Thesis*
*Submitted to Flinders University*
*for the degree of*

**Doctor of Public Health**

**College of Medicine and Public Health**

**16th December 2020**

# CONTENTS

# SUMMARY

**Background:** Leadership in public health has been emphasized to address complex public health challenges at national level as well as to assist with global public health threats. In this context, research on why and how someone becomes a leader in public health and what might influence the leadership development and practices are deemed important. Due to evidence that poor and improper leadership affects the health system in developing countries, it was vital to explore the leadership practices and competencies among public health leaders in developing countries like Nepal.

**Aims and objectives:** The major aim of this study was to develop a grounded theory to understand public health leadership in the Nepalese context. To achieve this aim, this study explored the methods of leadership development and its enactment at the individual level as well as the qualities and competencies needed for effective public health leadership.

**Methodology and methods:** The methodology of this study was grounded theory and the methods used for retrieving information were database analysis (HR database of MoH), document analysis (Job Description n=6), in-depth interviews (46 interviews with 22 participants) and focus group discussions (n=6). Each public health official was interviewed at least once to a maximum of three times to explore their leadership journey and leadership practices. Interviews with those officials as well as focus group discussions with their staff were undertaken to explore the leadership qualities and competencies essential for public health. Data were analysed by adopting the procedures of constructivist grounded theory. Memo writing, transcription and mind maps were used as tools for data analysis whereas initial coding, focused coding and constant comparison were done rigorously to develop a theory grounded on collected data. Measures to ensure the credibility, originality, resonance, and usefulness of developed theory were also adopted.

**Findings:** Grounded theory illustrates four phases of leadership development within an individual – initiation, identification, development and expansion. The initial phase is related to the individual's childhood and adolescents in which family environment, socio-cultural environment and individual characteristics play a role in developing the backup for leadership. In this phase, an individual observes the social dimensions of

leadership and becomes aware of the competencies required for leadership. The identification phase is about being identified as a public health leader after having formal positions in health organisations. From this phase, individuals formally start their leadership journey in public health and utilize leadership skills learned from academic and social settings. In the 'development' phase, individuals develop core leadership capabilities mostly through exposure and experiences. During this phase, an individual pursues supplementary leadership roles/strategies that help in developing additional skills and competencies. The last phase is 'expansion' in which an individual expands their leadership capabilities and recognition mostly by continuous self-directed learning. In this phase, the individual goes beyond the organisational hierarchy and often negotiates the bureaucratic processes for the betterment of public health. From the time of being identified as public health leaders (phase 2) up to the time of being recognized as a national figure (phase 4), an individual enacts his/her leadership to a varied extent, such as leading the management, emphasizing the system, structure and processes, focusing on people and relationships, and political negotiation. Leadership qualities and competencies identified and expected among public health leaders in Nepal were – subject expertise, passion, vision and being influential in having skills of managing people and organisation, socio-cultural intelligence, and goodness.

**Conclusions:** This study developed a grounded theory to explore how an individual becomes a leader in public health and represents a combined framework on leadership development, enactment and competencies in the Nepalese context. The theory has implications in academia to fulfill the absence of leadership theory in public health as well as at the policy level to recommend the best practices in leadership and further enhance the relationship between leader and followers.

# DECLARATION

I declare that this thesis does not incorporate without acknowledgement 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.

Sudarshan Subedi

Date: 16 December 2020

# DEDICATION

To all the Professors and academic faculties in Australian Universities who sponsored and supported overseas students to fulfill their dream of research higher degrees.

# LIST OF TABLES

# LIST OF FIGURES

# ACRONYMS

| | |
|---|---|
| BPH: | Bachelor's degree in Public Health |
| CPHA: | Chief Public Health Administrator |
| DHS: | Department of Health Services |
| GoN: | Government of Nepal |
| GT: | Grounded Theory |
| GTM: | Grounded Theory Methodology |
| HuRIC: | Human Resource Information Centre |
| HuRIS: | Human Resource Information System |
| INGO: | International Non-Governmental Organisations |
| IOM: | Institute of Medicine |
| JD: | Job Description |
| MBBS: | Bachelor's in Medicine and Bachelor's in Surgery |
| MoH: | Ministry of Health |
| MPH: | Master's degree in Public Health |
| PAG: | Project Advisory Group |
| PHA: | Public Health Administrator |
| PHC: | Primary Health Care |
| PHEOC: | Provincial Health Emergency Operations Centre |
| PHO: | Public Health Officer |
| RD: | Regional Director |
| RHD: | Regional Health Directorate |
| SHA: | Senior Health Administrator |
| SPHA: | Senior Public Health Administrator |
| SPHO: | Senior Public Health Officer |
| WHO: | World Health Organisation |

# OUTPUTS FROM THIS STUDY

Sudarshan Subedi, Colin MacDougall, Darlene McNaughton. "Contributions of leadership in public health: A systematic narrative review". Australian Public Health Conference 2018; 27/9/2018, Cairns, Queensland. Oral presentation.

Sudarshan Subedi, Colin MacDougall, Darlene McNaughton. "Job description and leadership practices among public health officials in Nepal: A grounded theory study". 1/5/2019, Brisbane, Queensland. Poster presentation

Subedi S, MacDougall C. Job Description of Public Health Officials in Nepal. J Nepal Health Res Counc. 2019 Nov 14;17(3):402-407. doi: 10.33314/jnhrc.v17i3.1680. PMID: 31735939.

# ACKNOWLEDGEMENTS

Thank God, I am writing this in my doctorate thesis.

From the deepest core of my heart, I am immensely grateful to my primary supervisor Prof. Colin MacDougall who made me what I am now academically. I have seen his generosity from the day when he picked me up at the airport and arranged accommodation for me and my family. It was not easy for international students to stay in their own rented apartment from their first night in Australia, but Colin made it possible. I will never forget his guidance as well as the socio-cultural bond that has been created between our families.

I appreciate the academic and administrative support of A/Prof. Darlene McNaughton who was initially my associate supervisor and the coordinator of DrPH program at Flinders University. She could not continue guiding me because she left the university for some reasons. I am grateful for all the roles she played to improve my knowledge as well as to facilitate my stay in Adelaide. I am indebted to her for her administrative support during her tenure as well as for her socio-cultural connections towards my family.

There is a saying that the hero comes at the end of the movie. Prof. Tara Brabazon and A/Prof. Udoy Saikia took the positions of associate supervisors towards the end of my study. Despite of her busyness as Dean of Graduate Research, Prof. Tara acted as a backup for me when I needed additional supervisors. Her contribution in shaping this thesis is appreciable. In the very short period of time he worked with me, Udoy did more than I expected. I appreciate his time towards my study as well as his constructive feedback which helped me a lot in the structuring and writing of this thesis.

As a part of my study, I got technical and administrative support from different people and organisations in Nepal. Acknowledgement goes to the staff at the Ministry of Health (MoH), Nepal Health Research Council and Pokhara University, as well as the members of the Project Advisory Group (PAG) including Prof. Madhusudhan Subedi (Patan Academy of Health Sciences), A/Prof. Binjwala Shrestha (Institute of Medicine), Dr. Mahendra Sapkota (Kathmandu University), Dr. Baburam Marasini (Ex-Director, Department of Health Services) and Mr. Shree Krishna Bhatta (Ex-Director, Regional Health Directorate). I am thankful to all the research participants for giving

their time for my study. The help of my best friend Dipak Subedi and my professional colleague Mr. Binod Regmi in my research is noticeable.

I also acknowledge the contribution of Dr Cecile Cutler who did English editing for this thesis and makes this more captivating. For so many casual things, I cannot forget the support of Prof. Naveen Shrestha and my colleagues at Pokhara University, Nepal. Ashleigh Merriel from the Office of Graduate Studies as well as Nilza Angmo, Elissa Mortimer, and Kristen Foley from College of Medicine and Public Health, Flinders University also helped me in a variety of ways.

I am delighted to all my family members of both the paternal house (Pang) and maternal house (Baglung) for their direct and indirect support throughout my study in Australia. The contributions of my maternal grandparents and maternal uncle-aunt during my childhood was awesome. Some of the names that I should mention are Santosh Subedi, Dipika Gautam, Sushant Acharya, Kalpana Rimal, Ganga Sharma, Chiranjibi Nepal, Jamuna Acharya, Nirmal Sapkota, Nishant Acharya, Aaradhana Sharma as well as the lovely children Aryashila, Aryadeep, Aryanayan, Aryasiddhi, Aryaprapti, Aryason and Aarambha. I am grateful to my wife Subina for all the things that she did for me along with her household responsibilities that helped in the acceleration of my study. I am beloved with my children Aryaman and Aakriti for believing and trusting me in every matter that I did with them. I am thankful with my in-law' parents Tikaram Acharya and Bhim Kumari Acharya for their concern and continuous motivation towards my study as well as their support during their stay in Australia. Jamuna, who played a mesmerizing role to initiate my study in public health and took care of the casual stuffs related to me, also gets the credit for this. Finally, I am delighted at this moment that the dream of my parents, Yukta Prasad Subedi and Janaki Subedi, to make me a person with advanced qualifications and recognition has been achieved.

# CHAPTER 1 – INTRODUCTION

## 1.1 Introduction

This research investigates how leadership is developed and enacted among public health officials in Nepal along with the identification of essential competencies for public health leadership in the Nepalese context. This chapter commences with how I developed my interest in public health leadership, supported by tertiary studies and experiences in public health. It then describes the background of the research, the context of the study site (Nepal), research questions with associated aims and objectives, significance and limitations. This chapter presents some preliminary data describing the current status of the public health workforce in Nepal. Finally, the chapter outlines the structure of the thesis.

## 1.2 Development of interest in research topic

My interest in the field of leadership and management in health system/services started in 2009 while I was studying my Master's degree in Public Health at Sam Higginbottom Institute of Agriculture, Technology and Sciences (SHIATS), Allahabad, India. I was influenced by a Professor who taught management topics in public health displaying sound academic knowledge and good professionalism. Because of her, I was able to understand the essentials of management and realized its importance for better health services. The curriculum at that time focused more on management. This experience stayed with me and I resolved to continue my study of leadership.

After I completed my MPH degree, I started my career as a Lecturer of public health at Pokhara University, Nepal from 2012. I taught management related subjects for public health undergraduates. It was a good combination for me when I started to teach 'health system development' and 'human resource development' along with guiding the students in field practicum. This helped to continue my interest and expertise in public health leadership and management. Field practicum for undergraduate students helped me interact with the Nepalese health system and understand how the system works in practice. During my five years of academic experience (January 2012 to February 2017), I often had a question in my mind. First,

how did one group of students positioned in field practicum learn so much whereas another group from the same cohort learned much less? Later I explored the fact that along with students' eagerness to learn, it is the leadership of the district public health offices that makes a difference. I also wondered why the performance of staff, or the overall achievements in public health within the same district, varied considerably with different officials. I became curious to understand if this had anything to do with leadership styles, competencies and leader-follower relationships.

As a consequence, I decided to explore public health leadership in the Nepalese context for my doctorate degree. I wanted to know how leadership (as a collection of capacities, skills and styles) develops among a group of individuals working in public health, and the ways in which leadership as a form of power over others is exercised and experienced. It was important to try and understand how leadership is understood and practiced in Nepal as there were little research on this topic. My study, therefore, aimed to open up a discussion and contribute new insights on leadership, which make sense of and critically reflect on the unique socio-cultural settings of the Nepalese health system. The overarching theme of my study, therefore, is an exploration of the development and enactment of leadership and the identification of key leadership competencies amongst individuals working at all levels of public health leadership in Nepal.

### 1.3 Background of research

Public health is complex and so is leadership. Both have multiple subsets in which the different nature of professionals and practitioners become engaged. Public health in the past often focused on reducing disease-specific morbidity and mortality, and more recently this shifted to include prevention and health promotion. This is understandably the central focus of public health systems in all countries. Obesity, tobacco use, flu pandemics and other non-communicable diseases are the contemporary global threats in public health, which are generally enormous in scale and require unusually long-term solutions (Koh and Jacobson, 2009). Public health goes beyond the health issues/problems or health services/system, and leadership is required to deal with the social and political concerns that have potential impacts on the health of the population, such as bioterrorism, crises response, and disaster management. Low-

and middle-income countries, with their scarce financial and human resources, are struggling for better public health (Reddy et al., 2017). Issues related to human resources management, financial management, and governance and leadership are common in most developing countries (WHO, 2007a; Gurung et al., 2016; Asante et al., 2012; Topp et al., 2018; Rabbani et al., 2016). Studies show that poor leadership is one of the factors that affects the functioning of health systems and poor public health in these countries (WHO, 2007b; Galaviz et al., 2019; Daire et al., 2014). In addition, health professionals are challenged nowadays to lead and manage the health system both for disease prevention and health services delivery (Institute of Medicine, 2003; Reddy et al., 2017; Holsinger et al., 2015). Whether it is to strengthen the health system in developing countries or to address the global public health threats, good governance and effective leadership is paramount. The Health System Framework developed by the WHO also stated that 'leadership and governance' is one of the essential building blocks of all health systems that seek to improve health outcomes of the country (WHO, 2007b).

In 1988, the US Institute of Medicine (IOM) suggested the need for workforce and leadership development to fulfill the essential purposes of public health (Institute of Medicine, 1988). This was reiterated after 15 years in 2003 with a call for actions to governmental public health organisations and academic public health institutions to focus on leadership training and development activities (Institute of Medicine, 2003). Leadership in public health has been emphasized strongly for the 21$^{st}$ century (Wright et al., 2000; Hughes, 2009; Koh et al., 2011; Fried et al., 2012; Holsinger et al., 2015; Fraser et al., 2017) to address complex public health challenges at national level (Ceraso et al., 2011), to defend against global public health threats (Koh, 2009) and other demanding public health issues (Uno and Zakariasen, 2010). Due to changes in the scope of work in public health and lack of formally educated practitioners, there is increased importance to continue the efforts in developing leaders for public health (Grimm et al., 2015).

To enable leaders to deal with contemporary public health issues, better understanding of public health leadership is warranted (Carlton, 2015a). Public health organisations need effective leadership to grow and support new initiatives and community needs and expectations. Leadership is essential for every official to bring

desirable changes in organisations, however, officials handling leadership roles may not exercise leadership effectively if they focus on micromanagement of activities that impede their vision for creativity and spontaneity (Lauer, 2003). For example, a study by Stankunas et al. (2012) showed that more than three quarters of public health executives preferred action-oriented roles. Those executives were reserved or limited in their leadership capacities and wanted to increase their leadership competencies (Stankunas et al., 2012). In most of the developing countries like Nepal, the senior officials in health organisations are technical staff (doctors, nurses and allied health workers) who are in-charge of managing people and programs. These officials are not formally employed as leaders but regularly exercise or enact leadership in their work. Public health physicians (usually referred to medical doctors with a public health degree) are often placed in leadership positions without having adequate experiences and skills in leadership (Uno and Zakariasen, 2010). Stronger leadership in public health is needed to accelerate improvement in public health and this will happen when the public health practitioners have commitment and competencies to perform leadership (Krishnan, 2018). Thus, it is necessary to understand the perspectives of leadership among public health professionals from varied backgrounds to explore the way they lead public health services.

Two decades ago, when Nepal was completing the 7$^{th}$ anniversary of the establishment of the district public health system (Dixit, 1995), a study was conducted into the management of district public health services in Nepal (Aitken, 1994). As per the study, the problems and issues in managing the public health services were related with staff selection and promotion, attitudes towards work, training and supervision, and the reporting system (Aitken, 1994). Later in 2007, the WHO identified system challenges for the country which were – health system decentralization, health workforce strengthening, and the health information system (WHO, 2007c). Despite many challenges, Nepal achieved significant progress in health indicators with 'Health for All by 2000' and 'Millennium Development Goals by 2015' because the government and donor agencies emphasized technical aspects (programs expansion and target achievements) of health service delivery. 'Leadership and governance', as one of the core parts of the health system (WHO, 2007b), has often been neglected in the country. Governance challenges related with staff management, supervision and monitoring, and financial management still exist in the Nepalese health system

(Department of Health Services, 2014; Department of Health Services, 2015; Gurung et al., 2016). Dixit (2014) noted that while the Nepalese government has made positive plans for addressing public health problems, these are either poorly implemented or implemented all of sudden and often at the last minute to meet targets. This captures the need for effective governance and leadership in Nepal.

There are fewer leadership studies focused on the health sector as compared to business management and public administration. Extensive review on these areas has not been carried because that is out of the scope of this thesis. Among the studies on leadership in the health sector, medicine and nursing are more common than public health. A review by Betker (2016) found very little theoretical and empirical literature examining leadership in public health. Public health has a relative dearth of literature about leadership consequently, public health professionals are applying the leadership lessons generated from other sectors (Koh and Jacobson, 2009; Aij and Rapsaniotis, 2017). It is argued that health organisations are slow to adopt best practice from other industries and are behind other industries in leadership development (McAlearney, 2006) and applying leadership models (Carlton et al., 2015a). Borrowing leadership theories and practices from other sectors not only overlooks the special nature of public health problems but also 'the unique opportunities that makes leadership in public health a rich source of inspiration, frustration and fascination' (Koh and Jacobson, 2009 p.199). Literature in public health leadership was mostly from developed countries and presented in the form of grey literature (comments, short communication, correspondence, reviews) rather than peer reviewed studies. Research on leadership identity development was more focused in non-health areas in developed countries (Komives et al., 2005; Murphy and Johnson, 2011; Van Velsor et al., 2013). For example, most leader development research has focused on US-based samples (Van Velsor et al., 2013) and there was no research (among 205 health research projects that were ethically approved) related to leadership/governance in Cambodia in 2012 (Goyet et al., 2015). Further, no studies related to any aspects of public health leadership were found in Nepal. Records from the Nepal Health Research Council showed that there was no research that was ethically approved by it till 2010 (Yadav, 2010), the status was same until 2017 (Pandey, 2018).

Despite the growing importance of leadership development, research gap still exists in the health industry (McAlearney, 2006) that needs further investigation specifically in gender differentiation, generational gaps, culture and values, and developing countries challenges (Lega et al., 2017). Limited studies to explore the ways by which leadership is developed, and how organizational and socio-cultural factors reflected in leadership in the health sector were undertaken. Studies recommended further research in public health with special focus on leadership journey and factors that determine leadership development and practices (Olson, 2013; Benke, 2014). Literature also recommended the development of leadership theory (Olson, 2013) to understand why and how someone becomes a leader in public health (Shickle et al., 2014). Leadership theory developed in one context may not be applicable to another context because of the variations in socio-cultural context and practices in each context. Nonetheless, in my experience (as noted in the beginning of this chapter), some of the issues and problems associated with the implementation of programs in public health, are due to inadequate or improper leadership which if improved, has the potential to bring about desirable changes in the health system and in the delivery of services. Thus, leadership studies in public health are of greater importance to fulfill the literature gap, both in the global context and in the context of developing countries. Informed by the literature gap regarding the development of leadership and its practices, I was inspired to study the aspects of individual leadership development and its application in public health.

## 1.4 Context of study site (Nepal)

As this research was conducted in Nepal, it is important to describe the general context of the country along with its health system. This section describes the geographical and socio-cultural settings of the country and specifically, the past and present contexts of the health system, and public health.

### 1.4.1 Brief description of geographical, political and socio-cultural settings

Nepal is a land-locked country in South Asia with total area of 147,181 $km^2$ and total population of 26.5 million as of the national census in 2011 (Central Bureau of

Statistics, 2012) and 29.3 million as of 2017 (World Bank, 2019). Mount Everest, the Himalayas, Buddha, Hinduism, and the unique flag are the most common identifiers of the country throughout the world. Nepal has five seasons – summer, monsoon, autumn, winter and spring, and three physiographic areas – Himal (Mountainous region), Pahad (Hilly Region) and Terai (Plains). 'Himal' is the northern part having high snow-covered mountains including Mount Everest (8848 metres) and seven other mountains with a height of more than 8000 metres. This area has minimal production of grains but is well-known for animal husbandry and medicinal plants. 'Pahad' is the hilly region with non-snowy mountains having a sub-tropical and alpine climate. People in this area usually work in agriculture and employments in governmental sector. 'Terai' is the southern part having fertile plains and is considered to be the centre of agriculture.


***Figure 1.1: Geographical map of Nepal***

*(Image retrieved from: http://ncthakur.itgo.com/map15.htm)*

Nepal has experienced rapid political changes since the time it was unified by the great King Prithivi Naryan Shah as an expansion of the Gorkha Kingdom in the 1750s. Nepal has a history of victory against British colonization (the Anglo-Nepal war in 1814-16). However, this resulted the loss of one third of its land. The Rana dynasty (1846 to 1951) came into existence following the overturning of the Monarchy and exercised autocratic leadership for over 104 years. However, the reign had a number of

innovations and development in terms of education (establishment of academic institutions), health (establishment of hospitals and medical doctors from overseas), agriculture and cultural heritage. The country achieved democracy in 1951 after defeating the Rana reign through a series of people's movements for over ten years. The democracy which resulted from these efforts did not last for even ten years. In 1960, the leadership was again taken by the King which lasted for up to 30 years. The 1990 people's movement via political parties ended the absolute monarchy and began the constitutional monarchy. With the slogan 'to the people, for the people, by the people', there was much unrest between 1990 to 2005 with 13 prime ministers. In 2001 there was a royal massacre which brought another king who started to rule on his own from 2005. This was not accepted by the political parties who, in cooperation with the Maoist (the underground revolutionary communists), started another people's movement in 2006. This resulted in the termination of the royal dynasty and initiation of the Federal Democratic Republic in 2007 with an interim constitution. After that, numerous changes occurred in the structural and administrative process of the country consequently from 2015 the country had a new constitution. As per the constitution, Nepal has three organs of government – executive, legislative and judicial. The frequent changes in the government (11 prime ministers in 11 years; 2008 to 2019) developed inter-political conflict which has its effects on every sectors of the country.

Nepal is a multi-cultural country with more than 125 cast/ethnic groups, 123 languages with 12 mostly spoken languages (Central Bureau of Statistics, 2012). Hinduism is practiced by 81.3% of the population with Buddhism (9%) the second highest religion (Central Bureau of Statistics, 2012). Nepalese people celebrate religious festivals that often last from one to several days. Nepali culture celebrates vital events of life including birth, marriage and death. Gender and cast/ethnicity are the most important socio-cultural dimensions with many issues, debates and advocacies in mass media and even in the parliament. Gender violence, specifically violence towards women, is an issue that has received a lot of academic attention and interventions in recent decades. Being a patriarchal society and due to cultural and religious beliefs, women were mostly confined to household chores in the past, but nowadays they are getting more access to education, health and other services. However, women living in very remote areas, adhering to harsh religious practices, labelling as disadvantageous ethnicity, and staying with a punitive male dominant society, still remain the same as

in the past. There is still more progress needed to fulfil the massive gap between genders and ethnicity.

### 1.4.2 Development of health systems in Nepal

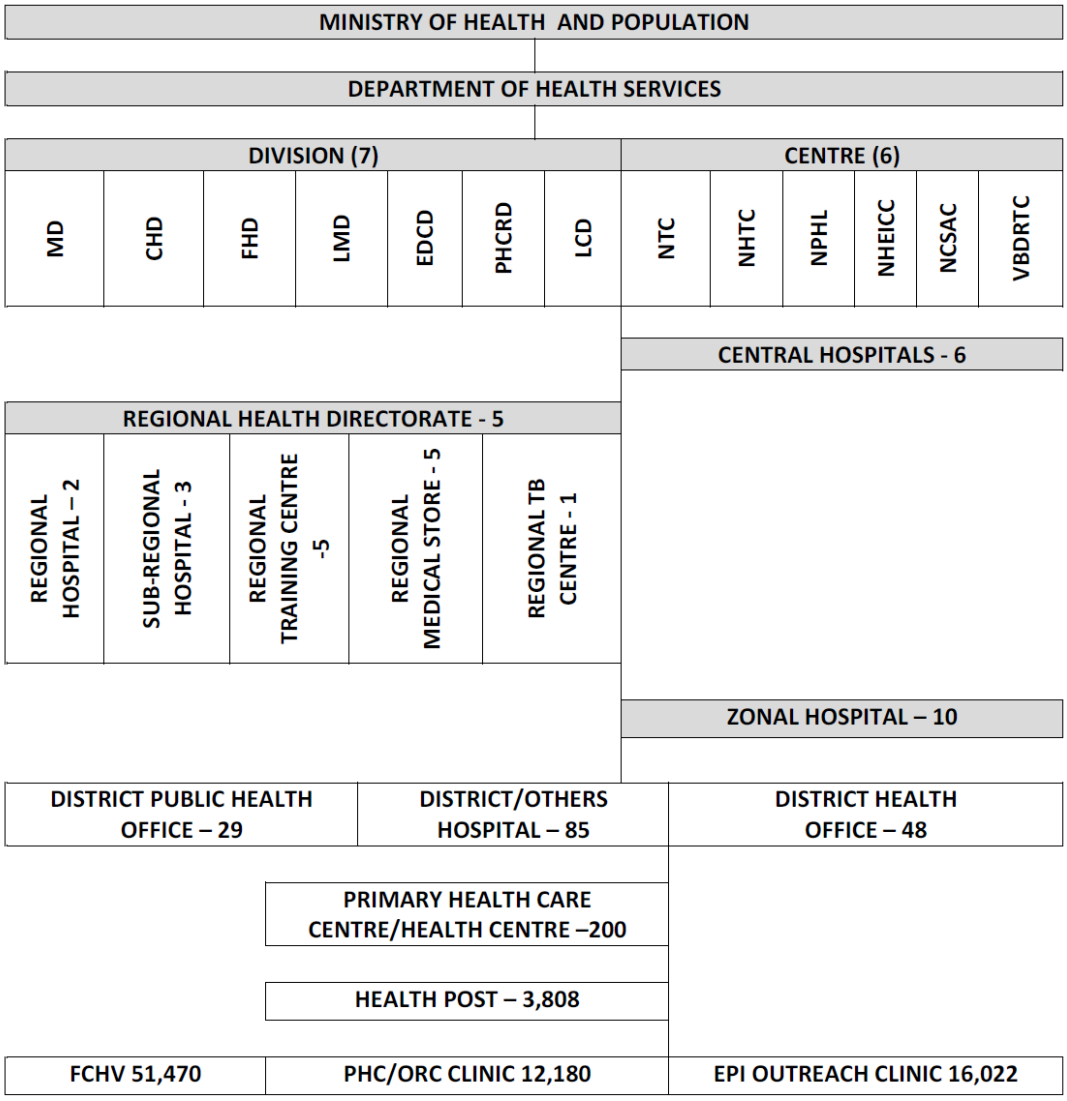
Nepal has been practising its own indigenous system of medicine for centuries. The traditional healers are still one of the service providers in Nepal, especially in the remote areas and in some ethnic groups. Since many parts of Nepalese history are missing, it is difficult to identify the development of health services in the past. The first recorded reference in Nepalese health services is the establishment of an ayurvedic hospital in between 605-620 A.D. (Dixit, 2013). Development of ayurvedic systems took place in the 17$^{th}$ century with emphasis on writing books and training (Marasini, 2003). It is believed that modern medicine was initiated in Nepal from the beginning of the 17$^{th}$ century (Paudel, 1994; Perceval, 2001; Sharma, 1999; Yadav, 1996 in Marasini, 2003). Considering that missionaries had a hidden interest with colonization and Christianity, the recently formed in the 1770s the Unified Kingdom of Nepal decided to close missions including medical clinics (Perceval, 2001; Yadav, 1996 in Marasini, 2003). It was believed that there were few British residents in Nepal during the 19$^{th}$ century who provided treatment of the King and Ranas.

The Rana reign (from 1846 to 1951) was an important landmark in establishing health and medical services in Nepal. Several hospitals and dispensaries were established both in traditional (Ayurveda) and modern (allopathic) medicine. Chains of hospitals were established in different parts of the country with some hospitals providing specialized services in leprosy, cholera, tuberculosis. These sorts of health services were continued and expanded in the post democracy period along with the involvement of non-government and private sectors. From the 1950s Nepal officially launched and implemented periodic plans by which health care services were implemented country-wide, with the establishment and expansion of health institutions at the village level and tertiary institutions at the central level. Primary health care services were highly emphasized and expanded during the 1990s by which the country was able to achieve the basic health indicators with the implementation of the National Health Policy, 1991 and by adopting the PHC strategies from the Alma-Ata Conference, 1978. Several health indicators such as life expectancy, maternal and child mortality, leprosy, tuberculosis, malaria, and other infectious diseases were

achieved. This was also the time when most of the academic institutions were established to produce human resources for health. Continuity of periodic plans and a long-term health plan (1997-2017) helped in improving the people's health status through the implementation of various public health programs, such as safe motherhood, family planning, nutrition, immunization and prevention and control of communicable diseases. After 2000, there were some noteworthy policies which followed after the declaration of health as a basic human right (2007): these included free basic health care services at primary health facilities (2009), free institutional delivery services and travel incentives for women (2009), and free hospital services to poor people with specified chronic diseases (2013).

### 1.4.3 Existing structure of health systems in Nepal

Nepal has a three-tier health system with comprehensive organisational structure from community level to central level. There are primary institutions providing basic/essential health care services at the community (local) level, secondary institutions providing health services at the district level, and tertiary institutions providing specialized health services at regional (state) and central (federal) level. The following two figures (Figures 1.1 and 1.2) illustrate the overall health structure of the Nepalese health system (Department of Health Services, 2016) during the period of this research. Figure 1.2 is the traditional organogram of the Nepalese health system which existed until 2017. Figure 1.3 is the new organogram that has been prepared based on the federal structure and implemented since 2018.




**Acronyms**

| | | | |
|---|---|---|---|
| *MD* | *Management Division* | *NHTC* | *National Health Training Centre* |
| *FHD* | *Family Health Division* | *NTC* | *National Tuberculosis Centre* |
| *CHD* | *Child Health Division* | *NCASC* | *National Centre for AIDS and STD Control* |
| *EDCD* | *Epidemiology and Disease Control Division* | *NPHL* | *National Public Health Laboratory* |
| *LMD* | *Logistics Management Division* | *FCHV* | *Female Community Health Volunteer* |
| *LCD* | *Leprosy Control Division* | *PHC/ORC* | *Primary Health Care Outreach Clinic* |
| *PHCRD* | *Primary Health Care Revitalization Division* | *EPI* | *Expanded Programme on Immunisation* |
| *NHEICC* | *National Health Education, Information and Communication Centre* | | |

**Figure 1.2:** ***Organogram of Nepalese health system till 2017***

***(Adopted from the Annual Report of Department of Health Services, Nepal, 2016)***

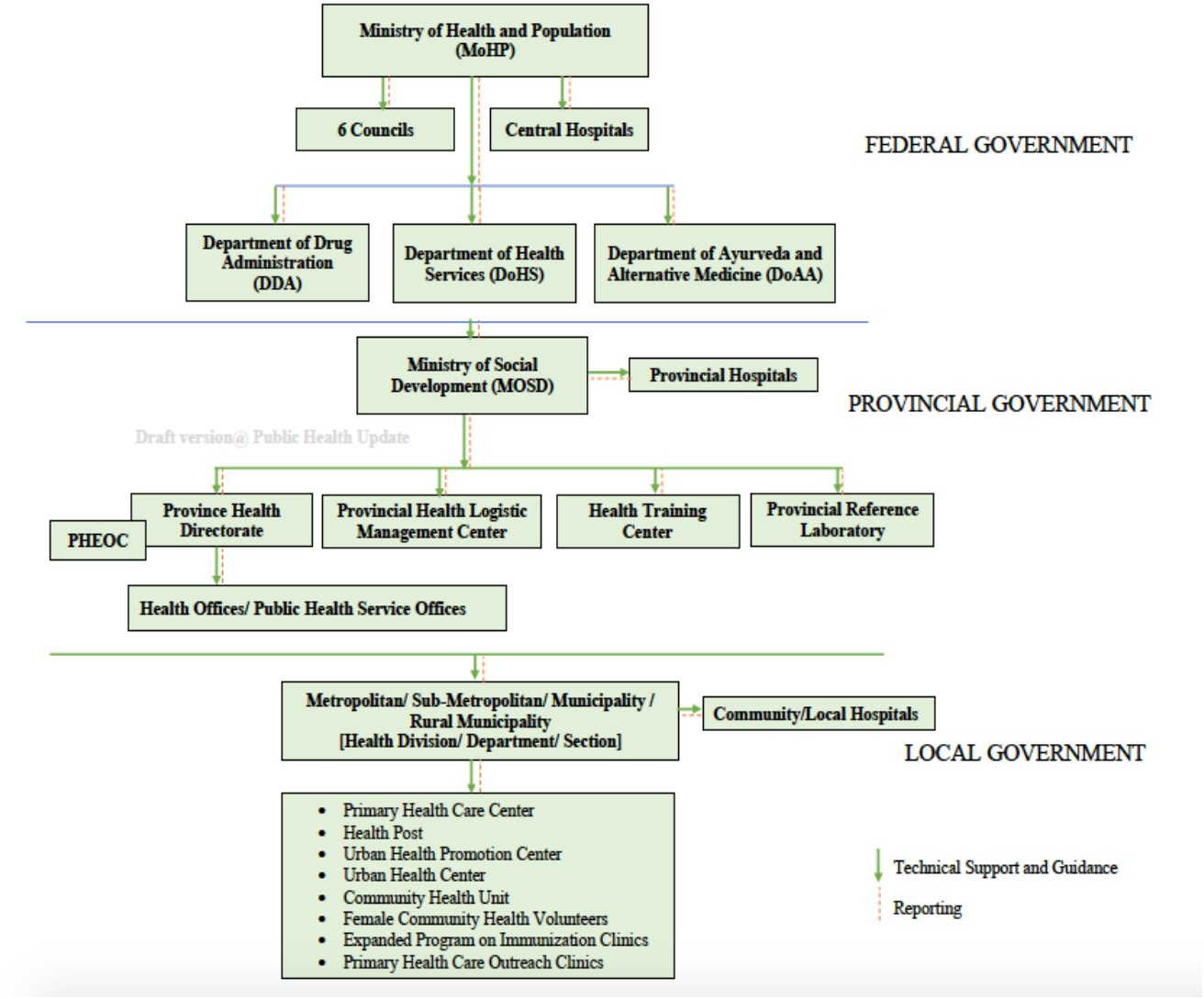



**Figure 1.3:** ***Organogram of Nepalese health system after 2018***
***(Adopted from the website of Public Health Update, 2020)***

### 1.4.4 Public health workforce in the Government of Nepal

The Government of Nepal (GoN) has various levels and positions of public health officials as defined by the *Health Service Act, 1997* and *Health Services Rules, 1999*. Public health officials enter government service following successful completion of a series of examinations (written, interview and group tasks) held by the Public Service Commission, an independent constitutional body responsible for recruitment and selection of human resources needed for the GoN. Public health is grouped under the technical category and the officials are recruited to positions based on their educational qualification and experiences. The positions of officials in public health are

categorized into various technical levels ranging from 7th to 11th level. Officials at 7th and 8th levels are 3rd class in position – commonly named as 'public health officer'; 9th and 10th levels are 2nd class in position – commonly named as 'health administrator/public health administrator', and 11th are 1st class in position – commonly named as 'chief public health administrator'. Based on their level and experiences these different types of officers and administrators work from district to central level under the Ministry of Health (MoH). The level of hierarchy determines the chain of command and span of control in the Nepalese health system. An officer could be either a chief of institution or a subordinate depending upon the level and organisation they work in. The positions, groups and academic qualifications/experiences of public health officials in GoN are tabulated below (Table 1.1).

**Table 1.1 Types of public health officials in Nepal**

| Positions | Class/Level | Group | Job Specification |
|---|---|---|---|
| Public Health Officer (PHO) | 3rd/7th | Health Inspection | Bachelor' of public health (BPH) |
| Senior Public Health Officer (SPHO) | 3rd/8th | Health Inspection | Promotion after three years' experience in related 7th level |
| Public Health Administrator (PHA) | 2nd/9th | Health Inspection | Master of public health (MPH) |
| Sub-Health Administrator (S-HA) | 2nd/9th | Public Health Administration | Master of public health (MPH) with Medical Degree (MBBS) |
| Senior Public Health Administrator (SPHA) | 2nd/10th | Health Inspection | Promotion after two years' experience in related 9th level |
| Senior Health Administrator (SHA) | 2nd/10th | Public Health Administration | Promotion after two years' experience in related 9th level |
| Chief Public Health Administrator (CPHA) | 1st/11th | Health Inspection/ Public Health Administration | MPH for Health Inspection, MPH with MBBS for Public Health Administration |
| Regional Health Director (RHD) | 1st/11th | Public Health Administration | MPH with MBBS |
| Director | 1st/11th | Health Inspection/ Public Health Administration | MPH for Health Inspection, MPH with MBBS for Public Health Administration |

*Source: Adopted from the Nepal Health Service Act, 1997 and Nepal Health Service Rule, 1999*

As a part of the literature review for this research, I was unable to find any publications regarding the size and characteristics of public health workforce in Nepal. This was one of the reasons that I initiated my research by gathering data about the public health workforce in the country. The human resource database of the Ministry of Health — the Human Resource Information System (HURIS), was used to extract the socio-

demographic and job characteristics of the public health workforce: Table 1.2 illustrates the total number of public health officials and their characteristics who were working in the Ministry of Health (as of June 2018).

**Table 1.2 Total size and characteristics of public health officials in the MoH**

| Socio-demographics | Size | Job features | Size |
|---|---|---|---|
| **Gender** | | **Group** | |
| Female | 14 (10.6%) | Health inspection | 112 (84.8%) |
| Male | 118 (89.4%) | Public health administration | 20 (15.2%) |
| **Age** | | **Position** | |
| Less than 30 years | 11 (8.3%) | Public Health Officers | 62 (47.0%) |
| 30 to 40 years | 37 (28.0%) | Public Health Administrators | 42 (31.8%) |
| 40 to 50 years | 25 (18.9%) | Sub/Health Administrators | 13 (9.8%) |
| 50 to 60 years | 59 (44.7%) | Chief PH Administrators | 15 (11.4%) |
| **Cast/ethnicity** | | **Overall experience** | |
| Brahman/Chhetri | 85 (64.4%) | Less than 5 years | 38 (28.8%) |
| Terai/Madhesi | 21 (15.9%) | 5 to 10 years | 05 (3.8%) |
| Newar | 12 (9.1%) | 10 to 20 years | 23 (17.4%) |
| Janajati | 09 (6.8%) | 20 to 30 years | 21 (15.9%) |
| Dalits | 04 (3.0%) | More than 30 years | 45 (34.1%) |
| Muslim | 01 (0.8%) | | |
| **Place of birth** | | **Level** | |
| Urban area | 41 (31.1%) | $7^{th}/8^{th}$ (bottom-level officer) | 62 (47.0%) |
| Remote area | 71 (53.8%) | $9^{th}/10^{th}$ (mid-level officer) | 55 (41.7%) |
| Ultra-remote area | 20 (15.2%) | $11^{th}$ (top-level officer) | 15 (11.4%) |
| **Education** | | **Working Institutions** | |
| Bachelor of Public Health | 25 (18.9%) | District/local level | 60 (45.5%) |
| Master of Public Health | 107 (81.1%) | Regional/province level | 15 (11.4%) |
| | | Central/federal level | 32 (24.2%) |
| **Academic background** | | **Initial entry positions** | |
| Public Health | 89 (67.4%) | Primary health worker | 67 (50.8%) |
| Medical Science | 20 (15.2%) | Public Health official | 41 (31.1%) |
| Nursing/allied health | 02 (1.5%) | Doctor (modern medicine) | 13 (9.8%) |
| Arts/education related | 21 (15.9%) | Doctor (traditional medicine) | 06 (4.5%) |
| | | Others | 05 (3.8%) |

*Source: Compiled from the HuRIS database, MoH, Nepal (as of July 4, 2018)*

With reference to the size of the public health workforce, there was a limited number of females, ethnic minorities, young people and people from non-public health backgrounds such as medicine and nursing. Under representation of females and ethnic minorities has a long history of socio-cultural practices including caste and class diversification and gender inequality. Despite the absence of gender and social diversity, public health workforces in Nepal include some people with diverse educational and professional backgrounds. Two-thirds of the total workforce of public health officials have undergraduate and/or postgraduate degrees in public health. The remaining workforce came into the public health sector from medicine, education, humanities, and nursing backgrounds. Due to limited numbers of public health professionals in the past, people from medicine and other allied health sciences worked for public health despite lack of educational qualifications in public health. Moreover, the people having non-health backgrounds, because of their work experiences in public health, became certified public health professionals after their attendance at public health education courses. The diverse academic and professional background among public health officials in Nepal is one of the causes of existing inter-disciplinary conflict between those with and without analogous background.

The public health workforce of Nepal, while comprised mostly of men from high castes, employed people from a number of age groups with a range of experience in the health sector. Almost half of the workforce was occupied by those who are soon to retire. There is excellent long-term job security in the public sector in the country, as well as flexible working hours and leave which makes these positions very attractive. Indeed, once someone has entered government service, they rarely leave the job. As the public health sector has expanded, this resulted in the workforce where older people make up a large portion of employees, as is also the case in the public sector more broadly in Nepal. It is likely that the limited number of people aged under thirty currently working in public health was due to employment policies favouring internal employment (e.g. promotion and internal competition) over external appointments in recent years. The analysis found that more than one quarter of officials had least experience (less than five years) with more than one third having the longest experience (more than 30 years) in the health system. Entering the job from the grassroot level at a younger age, and high retention, are the causes for having more aged and experienced people in the workforce.

Most public health officials in Nepal started their employment as primary level health workers from the time when the country started strategies in primary health care (PHC). Those officials gained experience via continuous work, simultaneously taking additional studies to develop public health knowledge and skills. The database shows almost half of the officials were working at the local level as lower-level officials. Increases in experience and qualifications facilitates their career path for consecutive leadership positions which are more specific. The worthy experiences of those officials, along with their dedication towards the Nepalese health system, helped to significantly improvements in the health indicators of the country.

### 1.5 Significance of research

The significance of this research is the insights gained in how an individual becomes a public health leader and how achievements in public health vary with changes in leadership positions. Despite of subject areas, studies in leadership development are still emerging (Day et al., 2014). As leader development is context sensitive (Hartley et al., 2008) it is necessary to study leadership from various dimensions in different settings. In the context of public health, there is a profound research gap with very limited original research in public health leadership. In the situation where public health professionals are applying leadership lessons from other sectors (Koh and Jacobson, 2009) such as business and general administration, research on why and how someone becomes a leader in public health (Shickle et al., 2014), how the journey of public health leaders progresses (Olson, 2013; McDermott et al., 2011) and what might influence the leadership development and practices (Olson, 2013; Benke, 2014) are recommended. Moreover, when there is evidence that poor and improper leadership affects the health system and public health (WHO, 2007a; Galaviz et al., 2019; Daire et al., 2014), especially in developing countries where leadership and governance is a challenge (WHO, 2007b; Gurung et al., 2016; Asante et al., 2012; Topp et al., 2018; Rabbani et al., 2016), it was important to explore the leadership practices and competencies among public health leaders in developing countries like Nepal. This study developed a separate leadership theory in public health so that the situation of borrowing leadership lessons from other disciplines could be addressed to some extent. Additionally, this study is also significant to fulfill the need of theory on

leader and leadership development (Day et al., 2008; O'Connell, 2014) as well as the need of leadership models grounded in the local context of Asian countries (Whetten, 2009; Leung 2012; Li et al., 2012 in Van Velsor, 2013).

### 1.6 Research questions

The following research questions have been developed based on the information presented in the previous section.

a) How leadership (as a capability) is developed among public health officials in Nepal?
b) What leadership styles and values are being enacted by public health officials in Nepal?
c) What are the core qualities and competencies required for effective public health leadership in Nepalese context?

### 1.7 Aims and objectives

Based on the research questions, following aims and objectives have been developed for this study.

Aim 1: Explore the nature, enactment and development of leadership styles, behaviours and skills at all levels of public health workforce in Nepal.

Objectives

a) To explore the factors through which leadership (as a capacity) developed among public health officials.
b) To identify and explore the leadership roles/responsibilities and its enactment among public health officials.
c) To explore the core qualities and competencies exist and needed for effective public health leadership.
d) Using grounded theory, construct a framework to understand the public health leadership in Nepalese context.

Aim 2: Explore and recommend opportunities for leadership development in public health settings of Nepal.

Objectives

a) To create a Project Advisory Group (PAG) in Nepal including academicians, professionals and governmental officials working in public health to provide guidance on the research project and assist with dissemination of its findings.
b) To identify the strategies for knowledge transfer and exchange (KTE) for the application of the findings of this research including its recommendations.

### 1.8 Thesis outline

This thesis is organised into seven chapters beginning with this chapter that describes the reasons for my interest in the topic, rationale for research based on the evidence derived from other studies, and overview of the study area.

Chapter two presents the literature review on different dimensions of public health leadership and the gap in knowledge. Based on the study aims, this chapter describes the history and existing concept of public health leadership as well as the findings on development, enactment and competencies of leadership in public health.

Chapter three illustrates the methodological aspects of this study which includes the need for qualitative study, rationales for using constructivist grounded theory, detailing of methods and procedures of data collection and analysis as well as the ethics related components.

Chapter four describes the theoretical and empirical findings on development, enactment and competencies in leadership. It illustrates some conceptual models and a comprehensive grounded theory developed from the study.

Chapter five discusses the findings of this study by comparing it with other relevant studies and describes the distinctiveness of this study.

Chapter six concludes this thesis by presenting a summary of major findings, its implications and recommendations as well as the knowledge translation strategies to disseminate the findings from this study.

## 1.9 Conclusion

This chapter described the general background and rationale for doing research in public health leadership. It also described the past and present scenario of the public health system and existing status of the public health workforce in Nepal where the research was conducted. The next chapter (Chapter 2) will develop the rationale for this research based on a systematic review of literature to further identify research gaps.

# CHAPTER 2 – LITERATURE REVIEW

## 2.1 Introduction

This chapter contains the review of literature regarding leadership theories in general, and public health leadership, in detail. The first section briefly describes the existing theories on leadership as a part of general review which includes the literature from various discipline such as business management and public administration. The second section is more specifically concern with the scope of this thesis and describes the various dimensions of leadership in public health. By adopting a systematic search and narrative description, the second section describes the findings on the concept of public health leadership, its development, enactment and competencies. This chapter concludes with the research gaps identified from the review and the need for future research in public health leadership.

## 2.2 Concept, meaning and definitions of leadership

The concept of leadership, as a part of academic literature and organisational context, goes back to the early twentieth century. The initial concept of leadership emphasized control and centralization of power with a common theme of domination which defined leadership as 'the centralization of effort to one person' (Blackmar, 1911). This implies authoritarian styles of leadership where the leader concentrates all the power to control others. A leadership conference in 1927 defined leadership as 'the ability to impress the will of the leader on those led and induce obedience, respect, loyalty, and cooperation' (Moore, 1927). Concepts and definitions on leadership have been added and revised considerably through the last century as summarized by Northouse (2016). In the 1930s, leadership was viewed as an influence and the focus was on traits or individual characteristics. In the 1940s, the group approach which defined leadership as the behaviour of the individual to direct group activities developed (Hemphill, 1949). Scholars in the mid twentieth century focused leadership on three themes – group, relationship and effectiveness. Stogdill (1950) defined leadership as 'the process of influencing the activities of an organised group in its effort towards goal setting and goal achievement'. In 1970s, the concept of leadership went towards the approach of organisational behaviour and focused more on achievements of

organisational goals with group efforts. Burns (1978) defined leadership as ’the reciprocal process of mobilizing by persons with certain motives and values, various economic, political, and other resources in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers’. In 1980s, leadership got more attention from academics and organisations, which mostly revolved around four themes – power/authority, influence, traits and transformation (Northouse, 2016). In the beginning of the 21st century, new approaches on leadership evolved based on the themes already identified earlier. Modern approaches focused on leadership as authentic, spiritual, servant, adaptive, strategic and crises.

Fleishman et al. (1991) outlined the presence of 65 different classification systems to define the dimension of leadership and Northouse (2016) summarizes the various ways of conceptualising it. Leadership could be viewed as the 'focus of group processes', in which a leader represents a group as the centre for change/decision making. Personality perspectives of leadership imply leadership is a combination of peculiar traits of an individual because of which they are able to influence others. The behaviour approach of leadership indicates leadership as an act or behaviour of an individual to bring change. As well as these three common traditional concepts, leadership is also defined in terms of power relationship (leaders having power to mobilize others to bring change), transformation (mobilizing followers more than usually expected) and skills (emphasizing knowledge and skills to make leadership effective).

Although leadership has been a key issue in academic and organisational settings for more than a century, it still remains an interesting subject for study. It is one of the most observed phenomena on earth, but the least understood (Burns, 1978). There are thousands of papers published on leadership and ample definitions of it however, there is no universal definition of leadership because it is complex and can be studied in different ways. Leadership is complex because of its application being personalized and having several ways to influence people with diverse perceptions and characteristics. Yukl (2006) defined leadership as ’the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives’. Northouse (2016) summarized leadership as 'a process whereby an individual

influence a group of individuals to achieve a common goal'. Lussier and Achua (2018) define leadership as 'the influencing process between leaders and followers to achieve organisational objectives through change'. According to them, a typical definition of leadership should consist of five key elements – influence, leaders-followers, change, people and organisational objectives.

The review of literature found leadership definitions focusing on various dimensions such as centralization and/or control (Blackmar, 1911; Bennis, 1959) interpersonal and/or social influence (Stogdill 1950; Tannenbaum 1961; Hersey and Blanchard, 1988; Hollander, 1978; Pondy 1989; Cohen, 1990; Yukl, 2006; Vroom and Jago 2007; Northouse, 2016; Lussier and Achua 2018), relationship with others (Knickerbocker 1948; Rost, 1993), changing behaviour of others (Bass, 1961), transforming others (Burns, 1978), mobilizing others (Burns 1978; Kouzes and Posner, 1995), meaningful direction (Bernard 1927; Jacobs and Jaques, 1990; Jaques and Clement, 1994), and having followers (Batten, 1989; Drucker, 1998; Lussier and Achua 2018).

### 2.3 Existing theories/approaches/models on leadership

Leadership theories explain different aspects of leadership including how someone become a leader, how s/he behaves and what skills are needed to lead others. As stated in the earlier paragraphs, concepts of leadership have been refined and modified with time, so have the leadership theories. Each theory is relevant depending upon the context in which it is applied. The traditional and modern theories on leadership commonly used in literature are described briefly in the following paragraphs.

**Trait theory –** The trait approach was one of the first systematic attempts to study leadership in the early twentieth century. Studies during that time mostly focused on determining what made certain people great leaders. This theory describes that leaders are born with certain physical characteristics and personality which makes them different than others. Because of their innate characteristics and charismatic power, leaders can influence others and get followers to make the changes they wish. This theory believes in the role of hereditary characteristics such as height, intelligence, attractiveness and self-confidence, including charisma. The universality of leadership traits has been a matter of debate as there were no agreed list of traits

that leader needs to be successful. An individual with specific characteristics could be a leader in one situation whereas s/he may not be a leader in another situation. However, different studies (Stogdill, 1948; Mann, 1959; Stogdill, 1974; Lord et al., 1986; Kirkpartick and Locke, 1991; Zaccaro, 2007 cited in Northouse, 2016) identified the leadership traits and characteristics that are required for effective leadership. Lussier and Achua (2018) summarizes the identified traits into five model of personality comprising surgency, agreeableness, adjustment, conscientiousness, and openness. The leadership traits which fit into this model are – dominance, extroversion, energy/determination, sociability/sensitivity, emotional intelligence, emotional stability and narcissism, self-confidence, dependability, integrity, flexibility, intelligence and locus of control. Despite numerous studies on trait leadership, it is not free from criticism. The theory has been criticised being ambiguous and uncertain at times, failing to take situations into account, being highly subjective determinations of most important leadership traits (Northouse, 2016). Nonetheless, this theory provides valuable information on leadership by providing direction on traits that are important to have if one wishes to be in leadership positions.

**Behavioural theory –** Behavioural theory emphasizes the behaviour of leaders: what leaders do and how they act. Numerous studies explored leadership style as a product of behavioural theory. Lewin et al. (1939) in a study at the University of Iowa, identified two basic leadership styles – autocratic and democratic. Autocratic leadership style is such behaviour in which leaders make the decision, tell their followers what to do, and closely supervise them. Democratic leadership style, on the other hand, is about encouraging participative decisions, working with followers on what to do, and believing them. Another set of studies from the University of Michigan and Ohio University identified two leadership styles – job-centred and employee-centred. Job centred behaviour emphasizes goals and work facilitation where the leaders closely direct subordinates and tell them what to do and how to do it. Employee-centred behaviour emphasizes more supportive leadership and interaction facilitation, where the leader focuses on meeting employees' needs and expectations along with developing trust and support. A leadership grid developed by Blake and Mouton (1978) shows how leaders help organisation to achieve goals through two factors – concern for people and concern for productivity. Based on the range from 1-9, the leadership grid outlines five major leadership styles: i) authority-compliance (9,1) – heavy

emphasis on task/performance and less emphasis on people/relationships, ii) country-club (1,9) – low concern for task/performance and high concern for interpersonal relationships, iii) impoverished (1,1) – neither concern for task/performance nor concern for relationship, iv) middle-of-the road (5,5) – intermediate concern for both task/performance and people/relationship, v) team (9,9) – strong emphasis on both task and interpersonal relationship.

The behavioural approach extended the scope of leadership research and provided understanding on its practical application regarding productivity and relationship inside the organisation. However, it has been criticised for being not able to find a universal style of leadership, not being able to prove the association between leaders' behaviour and performance outcome, and having limited applicability of high-high styles (task/performance and people/relationship) in leadership (Northouse, 2016). Critics suggested that different leadership styles are needed for different situations. This contributed to the emergence of contingency leadership theory.

**Situational theory –** Situational theory emerged due to the reality that no best leadership style is applicable in all situations. Following the leadership styles of the behavioural approach, this theory emphasizes the application of leadership styles based on existing circumstances. This theory emphasizes adaptability where leaders should be flexible according to the nature and capabilities of their subordinates as well as the demand of the situation. This approach retains its strength because of its practical approach, ease to understand and emphasis on flexibility. However, due to lack of a strong body of research findings to justify the theoretical underpinnings, it is also not free from criticism (Northouse, 2016).

**Contingency theory –** Contingency theory, similar to situational theory, focuses on different variables that determine the appropriateness of leadership styles. It is developed by Fiedler in the 1960s and specifies how situational variables interact with the personality and behaviour of a leader. A situation is defined by three factors – leader-member relation, task structure and positional power. A combination of these factors forms the situation in which a leader's style is meant to be effective or ineffective. Thus, leaders' effectiveness to lead depends on the control of the situation and the style of leadership. Fiedler (1967) believed that leadership styles are constant, so the leaders should modify the job context (situation) rather than change their

leadership styles. This belief is mostly criticised since it is generally agreed that changing leadership style could be easier than changing the situation. Contingency theory and situational theory are similar to a greater extent as both focus on the importance of a situation. The only difference between these two is that situation theory considers adaption of leadership styles based on the situation whereas contingency theory considers the changing of situations to match the leadership styles.

**Path-goal theory –** This theory developed by House (1971) and refined by House and Mitchell (1974) identifies a leader's style or behaviour that best fits the employee and work environment. It is about defining goals, clarifying paths, removing obstacles, and providing support. It emphasizes the relationship between leader's style, characteristics of followers and the organisational settings. Unlike situational approach, which suggests the adoption of leadership styles based on the followers' capabilities, this theory emphasizes the use of leadership styles based on the motivational needs of followers. Bartol and Martin (1998) summarized four major leadership behaviours of path-goal theory viz. directive leadership, supportive leadership, participative leadership and achievement-oriented leadership. Directive leadership is like task orientation in which a leader provides information to subordinates on what they expect and provide guidance on various aspects of work. Supportive leadership is more friendly and has concerns for the needs and well-being of subordinates. Participative leadership involves consulting with and encouraging subordinates in decision making. Achievement-oriented leadership is about setting challenging goals and concentrating on their achievements. The strength of this theory is that it attempts to integrate principles of motivation and provides a useful theoretical framework to understand how leadership behaviours affect satisfaction and work performance. This theory has been criticised for being complex, having less support from the empirical research, and failing to explain adequately the relationship between leadership behaviour and follower's motivation (Northouse, 2016).

**Leader-member exchange (LMX) theory –** This theory focuses on the quality of mutual relationship between the leader and the followers (Erdogan et al., 2006). Leaders adopt leadership behaviours based on the interpersonal relationship with each follower. The relationship between leader and follower may not always be positive or of high-quality, which results in the formation of exchange. Positive relationships or high-quality exchanges contribute to positive outcomes, such as job

satisfaction and better performance, whereas a lower quality relationship does not go beyond the formal employment contract (Loi et al., 2009). Leadership develops progressively over time in three phases – the stranger phase, the acquaintance phase, and the mature partnership phase (Graen and Uhl-Bien, 1991). During the stranger phase, the relationship between leader and follower is rule bound, relying heavily on the contractual relationship. In the acquaintance phase, either the leader or follower offers social exchange and expects to share resources and other information. In the mature partnership phase, there is high-quality exchange between the leader and follower with mutual trust, respect and obligation towards each other. This theory is considered as robust being a strong descriptive theory, focusing uniquely on the mutual relationship between leader and follower and having a large body of research (Northouse, 2016).

**Transformational leadership –** This is one of the contemporary theories on leadership in which a leader influences other by personal interaction and motivation, thereby leading towards the achievement of goals. According to Burns (1978) transformational leadership occurs 'when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality'. Leaders enhance the morality of followers and transform them through their inspirational nature and charismatic personalities. Adopting flexibility and emphasizing their relationship helps to create a sense of belonging, thus facilitating the change process. Transformational leaders are expected to have four important qualities – idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass 1985). Idealized influence is the way of exerting influence within a group and the ability of the leader to act as a role model. Inspirational motivation is the ability to inspire and raise morale among group members to gain their commitment for a shared belief. Intellectual stimulation is the encouragement of creativity and innovation so that the followers are able to discover new ideas to bring changes or to solve the issues as they arise. Individualized consideration means the leader recognizes the abilities and need of team members and helps them in their personal development through coaching and mentoring. Transformational leadership has received a lot of attention and emphasis in leadership research because of its broader view on leadership, focus on interplay between leaders and followers and its intuitive appeal to society's popular notion of what leadership means. However, it is

being criticised because of lacking conceptual clarity, methods of measurement and emphasis on individual traits or predisposition rather than a behaviour (Northouse, 2016).

**Transactional leadership –** This theory, also known as managerial leadership, focuses more on organisational system/structure, supervision and performance. It focuses less on people and relationships as compared to transformation leadership. It defines the relationship between leaders and subordinates as a social exchange and motivates the subordinates primarily through conditional rewards (Burns, 1978). Exchange could be positive or negative depending on the performance of each subordinate (Bass and Avolio, 1993). Once the exchange is completed, there is no need for further interaction unless another process of contingent reward is introduced (Antonakis and House, 2002). Transactional leaders use five steps to attain organisational goals through subordinates' performance – clarifying what is expected from subordinates, explaining what the subordinate should do to meet the expectations, explaining how the performance would be evaluated, providing feedback on whether the objective has been met, and allocating rewards based on the attainment of objectives (Bass, 1990).

**Laissez-faire leadership –** Laissez-faire or free-rein style provides all the rights and power to make decisions to the followers. This could be seen as the avoidance of duties and responsibilities of leadership. Practically, it has many limitations and is not seen as a good leadership strategy. However, it is supposed to be effective when followers are highly skilled and experienced, have pride in their work, have self-discipline and are trustworthy.

**Servant leadership –** This theory is unique as compared with other theories of leadership which implies the responsibilities of a leader to serve followers. It seems like a person could be a leader and a servant at the same time. As Greenleaf (1970) stated leadership begins with the natural feeling to serve others, and then the aspiration to lead is developed. The focus is to serve the followers to help them grow from being like a servant and being sensible to remove social inequalities and injustice. Servant leaders demonstrate strong moral behaviour towards their followers and emphasize service. Laub (1999) examined servant leadership in organisations and identified six features of servant-minded organisations: valuing people, developing

people, building community, displaying authenticity, providing leadership and sharing leadership. Russel and Stone (2002) compiled the attributes of servant leadership into two types – functional attributes and accompanying attributes. Functional attributes are the operative qualities, characteristics, and distinctive features of leaders and include vision, honesty, integrity, trust, service, modelling, pioneering, appreciating others and empowerment. Accompanying attributes are communication, credibility, competence, stewardship, visibility, influence, persuasion, listening, encouragement, teaching and delegation. Similarly, Spears (2002) identified ten characteristics of servant leadership extracted from Greenleaf (1970). Those characteristics are – listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community. Servant leadership has its strengths in its unique way to define leadership, as well as its counterintuitive and provocative approach to the use of influence in leadership which is different from other approaches. However, it is criticised for sounding unusual and disregarding the essence of leading, such as creating vision, directing and goal setting (Northouse, 2016).

**Authentic leadership –** This theory is one of the newest areas of leadership research which is still in the formative phase of development (Northouse, 2016). Authentic leadership can be defined from three perspectives – intrapersonal, interpersonal and developmental. The intrapersonal perspective is about leaders' self-knowledge, self-regulation, and self-concept; the interpersonal perspective is about the relationship between leaders and followers; and the developmental perspective is about the progression of leadership over lifetime which is often triggered by major life events. According to Walumbwa et al. (2007), authentic leadership consists of four distinct but interrelated components; self-awareness, internalized moral perspective, balanced processing, and relational transparency. This theory has been considered strong because of having an explicit moral dimension and emphasizing real leadership rather than imitating others. However, it is criticised because of not adequately explaining the moral component and its impact on positive organisational outcomes. Being in the formative stages of development, criticisms still need to be addressed (Northouse, 2016).

**Adaptive leadership –** This approach to leadership implies how a leader encourages subordinates and helps them do their work in order to adopt the changes they face. It

is the practice of mobilizing people to tackle tough challenges and thrive (Heifetz et al, 2009). Adaptive leaders engage in mobilizing, motivating, organizing, orienting and focusing the attention of others (Heifetz, 1994). The model of adaptive leadership describes three components – situational challenges, leader behaviours and adaptive work. The process of adaptive leadership works like this: leaders first try to understand the complexities of the situation as well as the interpersonal dynamics among subordinates. Then s/he assess the context where subordinates are experiencing change and addresses the problems (based on their nature) with his/her authority and expertise. The strengths of this approach are that it changes focus, is follower centred, has a prescriptive approach and considers leadership as a complex interactional event between leader and followers. It is being criticised as being inadequately used in empirical research, being too abstract and in need of further refinement (Northouse, 2016).

**Collaborative leadership –** Rather than a theory, this is a framework of practice that emphasizes unity and teamwork among leaders and subordinates within an organisation, as well as with other relevant stakeholders. It focuses on strategies to enhance the sharing of knowledge and experience as well as dialogue between multiple stakeholders (Frey, 2018). A favourable work environment helps in better collaboration between the various levels of organisations; thus, it contributes to implementation of effective practices. To ensure an effective working relationship, this approach considers three level of focus viz. the individual and his/her leadership capacities, people working within an organisational context, and community members working across boundaries to stimulate change and solve problems (Grimm et al., 2015). There are six key elements for leading a collaborative process – assessing the environment for collaboration, creating clarity, building trust and creating safety, sharing power and influence, developing people and self-reflection (Turning Point, 2002).

**Exemplary leadership model –** By researching the personal experiences of people holding excellent leadership, Kouzes and Posner (2012) outline a model of exemplary leadership with five best practices. The key behaviours of leaders showing exemplary leadership practices are - modelling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. Modelling the way refers to the leaders' behaviour in which s/he set the example by behaving in ways that reflect

the shared values. Inspiring a shared vision is about envisioning an exciting and meaningful future by enlisting others in a common vision and appealing to their values, interests and hopes. Challenging the process means exploring the opportunities to change, grow, innovate and improve in which the leader takes risks and learns from mistakes. Enabling others to act refers to encouraging people and strengthening their ability and developing their competence by fostering collaboration and building a spirit of trust. Encouraging the heart is about praise and recognition of individual contributions to the success of a project. This model of leadership turns the abstract concept of leadership into easy-to-grasp practices that are clear and evidence-based to achieve admirable leadership for individuals, groups and organisations.

**Shared leadership –** The concept of shared leadership is about influencing each other within a group as well as sharing power and responsibility. This increases morale and satisfaction among team members, and ultimately contributes to performance and productivity. Shared leadership is supposed to occur 'when two or more members engage in the leadership of the team in an effort to influence and direct fellow members to maximize team effectiveness' (Bergman et al., 2012). In this leadership, tasks are shared through a team environment that relies on a shared purpose, social support and voice (Carson et al., 2007). Shared purpose is about understanding and appreciating collective goals; social support is about providing emotional support to each other; and voice refers to the appreciation of each member's contribution. Shared leadership is different from team leadership where the team is led by a specific leader. However, it is similar with distributed leadership and literature often uses the term 'shared' and 'distributed' interchangeably, both types of leadership having the same core components (Northouse, 2016).

### 2.4 Leadership theories and applications in health

A review of literature found the application of various leadership theories in the health sector including medicine, nursing and public health. The most commonly used and emphasized leadership theories/approaches in the health sector are – behavioural approach (democratic/participative and situational), transformational leadership, transactional leadership, servant leadership, collaborative leadership and authentic leadership. It is out of the scope of this thesis to include all the leadership theories with

their outcomes in the health sector. Thus, the applicability and contribution of some important theories are described briefly in the following paragraphs.

The initial approach to leadership i.e. the Great Man theory which suggests leaders are born not made, has no applicability within healthcare settings being highly restrictive and exclusive (Kumar, 2013). Trait theory, as a progression of the Great Man theory, emphasizes mostly the perspectives of the historical high-status leader. Despite of the importance of trait theory in valuing personal characteristic to lead others, it could not represent sufficiently in health sector (Kumar, 2013), probably due to the need of technical education and experiences for leadership in health. The importance of trait approach decreased because of the emergence of behavioural theories and the rising concept of leadership as contextual and contingent (Fawkes, 2012). Behavioural theories and contingency/situational theories overshadow the applicability of trait theory. Behavioural theories and contingency/situational theories have a long history of application and still exist in health care research and practices in different forms and models.

Rowitz (2014) mentioned the importance of democratic/participative leadership where the team members are involved in the problem-solving process to build a consensus towards a decision. Public health leaders need to exhibit high-task and high-relationship behaviour because programs in public health demand technical expertise as well as good communication between leaders and their constituents. Rowitz (2014) also emphasized that public health leaders need to develop appropriate styles of leadership depending upon the context in which public health is being exercised. This refers to the importance of situational leadership in public health. As an example, leadership styles needed during the implementation of routine public health programs (immunization, family planning) and during epidemics/disasters should vary. Gifford et al. (2018) found the application of various leadership behaviours, such as change-oriented, relation-oriented and task-oriented behaviours in health settings. As compared to task-oriented behaviours, relational leadership contributed to greater job satisfaction (McCay et al., 2018). Thus, it is recommended adopting such leadership behaviours that meet the needs of healthcare professionals in order to overcome organisational barriers and to improve quality (Kumar, 2013).

Begun and Malcolm (2014) identified six distinctive circumstances of public health that affects leadership – predominance of not-for-profit and public settings, resource scarcity, complexity of challenges, long-term solutions, unique role in emergencies and political. Based on these circumstances, the authors suggest four complementary approaches to leadership relevant to public health leaders – servant leadership, transformational or adaptive leadership, integrative leadership, and complexity leadership. If public health problems were always straightforward and technical, the managerial approach (power of hierarchy and use of evidence) would be enough. But due to the complexity of public health problems, public health requires transformation or adaptive leadership to deal with the most challenging public health problems. As public health problems have multiple interdependent causes and effects outside the scope of public health, the traditional concept of independence does not work. Public health leaders are expected to understand the complex system and work together with various stakeholders. This stresses the need of integrative and complex leadership. Since public health leadership continuously needs communication, sharing of information, and service commitment from their followers to practically endorse their vision or to achieve goals, means the servant leadership approach becomes successful.

Servant leadership is considered as one of the best models for health care organisations (Trastek et al., 2014), and adoption and practice of this style is highly recommended (Cottey and McKimm, 2019). This is because of servant leadership focuses on strength of team, trust among team members, and serving the needs of clients (Trastek et al., 2014) as well as it helps in aligning organization to create a favourable environment in serving clients, and empowering for creativity and innovation (Cottey and McKimm, 2019). Studies found the contribution of servant style leadership in increasing trust (Bobbio and Manganelli, 2015), learning (Aij and Rapsaniotis, 2017), continuous development and innovation (Allen et al., 2016), and positive change in the long run (Han and Kim, 2012). Emphasis on empowerment was one of the main reasons for change and innovation (Hyett, 2003) in servant-leader model. A systematic review conducted by Aij and Rapsaniotis (2017) revealed the importance of servant leadership in improving quality care, healthy relationship between administrators and staff as well as between providers and patients, thus contributing to sustainability. Similarly, another integrative review revealed the

importance of servant leadership in developing compassionate leadership within health care organisation and with a strong relationship between well-being and workplace outcomes (de Zulueta, 2016).

Transformational leadership has been an important emphasis in health researches after the 1990s (Lo et al., 2018) and remains important in such an ever-changing health care environment (Jambawo, 2018). It is more beneficial for health service improvement and changes; thus, quality improvement initiatives are most likely to succeed (Kumar, 2013). As public health needs to work with and from the community, transformational leadership qualities are necessary to lead change as well as to effectively implement the tasks and responsibilities inside the organisation and within the community (Carlton et al., 2015b). The importance of transformational leadership increases in the contemporary public health context where team members want to be challenged and feel empowered rather than just being inspired by their leaders (Bass and Riggio, 2006). It requires understanding the experiences of team members as well as consideration of their emotional level (Betker, 2016). Carlton et al. (2015a,b) examined full range of leadership in public health and found some important applications of transformational and transactional leadership styles. Both transformation and transactional leadership were found to be successful in public health, however, most leadership outcomes were due to the practice of transformational rather than transactional leadership. Transformational leadership is best received with 'leading by example' and 'collaboration' which can lead to increased performance, job satisfaction and better operation of health departments (Carlton et al., 2015a). Leaders having transformational behaviours are in high demand during organisational change as they focus on intellectual stimulation, innovation and creativity (Allen et al., 2016). In the field of nursing, transformational leadership positively influences empowerment and creates a supportive work environment which in turn increases job satisfaction (Choi et al., 2016), retention among nurses (Boamah et al., 2018; Cowden et al, 2011) and positive changes (Al-Yami, 2018). It is found more effective than transactional and passive-avoidant styles in improving patient satisfaction and health expectations (Huynh et al., 2018) as well as in stimulating motivation and consolidating teamwork (Musinguzi et al., 2018). Transformational leadership, being an important contextual variable in the workplace, moderates the relationship between work well-being (Arnold, 2017) and employee creativity (Miao

and Cao, 2019) as well as increasing job satisfaction, organisational commitment, and proactive behaviour among employees (Steinmann et al., 2018). This type of leadership style has a critical role in employee creativity, thus expansion and implementing of this style is highly recommended (Ranjbar et al., 2019).

Despite the importance of transactional leadership in health, the contribution of transactional leadership could not be ignored. Transactional leadership approaches are traditionally used in most the health organisations but the strong emphasis on research and practice on transformational, servant and situational leadership (mainly after the 2000s) affected the workings of transactional leadership (Schwartz and Tumblin, 2002; Smith et al., 2015). However, due to the hierarchical relationship between different health professionals, transactional leadership could still be practised widely in health sector (Kumar, 2013). Research in health has been conducted to evaluate the different dimensions of human resources and productivity by combining both transformational and transactional leadership since these two styles are the components of a full range leadership model, and are interdependent with each other (Avolio and Bass, 1991). Practice of transactional leadership is found to be equal with the practice of transformational leadership among managers in primary health care settings (Jodar et al., 2016) as well as among nurses in hospital (Manning, 2016; Abdelhafiz et al., 2016; Alshahrani and Baig, 2016). Similar to transformational leadership, transactional leadership positively influenced work engagement (Manning, 2016) and increased job satisfaction (Jodar et al., 2016; Abdelhafiz et al., 2016; Alshahrani and Baig, 2016, 2016). Transactional leadership is considered the foundation for transformational leadership as Avolio and Bass (2002) stated that leaders cannot be truly transformational without having strong transactional leadership abilities. Based on each situation and context, transactional leadership is required in public health (Rowitz, 2014). Most importantly, it is essential to assure performance and to accomplish specific tasks in public health because not all public health activities lend themselves to being transformed due to the daily realities of public health practice (Carlton, 2015a). Transactional leadership has its strengths in achieving operational and financial targets but its role in improving health services is limited (Kumar, 2013).

Apart from the theories described in the above paragraphs, the health sector is also getting benefits with the application of other leadership theories such as authentic leadership, shared leadership and collaborative leadership. Shared leadership has the

potential of increasing staff engagement, job satisfaction (De Brun et al., 2019) as well as in improving team performance (Janssens et al., 2018). Authentic leadership positively correlates with health and well-being of employees as well as their job satisfaction and performance (Alilyyani et al., 2018). Collaborative leadership in public health is needed to discover new approaches and/or solutions for existing problems (Rowitz, 2014).

Up to here, the review of literature focused on existing leadership theories and their applications in different areas of the health sector. Since, this thesis is about leadership in public health settings, there was a need for a specific and organized literature review on the research topic. The chapter continues with a systematic narrative review on 'public health leadership'.

## 2.5 A systematic narrative review of public health leadership

### *2.5.1 Background*

Leadership in general, and/or business leadership is one of the subjects which occupies more space in academic literature because of numerous studies started in the 19$^{th}$ century. Influence by the general leadership theories and practices, different disciplines of the health sector gradually developed their own concept, theory, practices and competencies on leadership. Public health, being one of the most important domains in the 21$^{st}$ century and having increased scope in preventing and controlling the global threats to human health, the importance of leadership could not be ignored. Public health requires a renewed commitment to leadership to defend the recent challenges to human health (Koh, 2009) including the tough times during conflicts and pandemics (Hughes, 2009).

Public health has been considered delayed in defining its own spectrum of leadership and slow in translating and applying leadership models from other professions (Carlton et al., 2015a). Due to the lack of literature on public health leadership, public health professionals are compelled to apply leadership lessons from the non-health sector (Koh and Jacobson, 2009). Public health, as compared to the business and bureaucratic sector, is much less hierarchical (Koh, 2009) and due to the special nature of public health problems, it needs multi-sectoral collaborative leadership (Koh,

2009; Czabanowska et al., 2014; Reddy et al., 2017). Thus, borrowing leadership theories and practices from the non-health sector not only overlooks the special nature of public health but also 'the unique opportunities that makes leadership in public health a rich source of inspiration, frustration and fascination' (Koh and Jacobson, 2009).

Public health needs effective leadership at every level of each country. It is necessary to know the different aspects of leadership in public health in the global context. Thus, a systematic literature review was conducted to gather as much information as possible on public health leadership relevant to this research project.

### *2.5.2 Methods*

For this review, I adopted a systematic way of searching the research literature, collecting and collating the information, and presenting the findings. The stages and procedures of the different methods are described in the following paragraphs.

I started with a general and broad review question because I wanted to cover as much literature as possible in this comprehensive topic. I treated 'public health leadership' as a phrase on its own. The review question was:

*What is known from the existing literature about 'public health leadership'?*

I was aware that public health leadership is an ambiguous term that could include many aspects. But as a part of a doctoral thesis, it was important to know everything about the research topic. However, this review specifically aimed to cover the following aspects.

- Concepts of public health leadership
- Methods of leadership development in public health
- Practices in public health leadership
- Qualities and competencies needed for public health leadership

To identify relevant studies, I adopted three strategies – electronic databases, reference list and hand searching. Health and multi-disciplinary electronic databases that had a variable scope in the area of public health, health policy/system/services and human resource management were searched. The searched databases were

PubMed, ProQuest, CINAHL, PsycINFO, Emerald Full text, Business Source Complete, and ProQuest Dissertation and Theses.

Initially, I searched for 'public health' and 'leadership' in full text which was completely unmanageable (e.g. 446,071 articles in ProQuest and 21,048 in PubMed) which was searched again in another field except full text which was also unmanageable (47,354 in ProQuest). Containing these two terms in full text doesn't necessarily mean that the work is on public health leadership. Most of the papers include these terms as a part of providing introduction or discussion for other non-leadership research. So, I decided to search with the phrases 'public health' and 'leader*' in the document title. The rationale for searching the title was that if the study has complete focus on public health leadership, then the term 'public heath' and 'leader/leaders/leadership', should have been used in the title of articles despite their position.

Primary research (both published articles and grey literatures) adopting any type of study design and any types of literature review were selected. To cover a wide perspective of subject matter, conceptual papers such as commentary, viewpoint, correspondence, etc were also included. Dissertations and theses were also included as a source of grey literature. Contents from books (published) were not included because of the complexity; however, if the contents of the books were published in the form of journal articles, they were included. Coverage of review was set to English language and included papers from January 2000 to December 2019. Databases searching was done by limiting the results from scholarly journals which were peer reviewed. Table 2.1 shows the summary results from the searching.

**Table 2. 1 Search results from database with search strategy**

| Database Name | Search strategy | Results |
|---|---|---|
| ProQuest | ti(public health) AND ti(leader*) | 206 |
| ProQuest Dissertation and Theses | ti(public health) AND ti(leader*) | 25 |
| PsycINFO | ("public health" and leader*).m_titl | 55 |
| PubMed | (public health [Title]) AND leader*[Title] | 206 |
| Emerald full text | "public health leadership" | 28 |
| CINAHL | TI public health AND TI leader* | 204 |
| Business Source Complete | TI public health AND TI leader* | 43 |

Initial searches on databases resulted in 767 articles. This number was then reduced by removal of extraneous articles through duplication (402), title relevancy (162), abstract availability and relevancy (116), and full text relevancy (40). After removing the extraneous articles, 47 remained for review. Bibliography tracing was then done from these articles and relevant references were searched in google and/or website of stated journal. This resulted in additional nine papers that were relevant to include. In this way, 56 articles were used for review. The procedure of selection is illustrated as PRISMA flow chart (Figure 2.1).

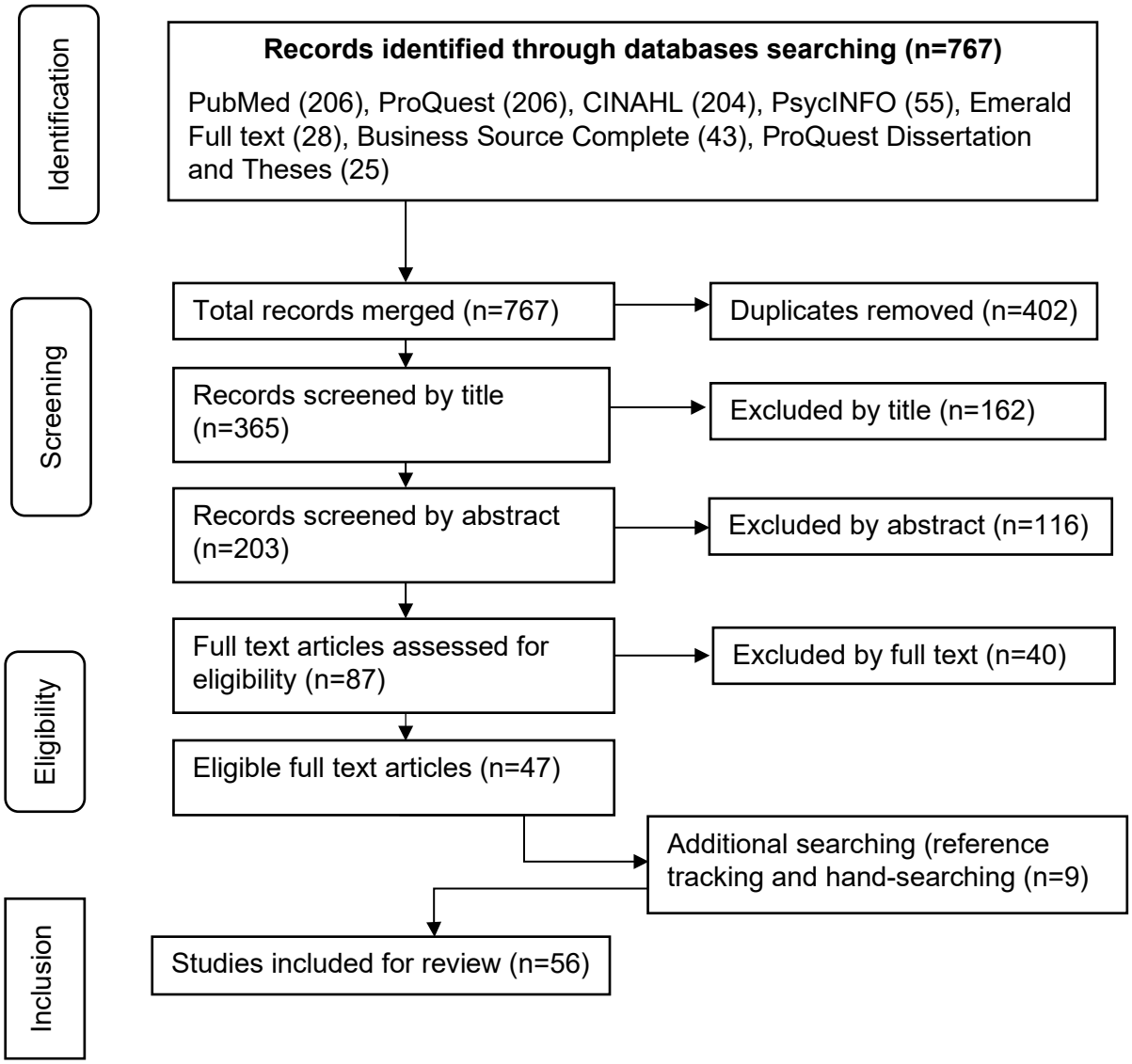



**Figure 2.1** ***PRISMA flow chart of systematic literature search***

### *2.5.3 Findings*

#### *2.5.3.1 Characteristics of studies*

A total of 56 studies were included in the review. Most of the articles were original research (18) and perspectives (16) and written in context of American countries (23) and in global context (20). The table below illustrates the details. Apart from the characteristics of the studies, the findings on public health leadership are categorised into four parts – concept, development, enactment and competencies.

**Table 2. 2 Characteristics of studies reviewed**

| Characteristics | Number | Details |
|---|---|---|
| **Article types** | | |
| Original | 18 | McAreavey et al. (2001); Saleh et al. (2004); Umble et al. (2005); Miller et al. (2007); Ceraso et al. (2011); Nowell and Harrison (2011); Stankunas et al. (2012); Olson (2013); Benke (2014); Day et al. (2014); Grimm et al. (2015); Carlton et al. (2015a); Carlton et al. (2015b); Stander et al. (2015); Coxen et al. (2016); Jadhav et al. (2017); Balio et al. (2019); Gianfredi (2019) |
| Review | 5 | Wirrmann and Carlson, 2005; Czabanowska et al. (2014); Popescu and Predescu (2016); Grimm et al. (2017); Kimberly (2011) |
| Perspectives | 16 | Wright et al. (2000); Gray (2009); Koh and Jacobson (2009); Koh (2009): Uno and Zakariasen (2010); Koh et al. (2011); Fried et al. (2012); Rabarison et al. (2013); Czabanowska et al. (2013a); Shickle et al. (2014); Carman (2015); Smith et al. (2015); Moodie (2016); Mullen (2016); Fraser et al. (2017); Baker (2019) |
| Opinion/comments | 9 | Freudenberg and Kotelchuck (2001); Hunter, (2009); Day et al. (2012); Srinivasan and Holsinger (2012); Lawton (2013); Yphantides et al. (2015); Reddy et al. (2017); Baroff (2015) |
| Editorial/correspondence | 6 | Yngve (2006); Hughes (2009); Czabanowska et al. (2013b); Holsinger et al. (2015); Koh (2015); Krishnan (2018) |

| | | |
|---|---|---|
| Report | 2 | IOM (1988); IOM (2003) |
| ***Regions*** | | |
| American | 23 | Wright et al. (2000); Saleh et al. (2004); Umble et al. (2005); Miller et al. (2007); Hunter (2009); Uno and Zakariasen (2010); Ceraso et al. (2011); Nowell and Harrison (2011); Rabarison et al. (2013); Czabanowska et al. (2013b); Olson (2013); Benke (2014); Shickle et al. (2014); Grimm et al. (2015); Baroff (2015); Carman (2015); Carlton et al. (2015a); Carlton et al. (2015b); Yphantides et al. (2015); Fraser et al. (2017); Jadhav et al. (2017); Grimm et al. (2017); Balio et al. (2019) |
| European | 9 | McAreavey et al. (2001); Wirrmann and Carlson (2005); Day et al. (2012); Stankunas et al. (2012); Czabanowska et al. (2013a); Czabanowska et al. (2014); Day et al. (2014); Smith et al. (2015); Karlberg (2016); Gianfredi (2019) |
| African | 2 | Stander et al. (2015); Coxen et al. (2016) |
| Asian | 2 | Reddy et al. (2017); Krishnan (2018) |
| Global | 20 | Freudenberg and Kotelchuck (2001); Yngve (2006); Gray (2009); Hughes, 2009); Koh and Jacobson (2009); Koh (2009); Koh et al. (2011); Kimberly (201); (Fried et al. (2012); Srinivasan and Holsinger (2012); Lawton (2013); Holsinger et al. (2015); Koh (2015); Karlberg (2016); Moodie (2016); Mullen (2016); Popescu and Predescu (2016); Baker (2019); IOM (1988); IOM (2003) |

#### *2.5.3.2 Concepts of public health leadership*

The need for public health leadership was initially pointed out in 1988 by the US Institute of Medicine which stated that key attention should be given to leadership development to fulfil the essential purpose of public health (Miller et al., 2007, Carlton et al., 2015a). Adopting the critical importance of public health leadership, the US Centre for Disease Control (CDC) from 1990s started to invest and focus in different types of leadership development training for professionals working in the public health sector (Miller et al., 2007). In 2003, the Institute of Medicine (IOM) reiterated

leadership development in public health and affirmed the importance of leadership training and development activities in governmental organisations and academic institutions (IOM, 2003 cited in Carlton et al., 2015a). Different centres and institutions were established during that period with the aim of developing public health leaders. The continuous efforts of these institutions and other independent researchers resulted in the development of various general and leadership competency frameworks needed for public health professionals (Uno and Zakariasen, 2010) for the US and European region.

Despite the need and importance of effective public health leadership in the 21st century (Wright et al., 2000; Hughes, 2009; Koh et al., 2011; Fried et al., 2012; Holsinger et al., 2015; Fraser et al., 2017), there is still a lack of a consensus definition of public health leadership (Koh, 2009). Public health leadership is not well defined (Czabanowska et al., 2013a) and the meaning, application and competencies of leadership in health crisis are also unclear (Hughes, 2009). Criticism has been made regarding public health leadership that it over-emphasized the technical aspects (Shickle et al., 2014), and thus ignored the 'public' part of public health. Public health leadership (along with its training) is not properly emphasized in countries that have gone through intensive public health reforms and need more leaders at every level (Czabanowska et al., 2013b). In addition, it took a long time for public health professionals to understand leadership skills as essential parts of public health training as they have been considered in business sector (Moodie, 2016).

The Public Health Agency of Canada (PHAC, 2008) defined public health leadership as 'an ability of an individual to influence, motivate and enable others to contribute toward the effectiveness and success of their community and/ or the organisation in which they work'. Public health leaders should mentor, coach, and empower their followers bearing in mind that their followers are the possibilities for future leadership. Leadership in public health is about mobilizing people, organisations, and communities to effectively tackle tough public health challenges (Begun and Malcolm, 2014 cited in Krishnan, 2018). It is about 'maximising our own potential as public health practitioners and maximising our sense of worth and meaning that we draw from our lives; and maximising the potential of others and the sense of worth and meaning they draw from their lives' (Moodie, 2016). It should be 'committed to most effective evidence-based balance of prevention and care within an integrated health system, with continual

learning in the face of change' (Fried et al., 2012). Public health needs multi-sectoral collaboration (Wirrmann and Carlson, 2005; Koh and Jacobson, 2009; Koh, 2009; Ceraso et al., 2011; Reddy et al., 2017) and a composite model of leadership (Reddy et al., 2017) as it needs to functions within a complex environment and engage with diverse domains, such as agriculture, business, and education to address the complex public health challenges. Collaborative types of leadership with shared responsibility and accountability are needed in public health (Kimberly, 2011 in Reddy et al., 2017) because public health is about interdependence not independent (Koh, 2009; Reddy et al., 2017).

Public health leadership could be described and applied at a variety of levels such as individual, community, organisation, national and global. Based on the level of practice, public health has five types of leader. The grassroot leader works with the community to improve its health; the organisational leaders lead health organisation for effective health outcomes; the national leader gets public health on the national political agenda; the international leaders advocate and lead for global public health; and the academic leader gives a sense of direction to the discipline of public health (Krishnan, 2018).

Koh (2009) has given five dimensions of public health leadership based on the dimensions of transcendent leadership and a successful story of a renowned public health leader. Those dimensions are as follows:

a) Pinpointing passion and compassion: The journey of public health leadership starts from ‘standing for something so that you won't fall for anything’. Public health leaders have gone through some crucial experiences (as wounded healers) in their life which ultimately develops their passion and compassion for something different.

b) Promoting servant leadership: No leader is perfect and has all the requisite skills to deal with the complexity of public health. This is the reason why public health needs inter-group collaboration. Public health is different from the classical leadership paradigm having a bold leader and passive followers: rather it requires more facilitative and collaborative leadership.

c) Acknowledging the unfamiliar, the ambiguous, and the paradoxical: Learning to accept chaos is one of the essential skills of public health leadership. Because of the ambiguity (partial knowledge, shifting dynamics and uncertain outcomes) in public

health, leaders should work on minimal or incomplete data, and must be especially prepared for unexpected events like disasters and pandemics. Public health leaders are required to do adaptive work in which problems and solutions require learning as well as coordinating with stakeholders.

d) Communicating succinctly to reframe: Public health leadership requires succinct and concrete communication to promote social change, thus it is different from communication by mass media which is for entertainment or information purposes. Public health should acknowledge uncertainty and need to communicate to the public being flexible and openness with the messages and in a way the public sees the world.

e) Understanding the 'public' part of public health leadership: A public health leader is always on stage, thus comments, criticisms, and interpretations (or misinterpretation) are likely. Public health leaders should be aware of the scrutiny of the public and media and be optimistic about their efforts for change.

#### *2.5.3.3 Leadership development in public health*

How an individual becomes a leader or what makes an individual a leader depends upon a range of physiological, social, cultural and educational factors. Charismatic leadership and trait leadership are some of the traditional paradigms of leadership theories which emphasized more on the individual characteristics than other social factors. Modern theories on leadership focused more on the behaviours of leaders and the role of social and cultural factors in leadership development. Educational interventions such as leadership training are also considered beneficial in developing leadership capabilities among professionals.

Hughes (2009) argues that leadership in public health is not concerned with innate characteristics; rather it is a complex set of personal attributes and competencies that develops via education, exposure, role modelling and mentoring with existing leaders (Hughes, 2009). In a study among public health leaders who completed a specific leadership training program, Olson (2013) found that public health must include multiple factors to develop exemplary leadership practices such as self-awareness, opportunities, experience and practice, passion and commitment, supportive relationships, positive climate, and confidence. Obstacles for leadership development included politics (organizational and interpersonal), heavy workloads, lack of self-

reflection time (including keeping the big picture in mind), and negative climates or relationships. (Olson, 2013). Public health professionals usually gain leadership skills and knowledge through their day to day activities (Uno and Zakariasen, 2010). Many leaders have endured and grown from indelible crucial experiences in their life by which they can gain passion and compassion to lead for change (Koh, 2009). Considering the gender perspectives, leadership for males and females is likely to be completely different. A female senior health executive argues the condition in which many women, even in developed countries like US, encounter difficulty in breaking through the glass ceiling, and prevent women from executive advancement (Baroff, 2015). For the development of leadership among females, gender equity, personal values, persistence and self-awareness are some of the important aspects (Baroff, 2015).

The journey for a public health professional usually starts from being a member of a team which gradually progresses to leadership positions and provides vision to motivate and influence others. This journey of leadership development could be seen to have three dimensions – level of influence, level of consciousness and level of leadership (Krishnan, 2018). Level of influence could be in single team, multiple teams, single agency, multiple agencies, single-sector and multiple sector; level of consciousness includes task doer, transaction, relation, inspiration, mentor and vision; level of leadership includes position, permission, production, people development, personhood and pinnacle. Figure 2.2 illustrates these dimensions of public health leadership.

Image removed due to copyright restriction.

**Figure 2.2** ***A conceptual framework for public health leadership (Adopted from Krishnan, 2018)***

Leadership development in public health should go beyond traditional educational approaches (Koh, 2015). Innovative ways help public health professionals to explore and identify their potentialities and prepare them for the dynamic, yet flexible world of public health. Leadership development models targeted for leadership including training and exposure are successful in improving the knowledge, skills and competencies of public health professionals (Saleh et al., 2004; Umble et al., 2005; Miller et al., 2007; Ceraso et al., 2011; Olson, 2013). For example, leadership trainings were found important to improve the ability to cope with and lead changes in public health practices as well as to advocate and empower people about health issues (Saleh et al., 2014). Trainings help individuals to improve their ability to engage in new leadership practices as well as in coaching and mentoring, managing conflicts, negotiating, and collaboration (Umble, et al. 2005). Other contributions of trainings include but not limited to increased self-awareness, organizational results (Miller et al., 2007), community engagement and coalitions (Ceraso et al., 2011). However, these

models have limitations in outcome-based results and demand revision to increase effectiveness (Grimm et al., 2017).

Public health leadership training programs improve the scholars' ability to cope with and lead changes, as well as the ability to educate and empower others (Saleh et al., 2004). Public health professionals develop new understanding and insights into leadership practices, increased confidence and self-awareness (Miller et al., 2007) and ability to engage in new leadership roles and practices (Umble et al., 2005). Organisational outcomes were achieved through leadership development training (Saleh et al., 2004; Miller et al., 2007). Community based public health leadership training programs increased participants' knowledge and competencies in leadership, as a result of which the public health services were expanded and community coalitions strengthened (Ceraso et al., 2011). Increment in collaborative practices, reflective behaviours, intentional behaviours and confidence were also the results of leadership training (Olson, 2013).

As well as the leadership training programs, some factors were explored that increased the leadership development and practices among public health leaders. Those are – having a leadership framework at work, self-awareness, opportunities, experience and practice, passion and commitment, a supportive relationship, a positive climate and confidence. On the contrary, organisational and interpersonal politics, heavy workload, lack of self-reflection time and unfavourable environment and negative relationships in the workplace are obstacles to leadership development (Olson, 2013).

#### *2.5.3.4 Leadership enactment in public health*

Literature has emphasized the role of vision, collaboration, transformation, shared and servant leadership in public health. Public health needs visionary leadership (Wright et al., 2000; Wirrmann and Carlson, 2005; Carlton et al., 2015b) to address the challenges posed by ever-changing public health problems in the local, national and global context. Visionary leadership sees how the world of public health should exist and turns the vison into reality. Public health leaders should be able to estimate the future public health by assessing the past and present health issues and problems. As quick fixes are rare in public health, it requires its leaders to dedicate themselves to

long-term sustainable prevention by stretching their minds and souls in almost unimaginable ways (Koh and Jacobson, 2009). For this, leaders should extend beyond historical, political, organisational and professional issues, even from the primary level setting (Wirrmann and Carlson, 2005) up to the global context.

Because of the complex nature of public health (Wright et al., 2000), its leadership could not stand independently. Although public health has relatively scarce (Shickle et al., 2014) but competent leadership with its own superheros (Day et al., 2012; Day et al., 2014), making plan and policies in public health on their own is not practicable (Shickle et al., 2014). Public health leadership should be interdependent (Koh and Jacobson, 2009) with other relevant sectors that may have direct and indirect contributions for the betterment of the health of the people. Leaders in public health not only come from within public health but also from outside, as for example the great Edwin Chadwick who was a lawyer (Day et al., 2012).

Leadership would be effective when the public health professionals work with, through and for others (McAreavey et al., 2001). In the new era of public health, there is the need for cross-sector collaborations, often with non-traditional public health entities, to address the social determinants of health (Balio, et al., 2019). Public health leaders should deal with a diverse group of 'Ps': policymakers, penurious budget officials, the press, passionate advocates, purchasers (public and private), providers, and, the public (Koh, 2009). Intergroup collaboration is essential because no single leader has all the skills and resources to confront the complexities of public health (Koh, 2009). Managing relationships with internal and external stakeholders (Nowell and Harrison, 2011), engagement and collaboration with other community agencies (Carlton et al., 2015b) and promoting partnerships (Nowell and Harrison, 2011) are some of the common roles played by public health leaders. However, leadership by could be problematic especially at primary level where public health professionals need to work with the formal organisational structure and informal community networks as well as in situations where the services are predominantly driven by a medical agenda. These type of conditions provoke the need for shared leadership by creating a learning culture that encourages public health practitioners to think and act in new ways (Wirrmann and Carlson, 2005), and should be able to amongst the non-health sector if needed (Wright et al., 2000). Public health leaders who engage in traditional governmental hierarchy must be able to support the ideas and work of partners from

non-government agencies, private sector and local communities (Mullen, 2016). Acknowledgement of expertise from other sectors, and recruiting them for the public health cause, would be a goal 'to develop leaders for public health along with leaders in public health' (Shickle et al., 2014).

An authentic leadership style followed by public health leaders significantly improved the optimism (Stander et al., 2015) and trust between organisations, supervisors and co-workers (Coxen et al., 2016). Trust in organisation and trust in co-workers positively influenced the organisational citizenship behaviour (Coxen et al., 2016) and work engagement (Stander et al., 2015). Public health institutions could benefit if the leaders or managers within them follow authentic leadership styles.

Transformational leadership styles adopted by public health leaders resulted in better leadership outcomes such as perceived performance, extra efforts and employee satisfaction (Carlton et al., 2015a). Transformational qualities of leaders are expected to build a better system within the institution with more motivated and hardworking employees. Leading by example, and providing individual consideration to followers, are the most important leadership behaviours perceived in public health. Leading by example is critical for team building and leaders credibility, whereas individual consideration to followers helps to make leadership successful (Carlton et al., 2015b). Compared with transformational leadership, transactional leadership has minimal significance in organisational outcomes (Carlton et al., 2015a). However, there are some situations in which transactional leadership styles works better such as to assure performance or to accomplish specific tasks, because leaders often do not have enough time to conceptualize and plan, instead they need to deal with the daily realties of public health to get things done (Carlton et al., 2015b). Thus, it is better to have a balance between transformational and transactional leadership styles by public health leaders.

Leadership behaviours are fundamentally rooted in the individual (Nowell and Harrison, 2011) which are dependent on various individual and organisational factors. Enactment of leadership roles is facilitated by enabling the organisational context, legitimacy and political capital (experiences of public health leaders and their connection with political leaders), and the individual strengths (passion, knowledge and leadership skills) of public health leaders. (Nowell and Harrison, 2011). Rank or

seniority of public health officials does not have any relationship with their leadership behaviours (Benke, 2014). Chief/executives in public health institutions sometimes overexercise management rather than leadership as they prefer to choose action-oriented roles, act as an implementer, adopt 'avoiding' as a conflict solving strategy, and most importantly want to improve their leadership competencies (Stankunas et al., 2012). Providing feedback on the leadership behaviours of public health leaders improves performance whereas failure to take actions and implement changes obstructs their learning and growth (Benke, 2014).

Public health leadership also requires effective followership without which organisational changes could not be achieved or sustained, despite of good qualities among leaders. Public health officials often have the interchangeable roles of leader and follower depending upon their level of hierarchy and area of work and should be able to demonstrate the qualities of both leadership and follower (Srinivasan and Holsinger, 2012). As for example, an officer at district level who usually acts as a leader would be a subordinate at the Ministry of Health and should act as a follower. Following is more important than the traditional leadership because of its role in accepting and adopting changes. Considering the involvement of external stakeholders in public health, public health professionals need to engage such stakeholders either as leaders or as followers based on the nature of public health activities (Srinivasan and Holsinger, 2012). Being a good follower is one of the most important components of effective public health leadership (Mullen, 2016). When both leaders and followers have sound interactions, set aside their egos and utilize their expertise (can be termed as 'teamship'), organisational systems will have a good impact on accreditation (Carman, 2015). Situational leadership, as a follower driven model of leadership also ensures ongoing quality improvement and performance for public health accreditation processes (Rabarison et al., 2013).

Public health professionals are moving towards a favourable working culture in the 21st century, however, they should not ignore the challenges to move the health service from a 'preoccupation with expansion' to a 'preoccupation with sustainability and change' (Gray, 2009). It is necessary to understand the nature of the policy and organisational context and encourage and shape a new way of tackling the problems (Hunter, 2009). Public health professionals push through various contradictory issues to bring changes and for sustainability. Since the resources are always finite and the

needs of public are infinite, leaders must be capable of tackling uncertainty and conflicts (Koh, 2015). Public health leaders need to advocate and negotiate resource allocation and distribution, multiple stakeholder's involvement, coordination with the non-health sector, health policy formulation and dialogue with political leaders. Conflicts between public health and political leadership is not new (Freudenberg and Kotelchuck, 2001). It is obvious where two different ideologies are assigned for a common goal – to improve the health status of the public. However, public health professionals regard politics as a contaminant in decision making rather than an inevitable part of democratic governance (IOM, 1988 in Mullen, 2016). They often face dilemmas in decision making as to whether to put their commitments into public health values or listen to the demands of political leaders who have the power to mobilize them (Freudenberg and Kotelchuck, 2001). Public health leaders should understand that lack of civilised political leadership results in unnecessarily poor public health (Karlberg, 2016). However, the good connection of public health leaders with political leaders significantly benefits collaborative partnership in public health (Nowell and Harrison, 2011). Thus, it is essential for public health leaders to understand the intentions of different political ideologies and to learn how to dissolve the political issues over public health.

#### *2.5.3.5 Leadership competencies in public health*

Literature has focused more on leadership competencies in public health as compared to development and enactment of leadership. Several leadership frameworks have been developed and used in academic and professional institutions to enhance leadership skills among current and prospective public health professionals. The leadership qualities and competencies identified in public health are described in the following paragraphs.

Wright et al. (2000) identified the four levels of leadership competencies required in public health – core transformation competencies, political competencies, trans-organisational competencies and team building competencies. Public health leaders should have a visioning of potential futures, sense of mission including strategies and tactics assessment, and capabilities to bring desirable changes in public health. They should identify, facilitate and implement the political and legislative processes,

negotiation, ethics and power in an increasingly competitive and contentious political environment. By understanding organisational dynamics, they should work beyond public health and be able to lead or facilitate in collaborative settings. Moreover, they should be competent in developing a team-oriented structure, facilitating teams and acting as an effective team member themselves.

Good leadership in public health should be consultative leadership and works with and through people and achieves by empowering others. Collaboration is one of the major competencies needed in public health leaders (Yngve, 2006; Koh and Jacobson, 2009; Koh, 2015; Yphantides et al., 2015; Mullen, 2016; Reddy et al., 2017). Leaders should have personal power, vision and understanding of complex issues within public health to lead for change (McAreavey et al., 2001) even when there are unclear boundaries and hierarchies (Koh and Jacobson, 2009). To act in a chaotic environment, public health leaders require emotional intelligence (Moodie, 2016) as a coping mechanism (Lawton, 2013). This emotional intelligence is more needed while developing coalition building skills (Koh and Jacobson, 2009) and while dealing with diverse stakeholders. Collaboration with stakeholders demands good communication skills (Yngve, 2006; Carlton et al., 2015b; Holsinger et al., 2015; Yphantides et al., 2015; Moodie, 2016; Fraser et al., 2017), networking abilities (Yphantides et al., 2015), transparency (Yngve, 2006), a team-based approach including team building and teamwork (Stankunas et al., 2012; Holsinger et al., 2015; Koh, 2015) and conflict management skills (Stankunas et al., 2012). Social strategy and political will could not be ignored for public health leadership (Koh, 2009).

Contemporary leaders in public health require contextual understanding and able to lead in an uncertain and ambiguous environment (Czabanowska et al., 2013a). By reviewing and analysing the leadership frameworks from 2000 to 2011, Czabanowska et.al (2014) developed a comprehensive public health leadership framework for the European region. The framework consists of 52 competencies within eight domains. The domains are: Systems Thinking, Political Leadership, Building and Leading Interdisciplinary Teams, Leadership and Communication, Leading Change, Emotional Intelligence and Leadership in Team-based Organisations, Leadership Organisational Learning and Development, and Ethics and Professionalism (Czabanowska et al., 2014). These domains are identified in Figure 2.3.

Image removed due to copyright restriction.

**Figure 2.3** ***Domains of Public Health Leadership Competency Framework (Adopted from Czabanowska et al., 2014)***

Day et al. (2014) identified five talents for public health leadership after examining the practices of nominated public health 'superheroes'. Public health superheroes were those who particularly inspired or influenced someone's career or are particularly admired by someone because of their influence on public health and their ability to make right decisions. The talents explored were mentoring-nurturing, shaping-organizing, networking-connecting, knowing-interpreting, and advocating-impacting. Public health professionals' mentor and nurture their colleagues and juniors to practice public health, thus building and fostering professional networks. With the abilities of administrative techniques to influence others, they shape and organize the agenda for the public health cause. Relationships with diverse stakeholders, particularly with the media, are important to practice effective public health and to break the status quo. Information and expertise on public health (depth of knowledge on a specific subject or a breadth wide-range knowledge) among different level of leaders is required to enable others to act for public health. Habits of writing (for journals) and public speaking (media interviews) are some ways of advocating and impacting for public health (Day et al., 2014).

In search of identifying the domains of public health leadership curriculum and leadership competencies among European public health professionals, a review by Smith et al. (2015) identified eleven themes – political leadership, ethical leadership, strategic leadership and systems thinking, charismatic/transformational leadership, emotional intelligence, team leadership, collaborative leadership, communication and transactional leadership.

Carlton et al. (2015b) examined public health leadership by utilizing the full-range leadership model and identified the ideal qualities for public health leaders. The most important qualities noted were leading by example, individual consideration to followers, having clear and competent vision for public health, collaboration with other community agencies, and addressing the current challenges of public health with creativity and innovation. Based on this study, it is noted that public health leaders should be people-oriented; supportive and encouraging to individual staff; creative and innovative; model and mentor; motivational, inspirational and passionate; decisive; adaptable, flexible and open to change (Carlton et al., 2015b)

Formal education courses taught in traditional schools and programs may not be enough to address the needs of practical leadership in public health (Yphantides et al., 2015; Baker, 2019; Gianfredi et al., 2019), thus leadership skills go beyond the discipline specific domains (Flores et al., 2019). Public health leaders should be visionary (Wright et al., 2000; McAreavey et al., 2001; Carlton et al., 2015b; Moodie, 2016; Reddy et al., 2017) having skills in policy formulation, systems thinking (Fraser et al., 2017) and advocacy (Yphantides et al., 2015). Interpersonal skills such as conveying, stimulating, furthering and enabling (Popescu and Predescu, 2016), and skills to move political, organisational and individual behaviour (Yphantides et al., 2015) are required to mobilize collective social actions (Mullen, 2016). Public health leaders even have the skills to be a follower (Srinivasan and Holsinger, 2012; Mullen, 2016).

Grimm et al. (2015) identified 21 different skills across six domains that are deemed necessary to lead in public health. The six domains were community/organisational responsiveness, ability to inspire, results focused, social intellect, authenticity, and composure and balance. Community/organisational responsiveness is defined as 'the ability to be keenly aware of the community and system' for which the individuals need

three different skills – skills to serve the community, skills of connect individual actions with institutions/systems, and skills for decision making to improve the community, organisation and/or system. The ability to inspire is defined as 'the ability to relate to others in a way that brings out the best in them', for which an individual needs three skills to collaborate with their team, to build relationships and to mentor others. Result focused is defined 'as the ability to focus on outcomes and achievements of results', for which individuals need skills to communicate the purpose and vision, to be decisive, to offer clear direction and to think strategically. Social intellect is defined as 'the ability to listen and engage with others', for which there is need of skills for conflict management, manage personal feelings, actively listen to others' concerns and sharing power. Authenticity is defined as 'the ability to be true to one's own personality, spirit, character and ethics', for which it is essential to lead with honesty, integrity and trustworthiness, willingness to stand for individual beliefs, and skill to deal with difficult situations. Composure and balance are 'the ability to use a level of selflessness and remain composed and balanced while in the centre of high-pressure situations'. For this, an individual should have skills to balance work and life, be humble, remain calm during conflict and change, and focus on continuous learning and development.

Public health leaders need passion for additional roles and responsibilities including knowledge and readiness to learn. Knowledge and experiences are some of the key leadership capacities perceived by public health leaders themselves (Nowell and Harrison, 2011). Public health leaders should have updated knowledge, skills and attitudes (Carlton et al., 2015b;, Yphantides et al., 2015) including sound knowledge on social determinants of health (Mullen, 2016). They should be technically competent (Moodie, 2016) and familiar with public policy, strategic planning and human resource management (Yphantides et al., 2015).

Jadhav et al. (2017) identified most relevant competencies among three level of public health leaders. The higher executives mostly interact with interrelated systems, the sub-agency level officers mostly advocate, and the program level managers/administrators ensure continuous quality improvement in public health (Jadhav et al., 2017). Leaders should have insights and skills for transformational change in a complex system of public health (Hunter, 2009). Future leaders in public health are expected to have unwavering commitments, new mindsets, a thirst for innovation and political practicality (Kimberly, 2011). To combat the ever-changing

global public health challenges, public health needs collaboration from the ground to the whole world. For this, public health leadership should be ‘visionary and practical, diplomatic yet assertive, fixed on targets but flexible in strategy’ (Reddy et al., 2017).

### *2.5.4 Conclusions and research gaps*

From the review, I found that most of the literature on public health leadership is of secondary nature, probing perspectives, viewpoints, and commentaries based on the knowledge, perception and experiences of public health leaders themselves. Systematic literature reviews (both narrative and systematic) are also lacking in this field. Most of the primary research in public health leadership emphasized 'leadership competencies' and masked the core aspects of leadership development and enactment. Leadership development in public health focus mostly in educational interventions such as leadership training. However, the leadership development journey and the effects of socio-cultural factors in it has been totally overlooked among public health professionals. Leadership competencies required for public health were established but none of them were for or from developing countries.

I did not find any studies from Nepal that relate to public health leadership. Moreover, there were no primary research from other neighbouring countries in South Asia from which I could draw ideas on similar subjects and settings. Studies from western culture were found in sufficient amount but those may have limitations in understanding, transfer and application to developing countries like Nepal. This is mostly because of the differences in socio-cultural settings and the social values and perception towards leadership. For example, Asian people feel more comfort with group and their leadership tend to focus on collective achievement whereas the Western people prefer individualistic approach and tend to deal with more challenges. Although leadership is widely considered to be universal, the way it is operationalized is usually viewed as culture specific. For example, a comparative study among Asian and American countries showed some of the leadership behaviours (supportive, contingent reward, and charismatic) complemented whereas some of them (directive, participative and contingent punishment) contradicts (Dorfman et al., 1997).Thus, there is high demand for both primary (original) research and systematic reviews in public health leadership in developing countries. Primary research focusing on the development and

enactment of leadership among public health professionals should be the utmost priority. Exploring the leadership development journey, identifying the practices of leadership behaviour and establishing the leadership competencies among public health professionals in developing countries like Nepal, will help in minimizing the existing research gaps.

## 2.6 Conclusion

This chapter described the prevailing concepts, theories and practices on public health leadership based on original and secondary research articles from around the world. Public health leadership has some fundamentals established in developed countries, but it is still a new discipline for developing countries. The subject needs more studies in developing countries, especially to understand the ways of leadership development and to explore how the leadership practices could be best developed and utilized in improving the health of the people.

The upcoming chapter (Chapter 3) will describe the methods and methodology of the research questions developed to fulfil the research gaps based on the review of literature. Chapter 3 will describe the research paradigm and design supported by research questions, methodology, research participants and their procedures of selection, methods of collecting data and analysing information and ethics related matters. To sum up, it will describe all the ways and methods of how the research has been initiated, continued and completed.

# CHAPTER 3 – METHODOLOGY

## 3.1 Introduction

This chapter describes the methodology and other related procedures of my research project. As the major concern of this research was to explore the 'how' of leadership development, I chose the constructivist paradigm and grounded theory as the best methodology to answer the research questions. The approach of grounded theory adopted was Charmaz's constructivist grounded theory which guided data collection and analysis. The paradigm, design, methodology and other procedures are described in detail in this chapter.

## 3.2 Paradigm

This research followed a constructivism paradigm which argues that reality is socially constructed (Gergen, 1999) by engaging and interpreting (Crotty, 1998) which could be done via interaction between investigator and subjects (Guba and Lincoln, 1994). While the reality may be different for each person (Burger and Luckmann, 1966 in Denzin and Lincoln, 2005), there are also shared assumptions, understandings, meaning and practices between persons. Constructionist approach in this research was mostly about recognizing, uncovering and describing a group of people's shared meanings and practices around leadership in public health. As a researcher, I was involved in constructing realities as constructivists suggest, because I was engaged in all stages of this research. I had built a good rapport and interpersonal relationship with research participants to have enough in-depth interaction for better understanding of their experiences and behaviours. I put myself in the participants' positions as far as possible, to attempt to see things through their perspective, and understand the meanings and values they brought to their leadership practices.

## 3.3 Design

This research was qualitative – the approach which explores, describes, interprets and aims to try to understand the meaning that individuals or groups ascribe to a social or human issue/problem (Creswell, 2009). The qualitative approach focuses on people's interpretations and experiences and seeks a deeper understanding of their lives,

experiences and meaning they give to these. This research, in a natural setting, explored how social contexts influence the development of leadership among public health officials and their leadership styles and behaviour in their workplace. As this research project aimed to produce a theoretical framework or model on leadership by exploring leadership development and qualities on leadership, it was best explored and described qualitatively.

### 3.4 Methodology

The methodology for this qualitative research is grounded theory – more specifically Charmaz's constructivist grounded theory that acknowledges subjectivity and the researcher's involvement in the construction and interpretation of data (Charmaz, 2014). Grounded theory is considered as the best method of analysis to develop theory from the collected data where the researcher is involved in interaction with people, perspectives and research practices (Charmaz, 2014). It is therefore appropriate in the absence of an existing theory to explain and understand a process (Creswell and Poth, 2018). As a researcher, my interest was on leadership in public health and the Nepalese context. There were no existing theoretical frameworks and/or models to understand Nepalese public health leadership. Thus, grounded theory was considered suitable for my study because it aims to investigate social phenomena or processes that have little prior research attention (Milliken, 2010) or that doesn't have pre-theoretically developed with existing theories and paradigms (Engward, 2013). Furthermore, grounded theory is a good approach with which to study leadership (Parry, 1998) because it reflects the context and process to retrieve rich perspectives in shaping leadership (Kempster and Parry, 2011). Grounded theory has a great potential to contribute in understanding of leadership with particular substantive context (Du Plessis and Marais, 2015) because it provides a way to explore concepts on public health leadership by examining the social context, interacting with participants, and analysing participants' experiences and understanding in leadership.

Charmaz's constructivist grounded theory is a contemporary version of Glaser and Strauss (1967) original statement (Charmaz, 2016). This version is similar to Glaser and Straus's in adopting the inductive, comparative, emergent and open-ended approach. It also adopts the earlier methodological strategies such as coding, memo-

writing, and theoretical sampling. However, it is distinct in the sense that it 'acknowledge[s] the subjectivity and the researcher's involvement in the construction and interpretation of data' (Charmaz, 2014). The constructivist approach treats research as a construction, and researcher should examine his/her privileges and preconception that may shape the analysis in creating meaning and interpretation.

### 3.5 Project Advisory Group (PAG)

An advisory group was formed in Nepal, including academics, public health professionals and governmental officials. The group comprised six members including three academics (each having expertise in qualitative research, gender and ethnicity, and grounded theory), one public health professional (expertise in health system research), and two retired bureaucrats (expertise in Nepalese health system). The aim of the PAG was to seek suggestions and comments on the research. The details of this is listed in Appendix.

As a researcher, I received some support from the members of the PAG during my research processes. I had three one-to-one meeting with them when I was in Nepal for the purpose of data collection and analysis. By considering the time availability of members and their distinct expertise with each other, I decided one-to-one meeting which was also their preference. The first meeting was done prior to data collection to seek suggestion regarding the ways to deal with participants, the , second meeting was during data collection to discuss the challenges faced, and third meeting was after during analysis to discuss with the codes generated from the interviews. Members from academic institutions provided support regarding the methodological aspects of the research as well as the context of gender and ethnicity in Nepal. Retired public health bureaucrats helped me to understand the internal environment of the Nepalese health system and the techniques for handling public health officials before, during and after data collection. In addition, I used the linkage and expertise of the PAG in the process of theory validation, dissemination of findings, and knowledge transfer and exchange (KTE).

## 3.6 Participants and recruitment

### *3.6.1 Participants*

The primary participants for this study were the public health officials who were working under the Ministry of Health (MoH) in Nepal and had experiences in leadership positions. Public health officials were defined as ’those officials who were working in the different positions of 'health inspection' and 'public health administration' group of the Nepal Health Services, Government of Nepal (GoN) with academic qualifications and/or experience in public health. Similarly, leadership position referred to working in the top-most position in health institutions at district level (public/health chief), or regional level (health directorate) or central level (Director in division/centres). The sample of participants is outlined in Table 3.1.

**Table 3. 1 Officials with experience in leadership positions**

| Types of officials | Experience in leadership positions | | Total |
|---|---|---|---|
| | Yes | No | |
| Public Health Officers | 14 (22.6%) | 48 (77.4%) | 62 (100%) |
| Public Health Administrators | 41 (97.6%) | 01 (2.4%) | 42 (100%) |
| Sub/Health Administrators | 13 (100%) | 00 (0%) | 13 (100%) |
| Chief Public Health Administrators | 15 (100%) | 00 (0%) | 15 (100%) |

Technical and administrative staff in public health positions were the subsequent participants in this research. For the purpose of this research, staff were defined as 'those individuals who were working under the leadership of public health officials in the same institutions as the public health officials did'. Technical staff for different health programs who had academic qualifications related to health sciences and/or public health were the focus. Administrative staff who were working in administrative and financial sections in the same institution were the non-health personnel who were targeted.

### *3.6.2 Source of participants*

All participants selected in this research were working in government health institutions at district (local), regional (state) and central (federal) level. Those institutions were District Health Offices (DHO), District Public Health Offices (DPHO), Regional Health Directorate (RHD), Department of Health Services (DHS) and Ministry of Health (MoH) (Table 3.2). Due to the latest changes (in 2017) in the national structure by adopting federalism in the country, the regional and district offices are under the control of state and local government, however, the positions and level of public health officials remain unchanged. These changes did not have any effects on this research.

**Table 3. 2 Types of participants and their source of recruitment**

| Participant types | Source |
|---|---|
| Public Health Officer (PHO) | District Health Offices (district/local level) |
| Public Health Administrators (PHA)<br>Sub-Health Administrators (SHA) | District Health Offices (district/local level)<br>Regional Health Directorate (regional/state level)<br>Department of Health Services (central/federal level)<br>Ministry of Health (central/federal level) |
| Chief Public Health Administrator (CPHA) | Regional Health Directorate (regional/state level)<br>Department of Health Services (central/federal level)<br>Ministry of Health (central/federal level) |
| Staff of PHO, PHA and SPHA | District/local, regional/state and central/federal level |

### *3.6.3 Recruitment of participants*

Prior to recruiting participants, I accessed the 'Human Resource Information System' (HuRIS) – an electronic database managed by the Human Resource Information Unit (HuRIC) under the Ministry of Health. This database contains the list of health institutions, sanction post and employees under the MoH. This database was used to describe the workforce and to help sampling access to the study participants.

Formal permission from the Ministry of Health to access the database for required information was received. The Ministry of Health allocated a focal person from the related department to assist me in this matter. For the purpose of this research, I asked for employee details (except their name and full address) such as age, gender, caste/ethnicity, locality, year and position of entry, working institution, existing position

and level, academic qualification, trainings, and upgrade/promotion history, which were extracted from the database by the focal person and given to me. The data set received was already de-identified with a unique code for all participants. I then re-categorized the participants based on socio-demographic and job-related characteristics as stated earlier. The focal person was then asked to make a list of potential participants for research by considering the criteria for recruitment (Table 3.3). This strategy aimed to maintain confidentiality and reduce the selection bias (since as a researcher I was not involved in sample recruitment) and ensure information rich participants (since a familiar person at the Ministry of Health identified the potential participants).

**Table 3. 3 Basis of recruitment for participants**

| **Characteristics** | **Public health officials** | **Technical and administrative staff** |
|---|---|---|
| Working institutions | District Health Office, Regional Health Directorate, Department of Health Services, and Ministry of Health | District Health Office, Regional Health Directorate, Department of Health Services, and Ministry of Health |
| Educational qualification | Bachelors (BPH), Masters (MPH) and above (Ph.D.) | n/a |
| Job types | Technical | Technical and non-technical |
| Position | Officer, administrator, and chief administrator | Officer and program supervisors |
| Level of hierarchy | $7^{th}$, $8^{th}$, $9^{th}$, $10^{th}$ and $11^{th}$ | $5^{th}$, $6^{th}$, $7^{th}$, and $8^{th}$ level |
| Years of experience | 5 – 10 years, 10 – 15 years, 15 – 20 years (based on promotion and retirement periods) | n/a |
| Nature of entry | Internal entry (as a part of career progression), and external entry (direct entry outside GoN) | n/a |
| External experience | Worked in I/NGOs in the past, and no experience with I/NGOs | n/a |
| Gender | Male and Female | Male and Female |
| Caste/ethnicity | Upper, middle and lower | n/a |
| Place of residence | Rural and urban | n/a |

Once the participants were identified, the focal person from the MoH contacted them via email and/or direct phone calls to gauge if they were interested in the research. Based on the response of participants, the focal person provided the contact details

of those participants who agreed to be part of the research to me. After that, I started the formal recruitment of participants.

At the very beginning, I contacted participants formally via email by introducing myself, the research and the role of participants in my research with the attachment of 'Letter of Introduction', 'Information Sheet', 'Consent Form', and 'Ethical Approval' (see Appendix). For each participant, I waited two weeks for their response via email. During that time, about a quarter of the participants responded. It is important here to acknowledge the culture of communication in the country. In Nepal, people prefer direct communication via phone calls or direct meetings, and most of the people did not take emails seriously. Even during the research period, it was clear that most of the participants did not have institutional emails, and they did not check their personal emails because they had email addresses primarily to aid connection to social media like Facebook. Nonetheless, the inadequate and poor connection to the remote areas of the country is also a barrier for e-communication. For those participants who did not have any email contact on the database, and who did not respond to emails after two weeks, I made a direct contact via phone calls. All the phone calls were answered and followed up with an appointment to meet them directly in their institutions. During that visit, I provided hard copies of ethics documents (the same documents that had been forwarded in emails) and requested a time for interview.

In most of the cases, participants decided on the time and place for interview. In very few cases where participants did not want to be in the office and agreed to meet outside, I decided the time and place for the meeting. Most of the interviews (37) were conducted in the participant's working institution in their out-of-office hours; the remaining few interviews (8) took place in hotels/restaurants with a pre-booked time in a safe, comfortable and private area; and one (1) interview was in the participant's home.

In the case of participant recruitment for the focus group discussion, I first met the Chief of institution with all the ethics documents and described the purpose of the research, the required number of participant and their characteristics and asked for their assistance in the research. I did not select the participants to avoid the potential biases and due to the consideration that the institutional chief could be a good source for choosing participants. The institutional chief then called the participants and

arranged the time and/or venue for discussion. After that, I explained the research to the participants and took their consent in written form. All the group discussions (n=6) were in participant's institutions in out-of-office hours.

### 3.7 Methods of data collection

To achieve the aims and objectives of this research, three different methods: secondary data analysis, in-depth interviews, and focus group discussions were adopted.

Secondary data analysis included two different sets of analysis – database analysis and document analysis.

**Database analysis:** The Human Resource Information System (HuRIS) was analysed to identify the status and describe the structure and nature of the public health workforce in Nepal. Information related to socio-demographic characteristics and job characteristics were retrieved from the database for analysis.

**Document analysis:** Job description, as one of the policy documents of Ministry of Health, which describes employees' role and responsibilities, was analysed to identify and differentiate the theory-practice dimensions of leadership among public health officials.

**Interviews:** Public health officials were asked to participate in multi-phasic in-depth interviews, the purpose of which was to explore their leadership development, to identify leadership roles and strategies adopted by them, to explore their experiences of successful leadership, and to understand their views on leadership qualities and competencies.

**Focus Group Discussions (FGDs):** Technical and administrative staff from public health organisations were asked to attend one of a series of focus group discussions to explore their views and perspectives on leadership qualities and competencies expected in the public health sector of Nepal.

Since leadership concerns two parties (one who was exercising and the other who was being exercised), opinions from both was required to identify common themes. In-depth interviewing was chosen to retrieve detailed information on leadership where views and experiences varied individually. On the other hand, focus group discussion

was chosen for public health staff because they were the people who were being exercised and their views on leadership could not be ignored. These two methods, based on the same issues and concern, brought together the commonalities of public health leadership in Nepal.

**Table 3. 4 Summarization of data collection methods based on aims and objectives**

| Aims and objectives | Methods | | | |
|---|---|---|---|---|
| | **Database analysis** | **Document Analysis** | **In-depth interview** | **Focus group discussion** |
| Status of public health workforce | x | | | |
| Leadership role and responsibilities | | x | x | |
| Leadership development | | | x | |
| Leadership enactment | | | x | |
| Leadership competencies | | | x | x |

### 3.8 Phases of research

Data collection for this research was multi-phasic which as described in the following paragraphs.

***Phase I, Part A (July 2018):*** I started data collection by gathering information on the public health workforce from the Ministry of Health's database i.e. Human Resource Information System (HuRIS). Access to this database served as the basis for participants' recruitment as stated earlier. I analysed this database to identify the nature and structure of public health workforce in Nepal.

***Phase I, Part B (August 2018):*** After completing the database analysis, I reviewed the Job description (a formal official document) of different positions of public health officials with the aim of identifying and describing the leadership role and responsibilities that was assigned to each of them. The findings from this were used to distinguish between the leadership roles people had in their job description and the leadership role they were practising in their real life.

***Phase II (September 2018):*** After completion of secondary data review (phase I), I conducted focus group discussions among the technical and administrative staff of public health organisations in three different levels and positions. All the sessions were recorded after written consent from the participants was given. Group discussion explored the meaning of public health leadership along with the qualities and competencies required in public health leadership in the Nepalese context. It produced themes and categories on effective public health leadership which were further used as a source of reference and data triangulation for in-depth interviews with public health officials. Each discussion session was facilitated by me along with note taking. A total of six focus group discussions were undertaken with average time of 28 minutes, 31 minutes being the longest and 25 minutes being the shortest.

***Phase III (October 2018 to February 2019):*** After completing focus group discussion with staff, I conducted face to face intensive interviews with public health officials. All the interviews were audio-taped after getting written consent. As grounded theory suggests, interviews were done in two to three consecutive phases for the development of theory.

***1st interview –*** This part of interview aimed to explore participant's experiences in leadership by using open ended questions. Initially, I inquired about their daily activities (both at home and office) as an ice-breaker activity. This interview was completely focused on 'leadership development' of participants. I took participants into their past to explore their journey in public health along with supporting and hindering factors to be a public health official. I explored information regarding childhood experiences, family environment, socio-cultural context including the role of gender and ethnicity, and educational and/or professional interests and exposure in public health. I also asked participants to consider their inspiration for leadership, adoption of leadership insights and the consequences on their field. The life history style interview explored the leadership dimensions in each participant's personal and professional life. This interview had an average duration of 30 minutes, 48 minutes being the maximum and 20 minutes being the minimum.

***2nd interview –*** The second interview was conducted a couple of weeks after the first. The focus of this interview was 'leadership enactment' and 'leadership competencies'. Initial questions were related to the participants' job roles and responsibilities from their

job descriptions. I asked participants about their leadership role in preparing the public health plan, policies and strategies, and their implementation. I also asked them about their relationship with staff to explore the people-oriented dimensions of leadership. This interview also explored the participants' experiences and understanding of successful leadership. During the interview, I emphasized different cultural, social, religious, political, and gendered dimensions of leadership in the Nepalese context. I also explored the views of the participants on the required qualities and competencies to be an effective public health leader in Nepal. This interview considered the themes previously generated from focus group discussions with staff and the first interview with the same officials.

This interview phase was longer than the first phase ranging from 42 minutes to 76 minutes, the average time being 60 minutes.

***3rd Interview –*** This interview focused on the development of emergent theory, which specifically explored more about key concepts and ideas which had been previously discovered. The tentative categories developed from the analysis of first and second interviews were reviewed, based on which some focus question were developed. Those focus questions were oriented towards the theoretical centrality and adequacy as discussed by Charmaz (2014). This concluding interview led the way towards theoretical saturation. This interview had an average duration of 28 minutes, 50 minutes being the maximum and 18 minutes the minimum.

I used a set of broad, open-ended, non-leading questions based on the subject matter covered by each interview. Participants were asked general questions at the beginning which were made more specific as the interview proceeded. Probing, as the essence of in-depth interviewing (Minichiello, 1990) was employed in its fullest. It encouraged participants to reflect further on the questions asked, reflect on personal images, and finally helped to retrieved more detailed information. Questions for later interviews were revised and added based on the information retrieved from the previous interview. Questions were reformulated again and again to align theoretical sampling and saturation.

In addition, the information was provided by participants verbally, the aspects of non-verbal communication like body languages, facial expressions, voice tone and overall personality was also observed during interviews and focus group discussion because

these are considered vital in qualitative studies. As Minichiello (1990) argued that 'different perceptual patterns link with different and characteristic eye movements, postures and breathing patterns which can be used to guide the interviewer to understand the informant rapidly and accurately'. In order to document these non-verbal expressions and other aspects of conversation, actions and events, note taking was done in the form of jottings and field notes. Taking notes was a good idea for recording the settings of interviews and discussion. The field notes and jottings were later used as a reference during data analysis.

Figure 3.1 illustrates the phases of research along with the sample size and methods.

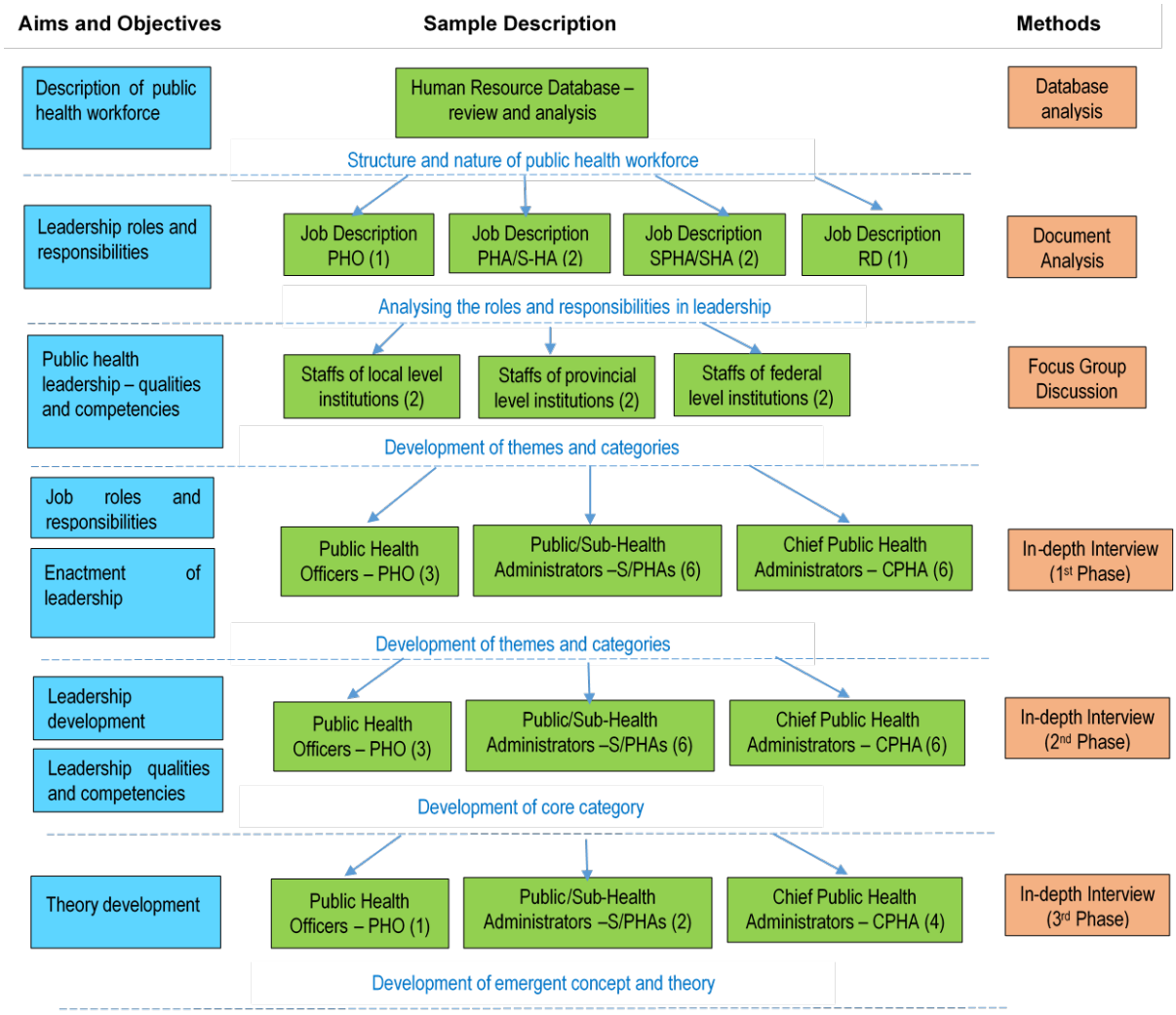



**Figure 3.1** ***Illustration of data collection procedures with sample and methods***

### 3.9 Sample and sampling

Samples for this research were selected in two ways – initiated by purposeful sampling and ended up with theoretical sampling. Purposeful sampling is used in grounded theory in the beginning because the researcher has little idea of which concepts are going to be theoretically relevant (Green and Thorogood, 2014). This sampling is relatively indiscriminate (in terms of retrieving data and information) as it seeks participants based on the purpose of research and/or the convenience of the researcher (Strauss and Corbin, 1990 in Green and Thorogood, 2014). But as the study proceeds, the researcher deliberately includes the samples that are more likely to generate the data for the concepts that are emerging for theory development (Green and Thorogood, 2014), which is the essence of theoretical sampling.

Initially, purposeful sampling was used to ensure participants from whom adequate relevant information could be retrieved to answer the research questions in the best way. Selecting information-rich cases for in-depth study is the power and logic of purposeful sampling (Patton, 2015), and only the researcher can purposefully understand the research problem and the central phenomenon of the study (Creswell and Poth, 2018). I addressed the variations and diversity among samples by selecting participants based on some typical characteristics (Table 3.4) to include a range of perspectives on public health leadership considering the multi-cultural context of the country.

The key sampling strategy developed into theoretical sampling (Charmaz, 2014), also known as inductive grounded and emergent theory sampling (Patton, 2015). It is an iterative process between data collection and analysis. It starts with data and constructs tentative ideas about data, and then examines the ideas through further empirical inquiry (Charmaz, 2014). The initial samples selected via purposeful sampling (for data saturation) provided some concepts or information on the central issue of the research which was then followed by theoretical sampling (for theoretical saturation) to lead the way on an emerging concept/theory.

As literature suggests, determination of sample size in qualitative research depends on several factors including the purpose of research, available resources (Patton, 2015), scope of research, design of study, amount of usable data, and quality of data (Morse, 2000). To be specific with grounded theory, the sample size is determined by

the number of interviews (Morse, 2000) and the use of multiple methods (Charmaz, 2014). Grounded theory usually expects two to three interviews with 20–30 participants (Charmaz, 2014). This research took consideration of its purpose, study design, data quality, multiple methods and number of interviews to finalize the sample size both by purposeful and theoretical sampling.

**Table 3. 5 Total numbers of samples included in the study**

| Participants type | Purposeful sampling | Theoretical sampling | Total samples |
|---|---|---|---|
| Public health officials | 30 interviews with 15 participants | 16 interviews with 16 participants (9 old and 7 new) | 46 interviews with 22 participants |
| Technical and administrative staff | 4 focus group discussion with 23 participants | 2 focus group discussion with 10 participants | 6 focus group discussion with 33 participants |

The samples (participants) included for this research, were the most appropriate samples to study leadership aspects in public health because they included public health officials from all levels and positions in the Nepalese health system with diversity in academic qualifications, experience and socio-demographic characteristics.

### 3.10 Saturation

This research adopted data saturation for purposeful sampling and theoretical saturation for theoretical sampling. Initially when the participants were selected purposefully and interviewed, I experienced the repetition of information. This repetition of information started from 20$^{th}$ interview with the 10$^{th}$ participant. However, to make sure of this, I conducted ten more interviews with five participants. This was basically data saturation. Since the methodology for this research was grounded theory, data saturation was not the end of data collection. In grounded theory, data collection ended up with theoretical saturation not by data saturation. Theoretical saturation differs from data saturation in the sense that it emphasizes saturation of emergent categories and theory rather than saturation on data/information (Charmaz, 2014). Data saturation helped in developing some themes and categories, based on

which subsequent samples were added to inquire further. Those subsequent samples were part of the theoretical sampling which supported the process of theorizing. The point of theoretical saturation was decided based on the researcher's comprehension during interviews along with the memos and mind map created during transcription and analysis. Eventually data were collected from 46 interviews with 22 participants.

## 3.11 Ethics

### *3.11.1 Approval*

This research was ethically approved by the Social and Behavioural Research Ethics Committee, Flinders University, South Australia on 3rd May 2018 (Project No. 7939). Additional approval was given by the Institutional Review Board, Pokhara University, Nepal on 7th June 2018 (Ref. No. 195.074/75). Permission was also received from the Ministry of Health, Nepal on 30th May 2018 to conduct data collection (primary and secondary) from its institutions and employees. Further modification approval was received from the Social and Behavioural Research Ethics Committee, Flinders University on 4th December 2018 and from the Institutional Review Board, Pokhara University, on 16th December 2018.

### *3.11.2 Documents*

For the purpose of this research, several documents (ethics documents and tools for data collection) were used after prior approval from the stated authorities. Ethics documents used in the research were Letter of Introduction, Information Sheet, and Consent Form. These documents along with the letter of ethical approval were provided to the participants beforehand. After going through these documents, participants decided whether to be a part of the research.

### *3.11.3 Consent*

Two sets of consent forms were provided to the participants; one to retain and one to return to me. The consent form (see Appendix) was in the local language and stated all the needed information including the benefits and risk to the participants.

### *3.11.4 Language*

Since the official language in Nepal is Nepali, ethics documents and study tools were prepared and disseminated in the same language. Considering this was the participant's and researcher's mother-tongue, data collection and communication with participants was in Nepali. However, data needed to be translated to English for analysis. Considering my position in research and fluency in English language, I undertook all the translation of data from Nepali to English.

### *3.11.5 Confidentiality and anonymity*

Participant anonymity and confidentiality was maintained during one on one interviews. Confidentially was maintained in the place where the interviews were held. Participants were asked not to name anyone during the interviews; however, this did not eventuate. All the names recorded during the interviews were removed during the transcription. In case of group discussion, it was not possible to guarantee anonymity because participants were already familiar with each other. I, as researcher, kept information confidential, but I could not guarantee this in a group discussion. Before starting each focus group discussion, I asked participants not to name anyone during the discussion and not to expose the discussion issues afterwards. When participants used someone's name, I removed it during the transcription: as in interviews. No sensitive information was raised during the interviews and group discussions. The Information Sheet had informed all participants that no information that identifies them individually will be disseminated or published. Pseudonyms were used in storage of data and final reporting.

The place for interviews and group discussions were selected in a way to minimize exposure to incidental people. However, in some interviews which took place in participant's workplace, incidental people came in contact, and the participants could not ignore them. In that case, I paused the interview (and the audio recording) until the time the incidental people left.

### 3.12 Data analysis

In this research, data analysis began from the first day of collection. Although the research adopted multiple phases and methods of data collection, all the information was analysed as far as practicable with the defined steps of constructivist grounded theory. Interconnection between the findings from multiple methods were established prior to developing a theory grounded on data. The sequence of data analysis in this research is as follows:

Database Analysis → Document Analysis → FGD Analysis → IDI Analysis

Data analysis started by analysing the human resource database given by the MoH. It was a qualitative descriptive analysis of the socio-demographic and job-related characteristics of all the public health officials in Nepal. Database analysis helped in understanding the overall status and nature of public health workforce in the country. Emphasis was given to gender and caste/ethnicity because these two were the prominent issues as well as social determinants of health in the Nepalese context (Dahal and Subedi, 2015). From the database analysis, I gained ideas about the characteristics of the public health officials. After that, it was important to understand the role and responsibilities of those officials and their application. For this, the Job Descriptions (JDs) of public health officials working at different levels were analysed, by considering them as policy documents.

The process of analysis included skimming (superficial examination), reading (thorough examination), and interpretation (Bowen, 2009). Themes were created based on the predefined categories that the documents already had. Comparing and contrasting was done within and between the pre-defined categories and their contents. Findings from the database and document analysis guided the prospective and comprehensive analysis of focus group discussion and interviews.

In the context of interviews and focus groups, I started analysing data from the first day of its collection. Data analysis was done with the help of memo writing, mind maps, transcription and coding as explained here.

***3.12.1 Memos:*** Memo writing is essential from the methodological perspectives of grounded theory as it helps the researcher to record the thoughts and feelings about the data and provides direction for further collection and analysis of data. Memos are the narrated records of the researcher which arise from the intellectual conversations with themselves about the data by which the researcher explores, explicates, and theorizes the emerging patterns (Bryant and Charmaz, 2011). Memos are also considered as a 'storehouse of analytical ideas' (Strauss and Corbin, 1998) which enables movement from description to conceptualization and facilitates in the generation of theory (Bryant and Charmaz, 2011).

I started writing memos from the beginning of data collection until the completion of data analysis. I wrote each memo on the same day of each interview stating my overall experience with the interviews. I described this memo as the 'post-interview memo' which includes but is not limited to – interview environment, participants' way of expressing their feelings and responses, quality of interviewing, lessons learned and strategies for further interviews. The next memo I wrote was during the transcription – the 'transcription memo'. While transcribing, I noted key words, patterns, questions, and any gaps that I felt to be fulfilled. Based on these things, I wrote memos with the ideas that I needed to remember and come back to explore in further interviews and/or analysis. The third memo made was during the core process of data analysis (coding). It is often named an 'analytical memo' (Charmaz, 2014). This was the most important memo which served in the development of codes and categories. It focused on the relationship between the key ideas and themes that emerged during the analysis and guided me in the development of theoretical concepts. As the memo writing increases the memos become more concise and specific. Post-interview memos were generally longer than the other two and were more descriptive. Examples of different types of memos are listed in the Appendix.

***3.12.2 Transcription:*** All interviews were transcribed as soon as they were completed. In the beginning, each interview was transcribed the day after its collection along with memo writing. The transcript from the second and third phase of interviewing was done once the interviews were completed. I transcribed all the recordings in the same language that I used for the interview (Nepali) using MS word. After the completion of each transcript, I reviewed and edited the transcript file to

ensure accuracy in typing, grammar and reflection. All the transcripts were sent to participants via email and I asked them to inspect and edit as necessary. Most of the participants provided the edited version of the transcript but there were no major revisions. Some participants phoned and told me that no revision or modifications were needed. I started data coding after being ensured that the participants went through their interview transcript.

Transcription was one of the most time-consuming aspects in my research. On average, one hour of audio recording took four to six hours to transcribe because of the complexity in 'Devanagari' script in the Nepali language, and the issues and problems with continued typing in computer. However, transcribing myself helped me understand the subject matter from the participants' perspectives and favours the way of writing memos. As a part of the transcription memo, I noted the keywords, important quotes from participants and ideas generated in my mind: this guided me in developing questions and prompts for further interviews as well as going back on the key concepts and ideas during analysis.

***3.12.3 Mind maps:*** The keywords and ideas noted during transcription and coding were arranged to create mind maps. Keywords were arranged in the way they occurred along with their causes and consequences and the linkage between them. Arrangement of those keywords and presenting them in a diagram (Figure 3.2) created a mind map of the concerned subject matter. I placed the subject matter (for example – application of job description) in the centre; and added the core ideas with relevant words and phrases as they arose from the transcript and coding process. The rough sketch mind map was converted into a graphical representation using the software ‘FreeMind’.

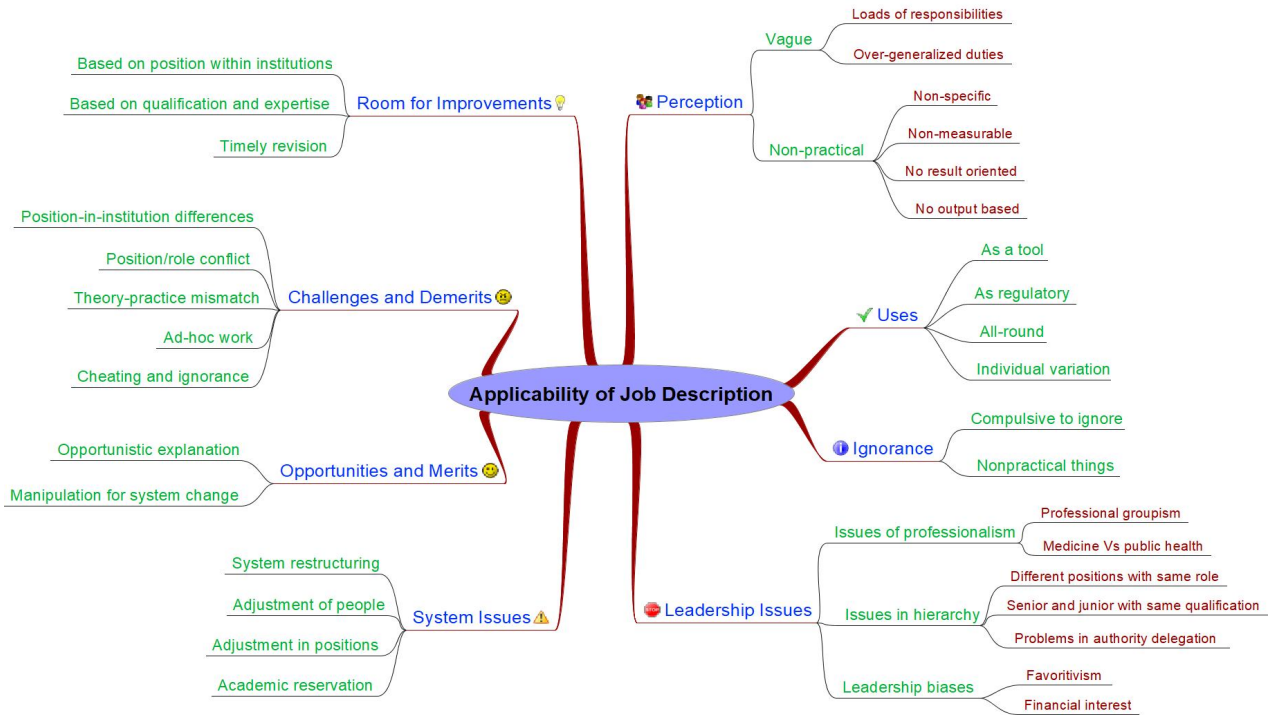



**Figure 3.2** ***Mind map created for applicability of job description***

***3.12.4 Coding:*** Coding is the process of sorting and synthesizing the large amounts of data into concise and meaningful terms by developing categories and sub-categories. It assigns the interpretive labels to the concepts and ideas which emerged from the data. Coding in grounded theory is the heart of the analysis that guides the user towards the development of a theory. As mentioned by Charmaz (2014), coding in grounded theory includes at least two main phases – initial coding and focused coding. Initial coding (also called open coding) is the first phase of coding in which every line or words or segment of data is given a specific name. Focused coding (also called selective coding) is the second phase of coding in which we emphasize the most significant or frequent initial codes to sort, synthesize, integrate and organize large amounts of data (Charmaz, 2014). Once these two processes of coding are completed, tentative categories are developed, and theoretical sorting and integrating is used for the development of theory. In this study, I did manual coding (no software was used) because I believe that software only helps in compilation of codes but cannot compete with human mind to understand and interpret the experiences, because of which less repetitive codes that carry meaningful information might be missed.

***3.12.5 Initial coding:*** I started initial coding by adopting the strategy of 'line-by-line' coding. Chunks of data were examined and given a code for each line and/or segment from the transcript (Table 3.6). Each code was assigned in a way that it categorised, summarised and accounted for each piece of data. I highlighted actions (what the participant did), while coding and named the code in the form of action as far as practicable. Gerunds (action verbs with *-ing* but used as a noun) and in-vivo codes (the same words that the participants expressed while interviewing) were used to ensure participants' actions and experiences were captured. As Charmaz (2014) suggested, while doing this coding and I tried to avoid the pre-existing categories of the data because focusing on pre-existing themes may prevent new ideas to emerge. I was attentive in making the codes as close to data as possible so that each code reflects the real experiences of participants from my side. Once the initial coding was completed for each transcript, I reviewed all the codes, and refined them to make them clearer.

Since the data was heavily related to the personal experiences of the participants, I thought about sharing the initial codes with the participants. I asked a few participants who had prior experiences in research and publications to review the initial codes. Feedback received from the participants was incorporated when the codes were reviewed and revised. This method ensured the codes selected were reflecting the meaning and experiences that the participants had. Moreover, the codes generated were cross checked by the supervisors to ensure that the pre-existing categories were not reflected during coding and development of tentative categories.

**Table 3. 6 Example of initial coding**

| Interview statement | Initial coding |
|---|---|
| Yeah…I think family influenced the way I am leading now. Sometimes… I couldn't find an answer for something. For example, staff deliberately do not turn off the electricity when they go outside. Then, again I think…if they have the same mind as me, they would have been in my place…. that's why, I am in my place and they are in their place…… The time when I had grown up… I think that environment made me like this. I have learnt a lot from my family such as how to manage the resources, how to be sensitive while providing services. I | Thinking of family<br>Searching for answers<br>Being resource conscious<br>Comparing with other people<br>Remembering the family and social environment |

| | |
|---|---|
| remember, we had spare housing in our village in which the nomads and travellers came to eat and sleep there, even the other people in the villages used to recommend those people coming in our house. Like as…I learnt to help since from my childhood, that image is lifelong. I still felt very sad if I heard some clients returning deprived from services. That service (at my village) in childhood and the current service I am doing is different, but service is service, it is about giving to someone who is in need. In that way, I think socialization influenced me and my career. With socialization, the role that my father and mother played, that also influenced me. | Managing resources<br>Being sensitive to provide services<br>Helping the needy people<br>Being responsible to clients<br>Realizing the essence of service<br>Influencing role of parents |
| ……I was doing job in a reputed NGO, but later I left there and came to the government system. What I did there did not bring any significant changes in the lives of the community people. Then I thought, if I apply the same efforts that I did in INGO, it can change the whole district. In there, there was neither recognition nor change…. Just the creation of dependency. Then I felt like this is the type of work I should do in the government system. You make a lot of efforts in INGOs, but you can bring change…you can't do anything until the system (government) turn the switch on to the INGOs. If you really want to bring change in the community, you should be in government. | Shifting of job<br>Being conscious with change<br>Analysing the efforts with output<br>Preferring independency<br>Expecting recognition<br>Explaining efforts with change<br>Emphasizing for change |

***3.12.6 Focused coding:*** I did focused coding with the codes that I had derived from the initial coding. I chose those codes which appeared more frequently during initial coding or those which were more significant in making analytic sense to categorize the data. I examined whether the selected codes matched with extensive data and then compared the codes with data and between the codes to determine which codes could lead to tentative categories. This comparison helped identify the codes having analytic power, from which I developed the tentative categories (Table 3.7).

**Table 3. 7 Example of focused coding**

| Interview statement | Focused coding |
|---|---|
| Yeah…I think family influenced the way I am leading now. Sometimes… I couldn't find answer of something. For example, staff deliberately do not turn off the electricity when they go outside. Then, again I think…if they have the same mind as me, they would have been in my place…. that's why, I am in my place and they are in their place…… The time when I had grown up… I think that environment made me like this. I have learnt a lot from my family like as how to manage the resources, how to be sensitive while providing services. I remember, we had spare housing in our village in which the nomads and travellers came to eat and sleep there, even the other people in the villagers used to recommend those people coming in our house. Like as…I learnt to help since from my childhood, that image is lifelong. I still felt very sad if I heard some clients return depriving from services. That service (at my village in childhood and the current service I am doing is different, but service is service, it is about to give someone who are in need. By that way, I think socialization influenced me and my career. With socialisation, the role that my father and mother played, that also influenced me. | Resources consciousness<br>Responsibility towards services<br>Effects of socialization<br>Role of parents |
| ……I was doing job in a reputed INGO, but later I left there and came to governmental system. What I did there did not bring any significant changes in the lives of the community people. Then I thought, if I applies the same efforts that I did in INGO, it can change the whole district. In there, there was neither recognition nor change…. Just the creation of dependency. Then I felt like this type of work I should do in governmental system. You do a lot of efforts in INGOs, but you can bring change…you can't do anything until the system (governmental) turn the switch on to the INGOs. If you really want to bring change in the community, you should be in government. | Passion for change<br>Independency and recognition |

Once the focused code developed, I compared them with the context, incident and data to generate tentative categories. Tentative categories were developed from the codes that carried the most weight. These tentative categories were the ideas, events

or processes that the participants experienced. The categories were left provisional in the beginning to remain open to further analysis. As the analysis goes on, some categories changed whereas some of them remain unchanged.

### *3.12.7 Constant comparison:*

Constant comparison is an approach by which the data are continually compared at each steps of analysis. I did constant comparison within and between the data (interview statements and codes developed). First, I compared the interview statements for the same participant (since there were multiple interviews with each participant) and between different participants with similar subject matter and circumstances. I applied the same method to the codes that were developed from the interviews. Constant comparison helped me to prevent perception and bias over analysis and guided me in a way to establish analytic distinction between participants' statements and codes explored.

## 3.13 Theory development

### *3.13.1 Theoretical sensitivity*

Sensitivity is a key component in developing a theory (Charmaz, 2014) in which the researcher, through data gathering and analysis, is able to discover the relationship between categories to construct a theory that is relevant to the field under study (Glaser, 1978). It allows the researcher to undertake effective open coding by 'studying life from multiple vantage points, make comparisons, follow leads, and build on ideas' (Charmaz, 2014). Using gerunds and focusing on codes to analyse actions instead of taking individual as discrete unit of analysis, is a key strategy in constructing theory (Charmaz, 2014). According to Glaser and Strauss (1967), theoretical sensitivity comes from the researcher's background including familiarity with the literature and from the analytic process itself.

I developed theoretical sensitivity because of my background as a public health academician having connection with public health leadership in Nepal as well as by extensive reading on the research topic. However, as a part of reflexivity (see below), I tried to minimize any influence of my pre-conceived ideas and perceptions during

data analysis. This was done by revisiting written memos as well as by consulting with supervisors who reviewed the transcripts and the codes generated. During the process of coding and analysis, I gave key attention to the actions of 'codes' by seeing sequence and making connection within them, as well as the conceptualized relationship between experiences and events.

### *3.13.2 Reflexivity*

One of the assumptions in any qualitative study is that the researcher should be able to conduct research without any preconceptions or ideas on the subject matter under study. The same was also assumed for grounded theory (Glaser and Strauss, 1967). But, Charmaz's constructivist grounded theory acknowledges that researchers cannot be free from their past experiences, and those past experiences build preconceptions. Thus, the researcher plays a vital role in all stages of data collection and analysis, making it more imperative to employ reflexivity (Liamputtong, 2013; Charmaz, 2014).

As a researcher, I was very conscious to minimize the bias in this research. Since I worked in public health academia for 7 years, I have some connections with the health system of Nepal and some ideas on how the public health leadership in Nepal works. So, there was room for potential preconceptions. I also have had my concepts, beliefs and experiences relevant to this research, and I tried not to portrait them in this study. I did not use my connections in recruiting the samples. Rather I used a focal person from the Ministry of Health for initial recruitment and made the sample as diverse as possible. I explained and convinced the participants about the importance of this research in Nepalese context. Participants were happy to be a part of this research and were also interested to know the results arise for this research. Participants provided enough time for interview because of my good rapport building, respectable communication and prior relationship with (some of) them. I felt participants shared their real feelings and experiences which contributed for the explicit findings of this research. However, I felt some difficulties in conducting interview with two participants, mostly because participants were more reserved in sharing their experiences on leadership practices and their relationship with others. The information gap arises from these participants was fulfilled by interviewing other participants with similar socio-demographic and job-related characteristics.

While doing data analysis, I tried to be open with participant's views and experiences and prevent my preconception being reflected. Since I shared the same socio-cultural characteristics that most of the participants did (for example gender and caste), I tried ignoring my own experiences while collating codes from the interview transcript. Although it was not possible to be empty mind, I tried to be open in every processes of research, mostly in data collection and analysis. I acknowledge that I was aware of my experiences and preconceptions and how they might influence the interpretation of data. I also acknowledge that meanings are co-constructed by the interaction between the researcher and participants, which is consistent with the philosophical assumptions of constructivist grounded theory.

### *3.13.3 Theoretical sorting, diagramming and integrating*

As stated in 3.11.1, I did memo writing in three phases – soon after interview, during transcription and during analysis. The memo written during data analysis was an 'analytical memo', which was sorted, diagrammed and integrated (Figure 3.3). Sorting in grounded theory is more than organizing which creates and refines theoretical links (Charmaz, 2006). The categories were compared so the relationship between categories became more apparent. The categories and their relationship were diagrammed mostly in the form of figures and a conceptual map to visualize the emerging theory. Subsequently, the analytical memos were integrated to explicated theoretical analysis and to construct theoretical framework.

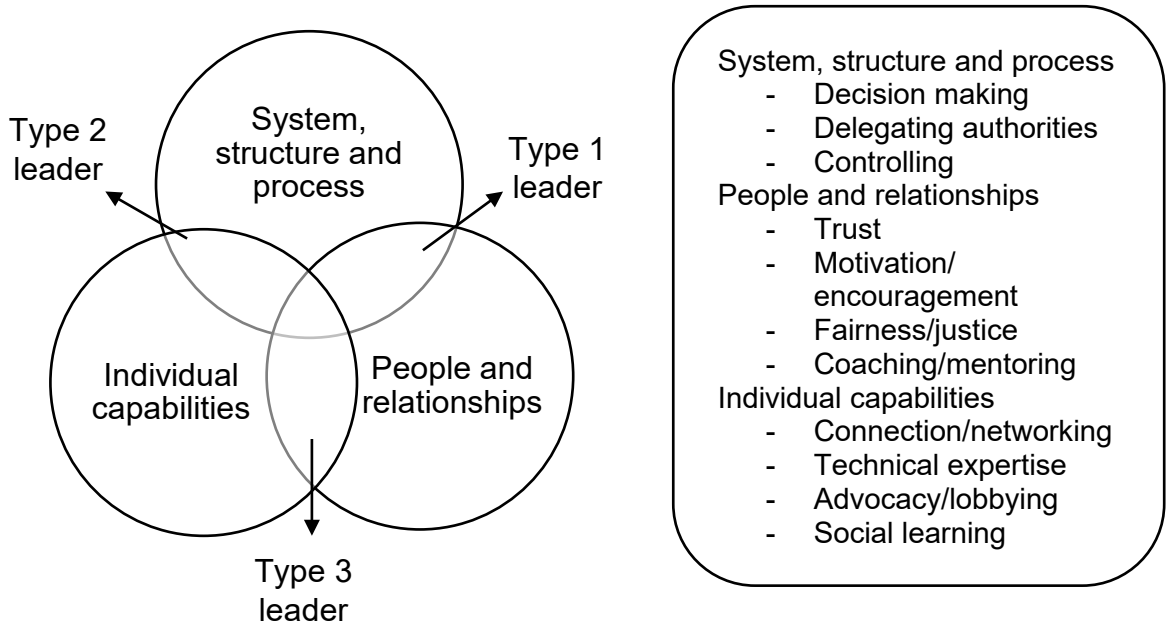



**Figure 3.3** ***Example of diagramming of categories (leadership enactment)***

### *3.13.4 Theory construction*

As a constructivist approach, the theory from this research is created from shared experiences and relationships with participants. The simultaneous collection and analysis of data resulted in the emergence of theoretical concepts. These concepts were constantly compared to develop the substantive grounded theory.

### *3.13.5 Theory validation*

Once I developed a tentative theory on leadership development findings, I had some consultations and meetings in Nepal. I met and discussed the theoretical model with two retired health secretaries (who were not the research participants but had long experience as public health bureaucrats and were designated in top-most positions under MoH) and cross-checked whether the components of the theoretical model reflected the existing scenario of leadership development in the country. I also had some discussion with the members of the Project Advisory Group (PAG) from whom I revised the way of constructing the theoretical model. From these consultations and discussion, the theory did not lose its essence, but it was refined to have a better look and understandability.

## 3.14 Theory evaluation

Charmaz (2006) provided some criteria to evaluate grounded theory studies. These are credibility, originality, resonance and usefulness. These aspects of the developed theory from this research are discussed below.

### *3.14.1 Credibility*

In a qualitative study, credibility means the collected data accurately reflects the multiple reality of the phenomenon of the study. Grounded theory ensures the collected data reflects the experiences of participants and the meaning of data is accurate (Charmaz, 2014). In this research, a variety of sources were used to collect data such as the human resource database, document analysis, in-depth interviews and focus group discussion, from which the multiple realities were drawn, and the findings were also triangulated. I had prolonged engagement with the research participants (about eight months in field with 1-3 interviews with each) to collect relevant data. Findings from initial interviews constructed and guided the questions for later interviews. All the steps of data analysis process were carefully taken such as coding, constant comparison and theoretical sorting, diagramming and interpretation. Participant's words were used in the form of 'in-vivo' codes and the codes reflects the same meaning as participants felt and expressed.

### *3.14.2 Originality*

Originality in grounded theory is about gaining new insights, ideas and concepts in the area studied (Charmaz, 2014). This research carries the features of originality as it developed new insights and concepts on public health leadership in the context of Nepal which has not previously been discussed in literature. Chapter 2 (literature review) describes how this research topic was identified and developed through the review of available literature. The methodology adopted is also original because there were very few qualitative studies in public health leadership and no grounded theory was found in exploring the leadership dimension in the Nepalese or any similar context.

### *3.14.3 Resonance*

Resonance in grounded theory is about making sure the categories reflect the implicit and explicit meanings of each participant's lived experiences under the phenomenon of the study (Charmaz, 2014). The categories used to develop the theory portray the fullness of their experiences in public health leadership. The theory makes sense to the participants by incorporating the deeper insights of their lives and work. I shared the interview transcript as well as the emerged codes with the participants, and they confirmed that the findings represent their feelings and experiences.

### *3.14.4 Usefulness*

Usefulness in grounded theory is about contributing to the breadth of knowledge and suggesting whether further studies need to be done (Charmaz, 2014). This research will significantly contribute to the knowledge about public health leadership in Nepal. People who have a role and experience in public health leadership would be able understand the theory developed from this research. The theory adds new concepts and understanding in Nepal as well as for other countries in South Asia that have similar socio-cultural settings. Nonetheless, it will fulfil the existing gap in literature related to public health leadership around the globe.

## 3.15 Conclusion

This chapter described, in detail, the methods carried out to explore the dimensions of public health leadership in the Nepalese context. Procedures of grounded theory methodology were explained and how it was initiated, continued and completed to construct a theory. The developed theory was also evaluated based on the criteria for grounded theory studies.

# CHAPTER 4 – FINDINGS AND GROUNDED THEORY

## 4.1 Introduction

This chapter reveals the overall findings of the research project adopting the methods and methodology explained in the previous chapter. It is about the nature, enactment and development of leadership styles, behaviours and skills at all levels of public health workforce in Nepal (Aim 1). This chapter has three sections. The first describes how leadership, as a capability, is developed within an individual (Aim 1, objective 1); the second section describes the practical application of leadership including the designated leadership roles/responsibilities and adopted leadership styles and behaviours (Aim 1, objective 2); the third describes the existing as well as expected skills and competencies for leaders working in the public health arena in Nepal. This chapter, with a series of figures, illustrates the findings on different aspects of leadership development, enactment and competencies from which, a grounded theory has been developed. (Aim 1, objective 4).

## 4.2 Study methods and participants

As stated in chapter 3, this study involved 46 in-depth interviews with 22 public health officials, six focus group discussions with public health officials and analysis of extant documents. Participants for this study were working in different institutions under the Ministry of Health with a range of work experience from local (district) level to central (federal) level. Data obtained from multiple methods were analysed using grounded theory to construct a framework to understand the public health leadership in the Nepalese context. The key characteristics of study participants selected for in-depth interviews along with the number of interviews is tabulated below (Table 4.1).

**Table 4.1 Study participants, their characteristics and number of interviews**

| Participant | Age | Sex | Position | Academic background | Total experience | Leadership experience | No. of interview |
|---|---|---|---|---|---|---|---|
| P1 | 52 | M | Sr. PHO | General | 29 | 2 | 2 |
| P2 | 45 | M | PHO | General | 9 | 1 | 2 |
| P3 | 34 | M | Sr. PHA | Public health | 4 | 4 | 3 |
| P4 | 54 | M | Sr. HA | Medicine | 18 | 6 | 2 |
| P5 | 54 | F | CPHA | Medicine | 38 | 2 | 2 |
| P6 | 57 | F | PHA | Nursing | 23 | 1 | 3 |
| P7 | 45 | M | PHA | Medicine | 3 | 1 | 3 |
| P8 | 55 | M | CPHA | Public health | 38 | 21 | 3 |
| P9 | 57 | M | CPHA | Public health | 37 | 18 | 3 |
| P10 | 37 | F | PHO | Public health | 3 | 1 | 2 |
| P11 | 57 | F | Sr. PHA | Public health | 36 | 9 | 3 |
| P12 | 55 | F | Director | Public health | 32 | 4 | 3 |
| P13 | 41 | M | CPHA | Public health | 2 | 2 | 2 |
| P14 | 37 | M | PHA | Public health | 15 | 3 | 3 |
| P15 | 47 | M | Sr. PHA | Public health | 17 | 12 | 3 |
| P16 | 50 | M | RD | Medicine | 25 | 10 | 1 |
| P17 | 58 | M | Director | Public health | 34 | 16 | 1 |
| P18 | 57 | M | Director | Medicine | 25 | 13 | 1 |
| P19 | 58 | M | Director | Public health | 36 | 15 | 1 |
| P20 | 53 | M | Director | Medicine | 30 | 11 | 1 |
| P21 | 35 | F | PHA | Public health | 3 | 1 | 1 |
| P22 | 47 | M | Sr. PHO | General | 22 | 3 | 1 |

*Note: Directors were also CPHA*

The participants had a wide range of experiences (1-18 years) in leadership positions being Public Health Officer, Public Health Administrator, Senior Health Administrator, Chief Public Health Administrator and Director (Regional and Central). Most of the participants worked in the primary level and it took more time for them to be in leadership positions and as a result there are more participants in their 40s and 50s. Very few participants in their 30s had direct entry into higher positions. All the study participants had recent qualifications in public health (BPH and/or MPH), however, their academic background varied. Twelve participants had a similar academic background (public health), six were medical doctors, one was a nurse and the

remaining three had non-health backgrounds. Not all the participants were in leadership positions at the time of their interview. In those cases, participants were interviewed based on the leadership positions they held in the past.

Thirty-one staff working under the leadership of public health officials were included in six focus group discussions. The details of focus group discussions are shown in Table 4.2.

**Table 4.2 Participants of focus group discussion and their profiles**

| FGD No. | Institution | No. of participants | Participants profile (gender and job role) |
|---|---|---|---|
| 1 | District Health Office | 6 | 4 males and 2 females<br>1 nurse, 3 paramedics, 2 administrative staff |
| 2 | District Health Office | 6 | 5 males and 1 female<br>1 nurse, 3 paramedics, 2 administrative staff |
| 3 | Regional Health Directorate | 6 | 4 males and 2 females<br>1 nurse, 3 paramedics, 1 public health officer, 1 administrative staff |
| 4 | Regional Health Directorate | 6 | 3 males and 3 females<br>1 doctor, 2 nurses, 2 paramedics, 1 administrative staff |
| 5 | Department of Health Services | 7 | 4 males and 3 females<br>2 public health officers, 3 paramedics, 2 administrative staff |
| 6 | Department of Health Services | 5 | 4 males and 1 female<br>2 public health officers; 1 paramedic, 2 administrative staff |

The details of documents that were reviewed and analysed are shown in Table 4.3.

**Table 4.3 Documents reviewed and analysed for study**

| Document No. | Document type | Target group | Unit |
|---|---|---|---|
| 1 | Job Description | Chief of District Health Office | One |
| 2 | Job Description | Chief of District Public Health Office | One |
| 3 | Job Description | Senior/Public Health Officer | One |
| 4 | Job Description | Senior/Public Health Administrator | One |
| 5 | Job Description | Senior/Sub-Health Administrator | One |
| 6 | Job Description | Regional Health Director | One |

### 4.3 Leadership Development

This section describes the ways in which an ordinary individual becomes a leader in public health, with reference to the socio-cultural context of Nepal. The study showed how leadership development has its foundations with the family and social environment in which an individual grows up and socializes. With natural characteristics and other social events, individual initiate the journey of leadership. The journey continues with exposures and experiences in public health settings, continuing the development and expansion of the skills and competencies for leadership. The overall findings on leadership development within an individual are described in four phases.

a) The initial phase in which family and social environment, and individual characteristics play a role in the background.
b) The identification phase in which an individual is formally identified and initiates their leadership journey in public health organisations.
c) The development phase in which an individual creates core leadership capabilities.
d) The expansion phase in which an individual expands their leadership capabilities and recognition.

#### *4.3.1 Initiating the foundations of leadership development (Phase 1)*

This is the earliest phase for leadership development in which an individual develops the essence of leadership abilities because of their distinctive characteristics and the family and social environment in which they grew up. This phase mostly describes an individual's exposure during the period of childhood and adolescence. However, the components of this phase continually influence the process of leadership development throughout the life of an individual *(Figure 4.1)*.

During the time when the family and social factors played a role in developing leadership, an individual knowingly and unknowingly observed the activities and characteristics of other people in society who have leadership roles. From that observation, to some extent, an individual understands the essence of leadership

behaviour and leadership qualities. This understanding during childhood and/or adolescents period acted as a backup for leadership behaviours in the future.

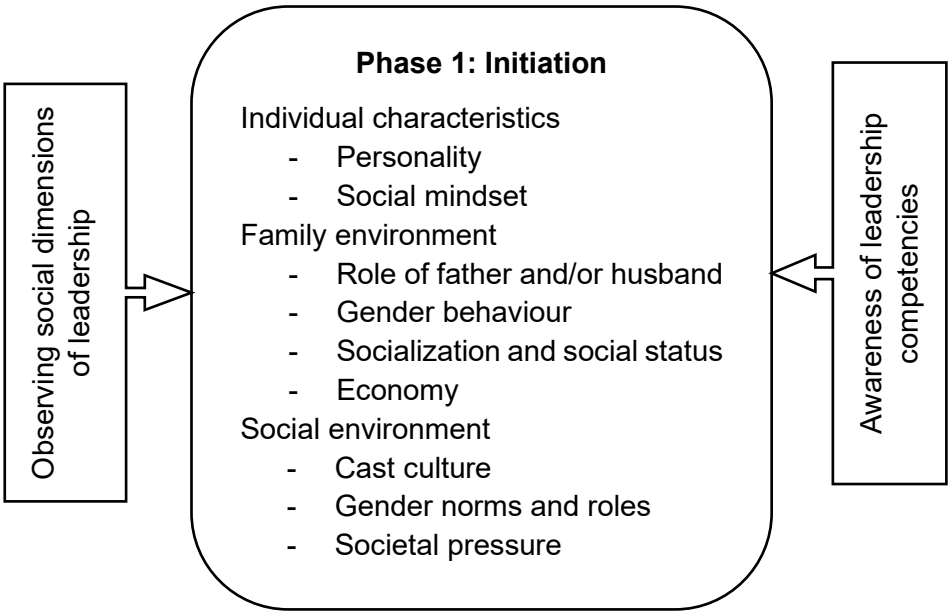



***Figure 4.1 Initiating the foundations of leadership development (phase 1)***

***Individual characteristics –*** Individuals who were successful in leadership naturally engaged with others (social mindset) and showed interests and involvement in social activities during childhood/adolescence. Because of their extrovert nature, they enjoy connections with professionals and general public. In addition, individuals who perceive themselves as stubborn were also successful in leadership because of their personal determination and an attitude to show others their capabilities.

> *I was involved in many social activities during my adolescence. I enjoyed talking with people, helping them farm…. if I was in my village, people used to say that they don't need to be stressed. [P19]*

> *…. I had just finished at high school and was a teen when I got married, I didn't know anything….my husband's family decided not to educate me further. It was time to go to 'maiti' (mother's house) for cultural purposes after marriage…. after stepping on the plane's ladder…. I told them…I will not return. I was not aware of all these things at that time …. that was disobedience…. I did that for my study. [P12]*

***Family environment –*** Family was found to be the first and most leading institution in developing leadership insights for the future, no matter whether the individual had this intention. The role of the father and/or spouse, gender behaviour, socialization, economy and social status of the family played a greater role to sensitizing an individual towards leadership in the future.

Advice and support from family members helped an individual to design a career path. The father acted as career anchor as well as the primary source of guidance for their children whereas the role of the mother was unnoticed in terms of career progression. The father's support before marriage and the husband's support after marriage was considered as a key to success among females. The role of the wife was important for the husband as she handles the household chores and accepts the external movement of her husband for his academic and professional achievements. Gender equality inside the family provided an equal opportunity for both males and females for their career development. Empowering girls from childhood helped them to develop dedication and commitment, by which they were able to tackle the unfavourable gender norms in society.

> *To achieve this position, there was also the role of my wife, because she provided me the freedom that I needed. I spend my family time with my clients. If she had have resisted this, it might not happen. [P15]*

> *My parents never taught me that being a daughter I should not do this…. I didn't feel any difference since from my childhood. I had been treated equally like my brothers. I was motivated to sustain myself…. independently…. I think that encouragement had a positive count. [P21]*

Socialization during childhood determined the way an individual perceives the people, resource and services they lead. Individuals have life-long impression of their family's positive role and support for society. Public health leaders who grew up in this culture were found to be more sensitive towards services for needy people, especially the poor and vulnerable. These leaders developed a 'culture of support' in their organisation and demonstrated the value of resources to their staff.

> *…..being sensitive while providing services…I learnt this from my family. The nomads and poor people used to live in our spare house during their travel, and they had food. I learned to help people from my childhood. Even now, if I hear that some clients return without receiving services, I feel very bad. That service*

*and this service (public health) is different but the concern is same, we should provide whatever they (people) need. [P3]*

Economy was an influential aspect in enrolling education, a pathway for leadership. Families adopted need-based utilization of resources or even compromises with financial aspects to manage the expenses in education. Individuals from lower economic status required support from external agents such as government and other donor agencies. Individuals from middle class families, who already had some financial privileges, also experienced financial hardship in arranging educational resources and other physical resources. As these individuals grew up in a culture that value for resources, they tried to manage the hardship by being self-reliant or by adopting alternative ways. Individuals who experienced financial crisis/limitations and struggle in managing the crisis, eventually developed financial consciousness. These individuals after becoming a leader understood the value of resources and utilized them in a very effective way.

*The amount that we spent in the canteen…it was enough for me and my brother at home. So, I usually didn't have lunch in the school's canteen. Even if I thought to buy a book, the expenses for the whole month (for groceries) became inadequate. There were so many days that I walked without any money in my pocket. After staring BPH course, my brother was a teacher in school, which made it a bit better. After that I also started to teach and had some money. After that, there was no scarcity…. otherwise it was a scarce. [P3]*

***Social environment –*** Apart from the environment inside the family, the social environment has a supplementary influence in developing the foundations for leadership. The most influencing factors of social environment explored are gender norms and roles, caste/ethnicity culture and societal pressure.

The traditional gender norms and roles in Nepalese society acted as an advantage for males but provided obstacles for females. These social norms also impacted on the way a family adopt gender behaviour. Socially assigned additional responsibilities for women (such as care for children/family, household chores) and cultural restrictions on them (such as staying at home, not being involved in social leadership) affected access to education and jobs, thus had impacts on future leadership development.

However, gender equality in the family and self-dedication of an individual outweighed traditional gender norms. Female leaders who were from families practising more equal gender roles felt proud in the sense that their parents defended them from the prevailing gender norms of traditional society. On the contrary, female leaders who experienced uneven gender roles in their family and society, tackled that discrepancy and adopted self-direction to achieve their aims to be a leader.

> *Obviously, it was a privilege as a male. I was free, I entertain the freedom as a male guy. I didn't face the barriers that a female has to face. That freedom, of course, helped me in my career development. [P7]*

> *Our culture and norms benefited us (male), and…. yes…. it's difficult to act as a female. For example, I work and even my wife works, when we meet at home in the evening, I expect a cup of tea from my wife…that means…our society still has this type of expectation. [P14]*

Every society has its perception towards education and/or job status of each family residing there. Society observes the success and failure of individuals in terms of education and financial status. Because of this, an individual constantly gets moral pressure to show his/her achievements to the society. This societal pressure acted in a positive way to achieve better education and job status, thus enhanced the way for leadership in the future.

> *We…who are from a middle class or lower middle-class family…always have pressure that 'you have to do something'…it is created by the society. I think, this social pressure worked for me. That pressure is painful sometimes but ….it is good for development. [P15]*

Socially assigned roles for certain castes/ethnic groups had established the values towards education, job, and economy. Ethnic groups that value education (such as Brahmin), emphasize achieving knowledge at any cost. Because of this education-preference culture, individuals from these ethnic groups are motivated for education from their childhood. The culture of education continues throughout their life, which helps them to get better job opportunities and eventually directs them into leadership positions.

> *The characteristics inside a caste or the culture of caste….is important. For example, giving value to education, work…. that value is more important.*

*Brahmin caste has a value to educate children…education is more important, and we emphasize educating our children at any cost…. like as…. we have a culture of savings; we do not do unnecessary expenses. We have had this sort of exposure since our childhood. We were educated from the ground reality that what to do, what not to do. So, it's not the caste but the culture of the caste that puts Brahmins in front in job and education status. [P15]*

***Transitional factors between phase 1 and 2 –*** To proceed to the second phase of leadership development, an individual requires relevant education and a job. Formal courses in public health were the most common means of starting the early career in public health. The reasons behind enrolling in public health education and/or job were basically due to the following circumstances:

- alternative to a medical degree
- interdisciplinary linkage between public health and other health profession
- exposure in public health activities
- observing others

Individuals started their journey in public health with interdisciplinary conflicts. Because of social recognition of doctors in Nepal, individuals interested in the health sector usually preferred to study for medical degrees. Unsuccessful attempts at medical entrance examinations motivated them to seek an alternative and public health is considered the best alternative for that. However, once the individual entered the profession, they start enjoying it and admire the work in public health. On the other hand, health professionals from medicine, nursing and other health sciences/education background preferred to expand their career in public health because of the interdisciplinary nature of public health. As these professionals became involved in public health activities, they perceived their work (as a doctor or nurse) confined and unidirectional and wished to provide health services beyond the four walls of the hospital. Involvement in designing and implementing public health interventions helped individuals to understand the broad scope and importance of public health. Companionship with other health professionals helped in determining their career path, and connection with community people provided further motivation to work in public health. Observation of friends working in the field of public health also inspired people to work in public health because of the job mobility (frequent travel to

different places), connection with community people and professionals, money and social prestige. A conducive environment was considered important to translate the interest into practice. Developing interests in being a public health professional, if supported and encouraged by external agents (e.g. funding organisation and supporting policy from the government) and internal agents (peer, family members) contributed to the pathway for leadership development.

In the context of Nepal, public health professionals wish to work in the government sector rather than private and non-governmental sectors, because they considered the government sector to be one of the best platforms to develop and practice leadership. Individuals who were involved in social and welfare activities in the community develop a concern for their responsibility to the state and ambition for change. These individuals were excited to work at the policy level and governance and prefer government jobs for further leadership opportunities. Other reasons to choose governmental jobs were job security, sustainability, social prestige and recognition, and family job culture. Government jobs are considered more secure, flexible and full of non-financial opportunities. Because of great social recognition, family members and other career anchors in society (e.g. teachers) recommended, often provided pressure for a government job. Individuals who had a family culture of government jobs were encouraged and trained to be a part of government.

### *4.3.2 Getting identification and affiliation as a leader (Phase 2)*

The second phase of leadership development is when an individual is identified as a public health leader because of his/her position and affiliation with a health-related institution along with networking with other professionals and recognition from the community where they work. During this phase, an individual practices leadership based on the roles and responsibilities assigned by the affiliated institution. For this, s/he utilize existing leadership competencies learned from educational courses as well as from the social experiences in the past *(Figure 4.2).*


***Figure 4.2 Getting identification and affiliation as a leader***

***Position/affiliation –*** The formal journey of public health leadership starts after getting an official position, such as public health officer or public health administrator. Being a chief executive of an institution, an individual commences leadership roles and responsibilities. Utilizing one's knowledge and expertise for better health outcomes by mobilizing staff and community people is considered as the core part and continuous job for public health leaders.

> *I was connected with community people and their health since I practiced as an Auxiliary Health Worker. After I became a public health officer, I started to think and act more from public health perspectives. [P1]*

***Community recognition –*** By involvement in public health interventions and acting as a health educator in the community, an individual gets recognition from the community. The level of recognition increases after the community feels the improvement in health services and indicators (visible outputs) such as availability of uninterrupted basic health services, and improvement in maternal and child health.

> *Because of my public health activities, community people recognized me…it was such a backward community…. some changes provided me with satisfaction. Children started to get immunized; deliveries were conducted at health facilities…. though it was struggling, the results made me motivated. [P3]*

***Professional networking –*** Working as a public health leader also increased connections with senior public health professionals and leaders, thus people developed professional networks. Continuous efforts to improve public health

programs and improving health indicators results in increased status and recognition within the professional network and inside the government system.

> *…. I developed more connection …. a type of relationship. Later, I received responsibility to handle the neonatal programs…. the mortality and morbidity decreased…. I became more recognized by my colleagues and seniors. [P9]*

***Transitional factors between phase 2 and 3 –*** To proceed to phase 3, an individual needs additional education and/or relevant training to facilitate the leadership journey by updating/upgrading existing knowledge and skills. Continuing education acted as a means of career development and helped to enhance expertise in leadership. Some individuals, after having specified years of experience, get privilege to move for senior leadership position through internal upgradation and promotion. Family support initiated from the beginning needed to be continued to facilitate the leadership journey. Here, the role of the father gradually decreased and mutual understanding between spouses played a vital role, especially in married females. Individuals who did not benefit from family support, developed self-dedication to proceed on their leadership journey.

### *4.3.3 Developing core leadership capabilities (Phase 3)*

This is the most important phase of leadership development as it is concerned with the development of core leadership abilities via different sources and methods (Figure 4.3). During this phase, an individual practice more leadership than assigned (as in second phase) because of the work experiences. While doing this, s/he realizes their insufficiency of existing capabilities for leadership and attempts to develop additional skills and competencies. The factors contributing to leadership development in this phase are personality shifting, passion for change, observation/inspiration, learning by doing, and networking and collaboration.

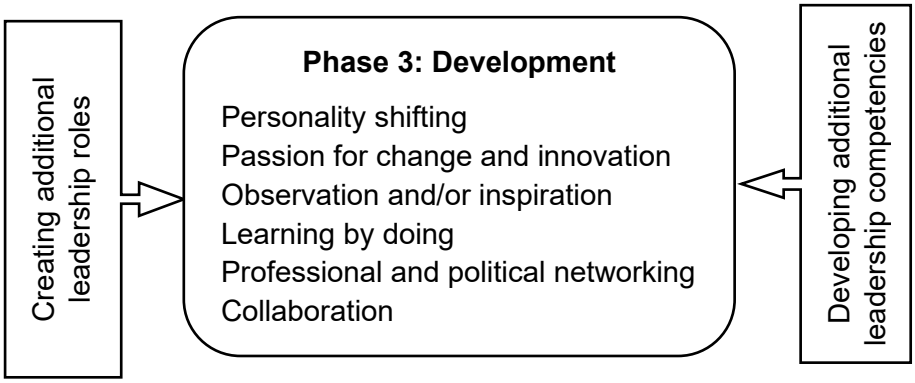



***Figure 4.3 Developing core leadership capabilities (phase 3)***

***Personality shifting –*** Public health leaders, who define themselves as quiet and shy, realized that public health needs extraversion characteristics. Exposure to public health activities and connection with other professionals helped them to develop extraversion characteristics that fit the nature of public health. This improved the way leaders speak, share and communicate with others. Thus, an extrovert personality is one of the triggers for leadership development.

> *I was shy at the beginning…. I thought that I don't need to say, they (supervisors) will understand. But slowly, I changed myself. I started to speak…realized that I must talk. I felt that was a part of leadership development within me. Now, I know how to deal with seniors and how to make my view influential or which way to proceed. [P3]*

***Passion for change and innovation –*** As stated earlier, individuals who wish to make an impact on policy and governance prefer to work with bureaucracy. Public health professionals working in the non-government sector switched to work in the government sector after they realized that small things could bring a significant impact, if it could be done inside the structure of the health system. Passion for change and innovation encouraged public health leaders to challenge the improper functioning of the health system and discovered new ways/techniques to improve the health system and/or indicators. Experience acted as a backup for the execution of passion for change.

*……I was the person who did the lobbying to inhibit the affiliation of public health courses to private sector……I felt like…. if I could be a part of government, then I can make an effort for changes…. [P9]*

*When working at the INGO, I thought…..if I do this much effort in the government sector, I can change the whole district ….but staying there (INGO), I neither got recognition nor can made any changes in the community …..that's why, I felt the need to work inside the system. [P3]*

***Observation and inspiration –*** Observing others and being inspired by them was one of the aspects of developing leadership. Individuals observed the administrative and leadership performance of senior leaders and tried to duplicate them in their life. The things that the junior leaders mimic from their leaders were their commanding capacity, decision making strategies, respect to work, relationship with staff, tactics for motivating staff, encouraging and convincing staff for additional responsibilities, and way of handling the diverse workforce and their expectations. However, individual variations were found in getting inspired and in applying the inspirational factors. A matching mindset between leader and follower was found important for inspiration.

*We started to work from the basic level. We saw our role model in public health…. there were very few…. but they were technically competent, supportive and always inspired us. By seeing the leadership of those people, I was inspired to work here. [P17]*

*"…...his capacity for administration, capacity to feel public health, thoroughness, leadership capacity…. particularly the multi-dimensional type personality…I got inspiration. [P1]*

Inspiration not only comes from people but is also developed from social environments. Community acted as a subject of inspiration and learning for some leaders. Observing community lifestyles, issues and problems, the way of managing resources, and their effort in struggling with scarcity and remoteness inspired public health leaders to serve their community much more. Providing health services was considered as a prestigious and religious job for these leaders.

*When I feel alone or feel like I can't do anything, then I go to the field…mostly remote areas. I observe the community, their living status, their houses, their behaviours…. that became an inspiration for me. After I see people struggling with*

*hardship, I realize how lucky I am, and still I have so many things to do. This thing charges me, I get energy…. for a whole month from a single visit to community. [P3]*

*More than an individual, it's like serving the community. The difficulties that are faced by health workers, even the health problems faced by people…. if I could do anything beneficial for them, why should not I do it? Community is an inspiration for me to work in public health. [P6]*

***Exposure and experiences –*** Exposure and/or experience was one of the best ways to develop leadership capabilities within an individual. Public health leaders learn to lead from their experiences, even from the time when they worked as a basic health worker. Prolonged engagement with community and continuous experiences in public health activities provided public health leaders with an opportunity to understand various dimensions in which leadership works better. Experiences result in the better understanding of needs and issues of institutional staff and community people, thus public health leaders were able to handle a diverse range of workforce demographics and rising public expectations. Experience was also a cause for leadership maturity.

*While working as institution chief…. most of the time was spent on leadership and decision making. In the beginning, I made immature decisions and inappropriate leadership. But as I worked more, I learned many things…my learning continued…. I applied practical things from my study…. I became mature as the time passed. [P20]*

Exposure in informal gatherings is an additional advantage for public health leaders as the discussions in those situations meant individuals had a sequence for official decision making in the future. However, this acted as a barrier for female leaders who were sensitive to the traditional gender norms and roles, and where the people in the community perceived female leaders to be in moral boundary or to follow the traditional norms. This made deprived females of learning arising from informal gatherings and from the additional responsibilities of leadership. Females who were conscious of their leadership development challenged the traditional gender norms and adopted a strategy to balance with their on-site behaviour and existing social perceptions.

*As a female, I can't stay till midnight……and can't drink (liquor) as well. There are various reasons that I must be home on time. We don't participate at evening*

*time…where the males used to drink, even it is good or more civilized. Because of this, our informal communication, the social bond shatters…. [P11]*

*After coming here (Ministry of Health), I changed my strategy. I go wherever they invite me. I know my limitations, it's not necessary to get drunk. I participate as far as practicable by arranging the time and convincing my family. Now, they call me in to policy level discussion. I know… if I don't go there once, they don't invite me afterwards saying that I can't give time. …. But it's not easy for all ladies…. they are bounded with family issues. [P21]*

***Networking and collaboration –*** Working in public health connects an individual with different health professionals and organisations along with community people, social organisations and non-health stakeholders. Being a public health leader, an individual works collaboratively with both health and non-health sectors. This sort of networking and collaboration demands advocacy and communication, the practice of which helps an individual to develop leadership. Apart from the second phase (initiation) in which a public health leader mostly engages in professional networking, the third phase involves networking and collaboration with political leaders and non-health ministries. With this, public health leaders develop additional leadership skills such as negotiation and lobbying.

*Relationship…coordination….it depends upon you. As a public health administrator, there are lots of spaces to contribute health from other sectors. [P17]*

*For that disability (policy), my and the minister's wavelength matched. I was planning and designing the program, and he has the intention to do that too. I was advocating for him and he asked me to generate evidence…. I did that and he did the lobbying. [P9]*

***Transitional factors between phase 3 and 4 –*** During the third phase, an individual obtains an acceptable level of leadership recognition based on their position as well as perceived by their staff. S/he then continually strives to develop his/her leadership capabilities and wishes to expand the leadership status beyond the public health sector. An individual requires self-confidence, self-esteem and self-determination to accept the leadership challenges and to motivate self to go above and beyond.

### *4.3.4 Expanding leadership capabilities (Phase 4)*

This is the final phase of leadership development in which an individual expands and increases his/her leadership abilities by continuous self-directed learning, resilience and optimism, and by broadening professional and political networking (Figure 4.4). In this phase, a public health leader reaches the optimum leadership state by position, and most importantly by skills and experience. This makes an individual able to modify (or even manipulate) leadership roles and strategies to bring in desirable changes to the health system. This phase is critical for every public health leader as they struggle to retain their status of acceptance (by others) and social prestige received as a part of their leadership journey.


***Figure 4.4 Expanding leadership capabilities (phase 4)***

***Continuous self-directed learning –*** Being studious and updated with contemporary social, political and public health issues helps public health leaders maintain the superiority of their leadership as well as to lead the newcomers with revitalized knowledge. Public health leaders who were eager to learn, created an enabling environment for themselves.

> *Learning is like…. I can learn from supervisors, even from an office assistant…it's not important from where you learn and how you learn…. if you learn, that's for you. If you have the intention to learn or if you are positive to adopt learning……there is environment to learn….in fact, you create the environment by yourself. [P14]*

***Resilience and optimism –*** After having intense experiences of leadership public health leaders understood the value of human resources and the reciprocal relationship with them. Being resilient and optimistic was one of the accomplishments of their leadership, which they used to mobilize their team the way they desire.

> *….it was true. I now feel that I had walked in the right path. My past works are motivating me…. whatever I initiated in the past, that is in practice nowadays…. I am satisfied with this. [P19]*

***Acceptance (by others) –*** Because of their excellent relationship with others, being loyal in providing services, practising justice and equity in the workplace, pioneering novelty and dedication to enhance the health system, made public health leaders accepted by their followers as well as by political and professional groups. The existing network and collaboration with professional and political stakeholders need to be improved and continued, to sustain the proximity of one's leadership. Advocacy, lobbying and negotiation were considered as a must to prevent and control undue influence in public health leadership practices.

> *Whatever I did…I did differently, showed good leadership. Now I don't have to think if I don't get a shelter (during a field visit) …. I will get help from the people. If you see here (working institution), the staff are feeling like…. there may not come a person like me if I go from here…. I already created that environment. [P19]*

> *All Directors are assumed to have political affiliation. Although, people believe that I am also affiliated to one of the political parties, I am not experiencing difficulties from that. Still I believe, I am well accepted by all political parties. [P18]*

### 4.4 The Grounded Theory

Based on the factors explored for the development of leadership within an individual, a grounded theory has been developed to describe public health leadership in the context of Nepal. The following illustrates the grounded theory which is also the compilation of all findings and figures described earlier.

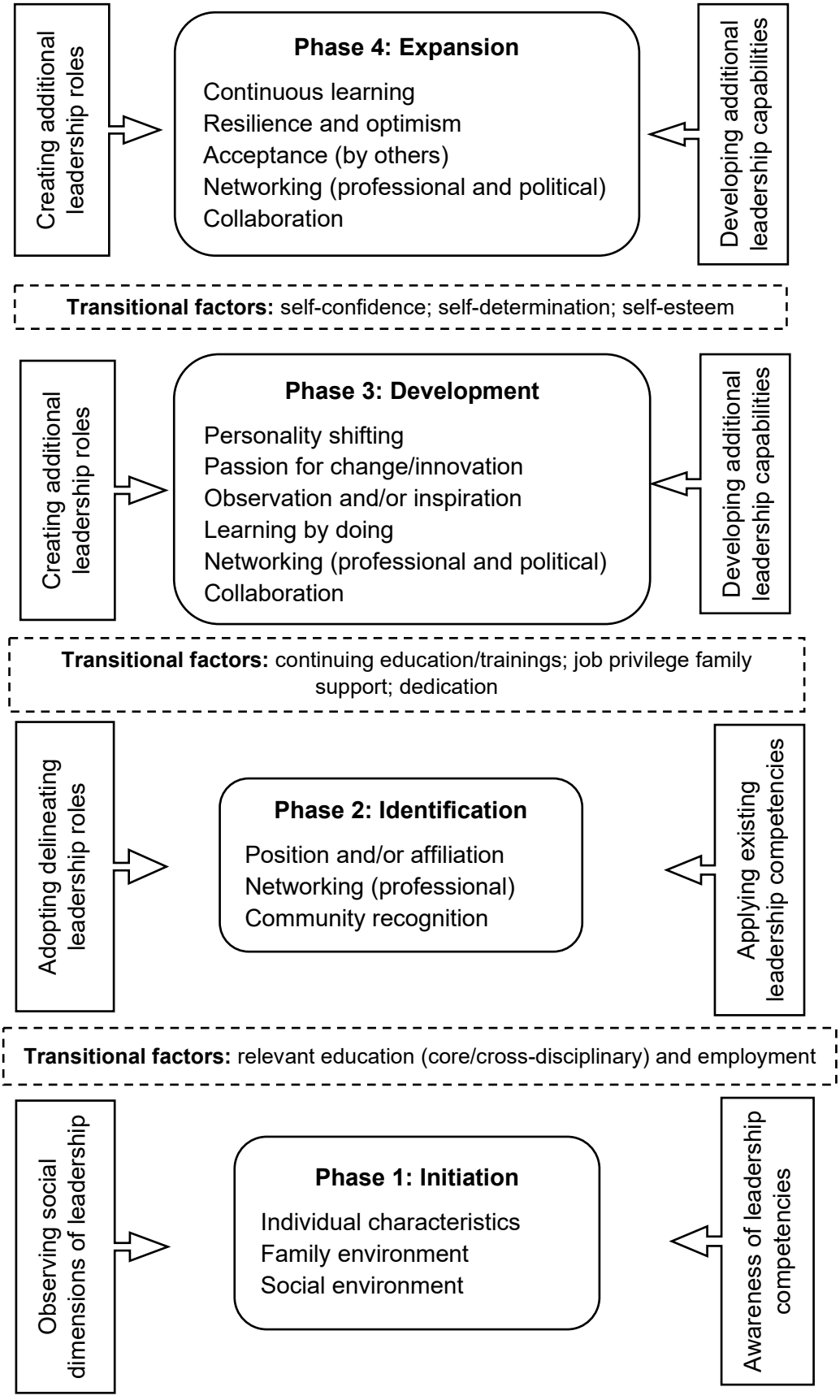



***Figure 4.5 Grounded theory on public health leadership in Nepalese context***

Figure 4.5 illustrates how an individual becomes a leader in public health and how s/he enacts his/her leadership styles and competencies throughout the leadership journey. The four phases illustrated sequentially in the middle of the figure (starting from the bottom and going upwards) describe the factors for leadership development along with the transitional factors between phases. The components in the left and right side of the figure describe the aspects of leadership enactment and competencies respectively and their relationship with the corresponding phases.

As a part of the grounded theory illustrated above, the factors related to leadership enactment and competencies and their descriptions are explained in subsequent sections (4.5 and 4.6)

## 4.5 Leadership Enactment

Public health officials practised and utilised their leadership capabilities in multiple ways to lead a diverse range of staff at various levels. The following themes show how a leader in public health enacts his/her leadership capacity in the organisation they are leading.

a) Job description: considering yet modifying
b) Leading the management
c) Focusing on people and relationships
d) Emphasizing system, structure and processes
e) Mixing of multiple leadership styles
f) Political influence: adjusting, fortifying and negotiating

### *4.5.1 Job description: considering yet modifying*

Each level of public health officials was assigned a 'Job Description' (JD) that stated the assigned roles and responsibilities that a public health official should carry out at different job levels and institutions. At the beginning of their leadership journey, public health officials used to follow what their job description suggests. The continuous exposure and experiences made these leaders realize the impracticability of their job description because of its vagueness, over-generalisation and policy-practice deviation.

> *It is different…… extremely different. I cannot do what my job description asked me to do. [P6]*

As a tool, the officials considered the JD as outdated, generic and traditional. Duties and responsibilities were often ad-hoc with limitations and/or extensions. Duplication of job roles between different positions created the inter-positional conflict and issues in authority delegation. Officials believed that emphasizing favouritism by leadership positions in delegating authority and responsibility, resulted in poor relationships between leaders (officials) and followers (staff).

> *We cannot follow the JD strictly what it says. Sometimes we do even more but sometimes we cannot do the things that we should do. Institution chief become biased in assigning duties and delegating authority, especially with the job that has financial benefits. [P10]*

However, as the job descriptions are policy documents, the public health leaders had moral/ethical acceptance of it. Overlooking the traditional and generic JD was considered as a compulsion rather than a choice.

> *JD is like…it is ornamental, not functional…being a policy document, we can't say we ignore…. but actually, we do… [P7]*

Job description mostly emphasized managerial activities rather than leadership. Officials who followed their JD had bonding and commitment towards their work, due to which they engaged themselves in day-to-day administrative activities. Over emphasis on micromanagement of public health programs resulted in good achievements in health outputs, however, it impeded the vision for leadership. Public health officials who wish to be proactive and expect changes in the system usually ignored the job description because they experienced that attachment to the job description will not direct them into the path of leadership. These officials often modify their job descriptions and bureaucratic processes for betterment in public health.

> *We are the top-level public health administrators, we don't have JD, we don't need it either. We are at the level that we should create our JD our self. What we expect the system to be, we should make it by our own. [P12]*

> *If I follow my JD, I will be like a manager. I can improve the health indicators, but I cannot bring any significant changes to the system. I need to cross the line for change. [P3]*

Figure 4.6, in the form of a framework, illustrates the linkage between job description and leadership.

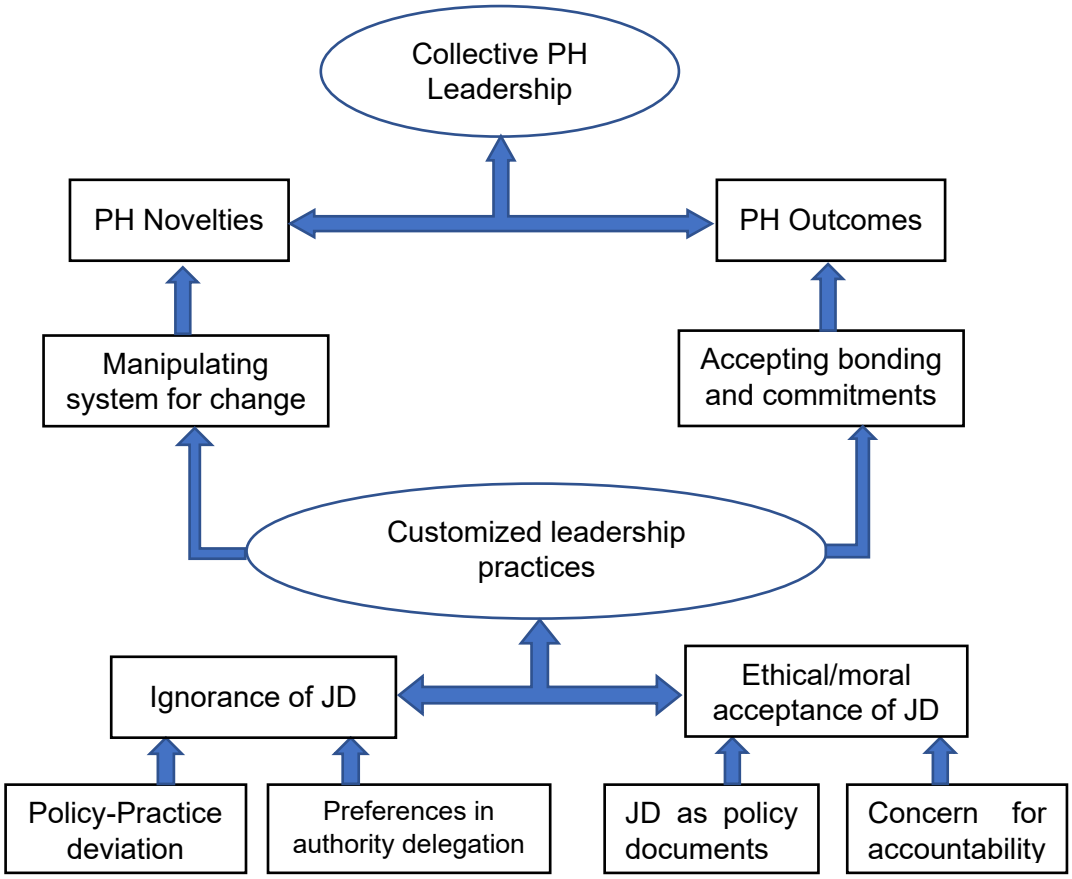



***Figure 4. 6 Framework on relationship between leadership and job description***

The figure above illustrates how the public health leaders perceive and practice the job description they had. Being a policy documents and thinking for one's accountability, leaders have moral obligations to accept their JD. However, considering its inapplicability, they used to ignore and/or reject what the JD says. Depending upon the circumstances, public health leaders customized their leadership practices with reference to their JD to bring changes or to achieve health outcomes.

### *4.5.2 Leading the management*

Public health leaders utilized their technical competencies by leading the basic managerial functions in their day-to-day work. The leading functions that a leader did were – planning the public health programs; organizing the structure and processes of both programs and organisation; arranging human, physical and financial resources; communicating, coordinating, and collaborating with different stakeholders; controlling the programs and activities; and generating and utilizing evidence through

information systems. Execution of these basic functions depends upon the level of the leader. The bottom level leaders usually had more managerial functions and fewer leadership functions whereas the top-level leaders focused prominently on core areas of leadership; the mid-level leaders fall in-between the two. As the head of an institution, the role of public health leaders is like being 'in-charge' of management. A public health leader always needs to ensure the public health programs and activities are managed efficiently and effectively.

> *"……doing overall leadership role as a chief of district health….such as administrative and management….doing technical support, communication and coordination with local stakeholders…..it is much more like program implementation, financial management….almost everything that includes both leadership and management…..more towards the side of management…. Nonetheless, management itself is a leadership. [P6]*

Ignoring the essence of managing an organisation barely allows an individual to move in the path of leadership in public health because working in public health is a mixture of technicality and the people. After getting familiar with social issues/problems and becoming capable of managing people and programs, a leader starts to think and act to bring changes without impeding the existing system in which they work.

> *Without technical capacity, we cannot provide leadership in public health. [P9]*

> *It is the planning (as a function of management) in which the vision of the leader could be seen. It is hard to bring instant change in our bureaucracy…. however, there is always a space if you wish to do innovation within a framework. [P3]*

Public health officials often perform their leadership roles within the scope they are assigned. Based on the context, public health leaders may create a vision or implement the vision already created by the politicians and endorsed by constitutional authority. Creating a vision and executing a vision are different things but interrelated with each other. Thus, it is all contextual for public health leadership. An official, at a time is a leader when selling his/her vision; and at another time could be labelled as a manager when performing public health activities.

> *…we do not have the role of leadership in the way we study and understand leadership. You need an open sky for leadership, but we are bound. But….*

*whatever we are assigned to do as an employee inside the health system, we can fully exercise our leadership on that. For example, if we are assigned to eradicate polio in certain area, we would exercise leadership inside that. [P15]*

### *4.5.3 Focusing on people and relationships*

As a part of leadership, public health leaders utilized their time in motivating, coaching and mentoring, convincing and counselling, listening, consulting and discussing with their staff. The purpose of all these activities is to make staff more responsible towards their duties/responsibilities and increase their performance.

Public health leaders mostly used intrinsic and extrinsic factors for motivating staff. Providing opportunities for field exposure and recommending training were the common extrinsic factors, whereas encouraging staff and praising them in the staff forum was the most common form of intrinsic motivation. In addition, some leaders used spirituality as a method to motivate their staff. Those leaders convinced the staff to respect their work, to treat work as auspicious, to bring purity of mind and soul and to be conscious of social prestige in their post-work life.

*What I connect with duty is…..it is a matter of saintliness…we consider saintliness as very big thing, a religious thing…..religion is not like Hindu or Christianity…it is a devotion towards work….sincerity and honesty towards work is enough to earn saintliness. I ask my staff to make their mind and soul pure…it improves willpower…. [P4]*

Another way of motivating staff was 'providing additional responsibilities' to them. If leaders use their authority to provide additional responsibilities, staff feel they have power and perceive themselves as assets of their leader and/or organisation consequently they act for better performance and output.

*From the first day, my effort is to make staff responsible. I stay as backup and bring them to the front. There is a proverb "providing the key to the thief will prevent theft". So, if you make them more responsible, they can't do wrong. They feel motivated if you make them responsible, they feel like they have authority and power. [P3]*

Although praise and recognition were the most common form of internal motivation, that did not work always. Staff also expect physical forms of rewards, such as financial

incentives, training and other opportunities for career development. Since the Ministry of Health had several public health programs that need maximum mobilization of staff in the remote part of the country, staff felt the need for financial incentives to compensate for the expenses as well as the time and effort to do the programs.

> *Staff expect financial benefits…yes, they expect for sure. Side by side, they also seek non-financial…I don't know the balance for this. The health sector has more programs as compared to others…so they expect financial…usually. [P12]*

Public health leaders preferred coaching and mentoring their staff to make them more capable by fulfilling the knowledge gap. They facilitated learning and provided constructive feedback. However, limitations of resources sometimes had constraints the way leaders expect.

> *Staff have knowledge and gaps in knowledge. I expect to fulfill that gap and use my own knowledge. But theoretical things don't always work. We need some other resources which are not easily available. [P5]*

Listening to staff was considered as one of the best strategies for leadership. Understanding staff and their problems/issues as well as assessing their personal factors in working environments indicates how conscious a leader is about people and relationships. Whether it is a matter of conflict, or an issue of poor performance, leaders need to explore the causes by listening keenly to their staff. Based on the expectations of staff, leaders convinced and counselled them about personal, family and social issues which may be hindering their performance. Additionally, leaders were cautious that most of the organisation problems have their roots in personal issues of staff.

> *Listening, listening, listening…. Listening is important. If you listen carefully and enough, solution for everything is* there. [P7]

Trusting or believing staff was accepted as a vital component of leadership without which the organisational activities could not be proceed, maintained and finalised. Leaders had no way of believing their staff, as leadership cannot be done one-to-one in the diverse scope of public health. However, leaders adopted cross checking and verification in the matter of trust because of some unpleasant experiences with events that have financial issues. Thus, leadership realizes trust as compulsive yet conditional.

*Without trust, work cannot be initiated. Although we are in a dilemma of trust, we should provide responsibility from the beginning. So, trust is a must. Assigning work with full trust but evaluating from the very near.* [P2]

*Should believe staff because of not knowing everything…. particularly…the things related to administrative or financial aspects. However, it is important to do self-study before signing any document…. should not do anything in a rush by fully trusting them. [P6]*

Trust, counselling and encouragement were the best adopted strategies for those leaders who believe people and relationship are the top-most priority for leadership. Those leaders perceive themselves as honest, loyal and transparent. They considered staff as valuable assets for their leadership and for their organisation.

*If you want innovation, encourage them, inspire them, appreciate them; it does not cost anything. If still they don't do it, visit them individually, understand their problems, ask if they lack guidance or are misguided by someone else; assess the constraints and remove those constraints……don't take any revenge with them….you don't have the sovereignty power to take action….. you are in the position to provide excuses and guide them in a good direction. [P21]*

### *4.5.4 Emphasizing system, structure and processes*

Apart from the leaders who focused on people and relationships, there were leaders who put the organisational system, structure and process first. Leaders used to delegate authority based on the organisational structure and follow the guidelines/procedures to the fullest. A strong health system encourages staff to focus on their assigned roles and responsibilities and perform as expected. These leaders considered adaptation of procedures/guidelines as one of the best strategies in maintaining discipline at the workplace, achieving health targets and indicators, and preventing leadership from criticism. Regarding any decision making that may have potential criticism, leaders used to develop and endorse an additional mechanism beforehand so that the expected outcome would be achieved without any undue influence.

*There was a culture to recruit staff from interviews so that influence could be done. But during my tenure, I made such mechanisms and set such criteria…. even*

*endorsed it from a meeting….and put other people in the selection committee. Then I left them to choose….and asked them to play with the mechanism if they can. They tried…. but they couldn't because it was so watertight….so, yes…. system is important. [P15]*

Leaders assessed and modified the behaviours of their staff by adopting systematic tools such as Job Description (JD), Performance Appraisal (PA), workplan and schedule. They developed a systematic framework that spontaneously controlled the performance and behaviour of staff. As an individual, those leaders do not want to spend more time in unnecessary arguments and seem to be less authoritarian.

*My nature is like…. I can't argue, can't talk rudely. For control system….no need to be present hardly with staff. I will make a system; the system automatically controls them. For example, I don't need to observe who is punctual. I will keep electronic attendance, that's it…. no need to argue everyday with them. [P3]*

Although focused more on system rather than people and relationship, these leaders expect and attempt to bring changes to the system to make it more efficient and effective. However, these leaders do not perceive themselves as changing the system completely: rather, they manipulate the system for betterment by incorporating novel procedures in the existing system.

### *4.5.5 Mixing of multiple leadership styles*

Public health leaders practised a variety of leadership styles and defined their leadership styles based on their knowledge of prevailing leadership theories. The leadership styles adopted were based on the nature of leaders and their family/social schooling in the past, characteristics of staff and their attitude towards work, work experiences of leaders and the existing situation at workplace. Based on the existing theories on leadership, the styles adopted by public health leaders could be categorized into the following:

- Free rein leadership
- Participatory/consultative leadership with coaching/delegating
- Transformational leadership yet authoritarian.

Public health leaders used to mix multiple leadership styles such as participatory with coaching, and transformative with authoritarian. This is because the leaders have to deal with diverse range of staffs and to treat staff with specific interest. For example, leaders initially focused on encouragement and positive development but if the purpose could not be fulfilled due to the attitude of staff, s/he shift towards authoritarian style for that specific staff until the behaviour changes. Similarly, leaders who perceive themselves as democratic/participative engaged mostly in guiding and mentoring staffs to enhance their knowledge and skills.

The adaptation and application of each leadership style was found to be influenced by multiple factors within an individual such as socio-cultural background, individual nature and capabilities and work experiences. Individuals who were new bureaucrats and had limited academic expertise usually adopted a free rein style. This went to a participatory style if the same individual was in mid-adulthood with a robust academic background and professional networking. Individuals who experienced financial crisis during their childhood and adolescence understand deeply the value of physical, financial and human resources; and prefer mostly coaching and delegating type of leadership styles. Individuals holding senior leadership positions, having extensive experience and a social mindset followed transformational leadership. This type of leadership, based on the behaviour of staff, sometimes turned into authoritarian.

In free-rein leadership styles, leaders used to provide information to their staff which was mostly based on organisational goals and objectives. They made their staff undertake their duties and responsibilities and to act accordingly. Decision making was practiced based on the suggestions of staff as well as the regulatory procedures and guidelines.

> *…. meeting with them (staff), asking them to do good work and to fulfill their responsibilities…. I ask them to follow the organogram and their job roles…. [P4]*

Leaders who perceived themselves less competent than their staff. or who have staff equal to their level of hierarchy or experiences. used to follow free-rein styles. These leaders expect support and contributions from their staff but do not want to, or are able, to guide and control them. They expect self-disciplinary behaviours from their staff and easiness in leadership.

*if they (staff) have the sense of 'group effort' or 'we' feeling inside them, it would be easy for us to guide them. [P6]*

Free-rein leaders believe staff as having mature personalities and prefer self-control among their staff. They let their staff practice on their own help the staff realize their duties/responsibilities, thus avoiding direct/external and systematic control. However, the preference for self-control was found to be ineffective and leaders realized that control mechanisms need to be exercised from the beginning, because once the leader loses the power of control it is difficult to revert.

*I didn't control much, consequently many things went wrong…I realized that later on. Control should be from the beginning…. based on the staff's nature, a mechanism needs to be developed…. If you let them free at the beginning, you cannot adopt other styles afterwards…. need to know how much distance to keep with staff. [P1]*

The second type of leadership style explored was 'participatory' mixed up with 'coaching/delegating'. Leaders were practising the universal standards of participatory leadership styles, such as participating, consulting and discussing with staff and incorporating their insights in decision making. Leaders encourage participation of their staff in decision making to ensure better results and to share potential risk that may arise from improper decision making. Leaders realize the potentialities of their staff and seek their inputs especially in the areas of their expertise. Leaders also consult with their seniors, even if they are retired, from which they receive useful insights from their past experiences.

*There are related technical experts in different areas…. consulting and discussing with them…. I usually do not do a single decision. [P12]*

*I usually do consultative……consultation not only within my team members but also from retired professionals and seniors…. I get good ideas from them, they also become happy to share their experiences. [P12]*

Beyond participation and consultation, public health leaders were focused to increase the performance of their staff by delegating authority and providing necessary guidance on that. These leaders prefer to identify their leadership style as 'delegating and coaching'. Leaders were confident in developing the performance of their staff by

providing them with additional exposure and responsibilities and by continually coaching them.

> *I delegate and make them (staff) more responsible towards their work. It also increases their performance. [P11]*

> *What I do is…….providing exposure to my subordinates…. sending them alone or taking them with me to some inter-ministerial meeting…. they learn from that event…. also, I handover my task to them…. it is all about increasing their competency by making them more responsible. [P14]*

The third type of leadership style explored was 'transformational' in which the leader creates a vision for change and works with the team to implement the change. Because of their efforts and results, these leaders were a source of inspiration for their followers, and lead by example. Leaders emphasized understanding of the personal and social aspects of their staff, listening to them, showing empathy and supporting them to the fullest. By providing enough time for advice and suggestions, these leaders made decisions by participating with their staff and making consensus.

> *He is my senior and I like the way he leads, and his habit of continuous writing and publishing. I am an officer but like to work with him being his subordinate. [P1]*

> *I know being leader is challenging…. people with so many interests…thus, lead accordingly……by participating in their problems, guiding them, inspiring and motivating them, providing incentives…. focusing on them always….. Even for work, not keeping authority always in one own's fist, delegating to them and sharing power with them*. [P19]

Observing attendance, punctuality, and discipline are the basic things that the bureaucracy expects its leader to be inspecting and assessing. Due to the nature of public health work, which is not always bound inside the boundaries of a building, the transformational leaders were flexible in these basic things and valued the performance and output rather than the physical presence of their staff.

> *Control is not like staying at the office from 10am to 5pm….although I am officially bound to follow 10 to 5, but we are making them (staff) work even outside the office, at their home, even during the night time….due to this, flexibility could be provided to them…..Regardless of this, they (staff) need to be in control. [P9]*

Despite adopting transformational leadership styles, public health leaders were found to be authoritative especially when the staff undervalue the way they lead. In such a situation, leaders deprived their staff from any sort of responsibilities and associated benefits. Being deprived from responsibility and being ignored by leaders (who were more popular) made staff feel awkward and realize their faults. Although punishment was found to be rare inside the health system, it was perceived as less preventive and more destructive when leaders wished to proceed.

> *Some staff focus on individual interest rather than people and state. I closely watch them do more either by hook or by crook. [P8]*

> *I orient my staff, provide information on responsibility, guide, coach and then trust them. If they break trust, I completely disregard them. If it is by intention, then I am very strict in this matter. [P9]*

Above mentioned leadership styles are the most used styles that the public health officials practiced. However, public health leaders agreed that the use of situational leadership styles depends upon the situation, such as an epidemic and in the context of immediate decision making.

### *4.5.6 Political influence: adopting, fortifying and negotiating*

Political influence was widespread in the health system of Nepal, which affected the way public health leaders enact their leadership styles and decision making. Public health leaders understood the undue political influence due to unstable government as well as politics not being institutionalized to regulate societal behaviour in an ethical and moral way. Figure 4.7 illustrates the different aspects of politics and public health in Nepal.

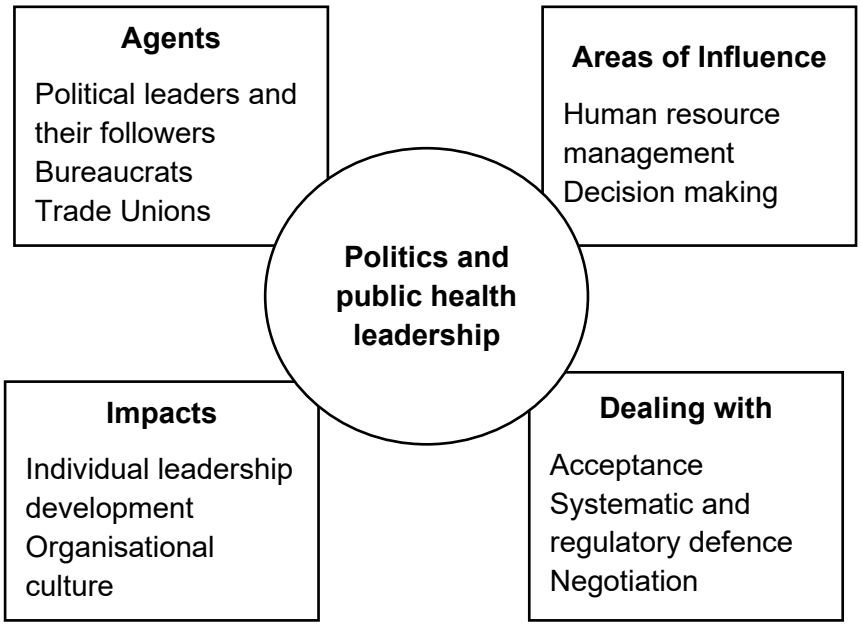



***Figure 4.7 Framework on political influence and public health leadership***

The most common agents for political influence were the political leaders and their followers, who generally persuade public health leaders related to human resources management and decision making. The most common areas of human resource management that faces political influence were recruitment, placement, transfer and promotion. Despite of this, public health leaders also experienced influence while making decisions related to procurement planning, financial resource utilization and establishing/rearranging health facilities.

> *Can't say how much…. it's too much. From recommending staff for training to decision making…. political pressure occurring, occurring and occurring…. [P16]*

> *Of course, they do influence. All have their own interest. Once a person came and asked me to give a job to his people. He was saying, if I cannot provide jobs for some people during the tenure of my party's minister, what's the meaning of my involvement in the party? Yeah....It's like this…they have this sort of interest. So, pressure is obvious. [P18]*

Staff of public health leaders were usually involved with trade unions and these became one of the agents for political influence. Public health leaders mostly experienced threats and challenges from their own staff who are guided politically and mask their personal interest and present it in the form of a political agenda. In this

condition, public health leaders mostly adopted the strategy of 'counselling and convincing' rather than confronting. Side by side, the public health leaders also presented themselves as apolitical and implemented the tactic of 'neither benefit nor harm' as they enact their leadership based on systematic and regulatory procedures.

> *….in these situations, our leadership role is to convince them because they have the link with our boss or with our minister. That's why instead of confronting them or proceeding to punishment, it's good to convince them, counsel them…. …. all of them doesn't perceive wrong, except one or two….by this way we can bring them on track. [P15]*

> *Here are trade unions…these are our staff. If I keep interest, one party is benefited, and others become dissatisfied. If I don't' keep any interest, both benefited or both harmed….so, there won't be any problems between them. [P3]*

In the case of when public health leaders ignored the political persuasion, political leaders translated the political pressure into bureaucratic pressure. Political leaders shared their expectation with senior level bureaucrats who have connections with them, and the senior level bureaucrats pressure the junior level bureaucrats to do the same thing. Public health leaders felt easy tackling their seniors as both the parties knew the nature/extent of political pressure, existing regulations and their relationship.

> *High level leaders (political) don't want to come in the front, rather they use others…If we say ok, they (political leaders) will be happy, otherwise we give rational and they don't argue. Instead, the pressure comes to the Ministry and through the Ministry to us. [P12]*

Public health leaders faced political pressure using multiple strategies – adoption, fortification and negotiation. Leaders followed the direction of political leaders in decision making because of three reasons – first, both have the same political ideology/affiliation; second, the public health leaders are at the beginning of their leadership journey and are inexperienced; third, public health leaders accept the vision of political leaders. In this way, conditional acceptance of political persuasion occurs.

> *In the beginning, after pressure from above, I became a bit liberal and considered them (staff), but that consideration was legitimate…whatever…I became stretched by these pressures. Afterwards, I gained maturity, improved interpersonal relationship…. then, I was like…how it could be done, how can I ask myself to do this…. after that, pressure was reduced. [P15]*

*Although we said we have enough (competencies) in making policy and programs, we may lack certain visioning…. They (political leaders) have a different commitment consequently it is about proceeding differently. Thus, we have to listen to what they (political leaders) say. [P8]*

Public health leaders who were passionate for change presented themselves as apolitical, developed a mechanism for each activity and adopted fairness in their leadership behaviour. To a greater extent this helped them to prevent undue political pressure. Keeping personal interest aside and confronting political leaders by taking rules and regulations as a reference was one of the common strategies for controlling political pressure. Apart from this, public health leaders prefer negotiation and lobbying with political leaders for change and innovation.

*If it is about fairness….it could not be denied by political parties too. If we can put things clearly, making them believe that we (public health leaders) are working without any personal interest…. pressure could be reduced. [P15]*

Ignoring and/or confronting political influence had impacts on both the individual and organisational level. At the individual level it has effects in receiving opportunities for training and development activities, in leading top-level institutions and in receiving supplementary leadership position. Public health leaders experienced preferential treatment by political leaders and politically affiliated bureaucrats regarding overseas visits, transfers, political appointments and to some extent, on performance appraisal. Lack of political connection and/or consideration inhibits the leadership development of public health leaders as they do not get opportunities to demonstrate and utilize their leadership capabilities. However, public health leaders who had faith in the system, as well as in in their competency, disregarded these circumstances and chose self-satisfaction. This also helped in nullifying the culture of political labelling among public health leaders who emphasized honesty, sincerity and fairness in leadership.

*In my personal case…. I didn't face tough times although there were different political leaders…. but I also got affected a bit…. because I didn't receive the opportunities that I should…. [P9]*

*I knew beforehand that they would not support my opportunities but I will not get satisfaction….as I haven't done all the things that they asked for….they won't take you up (to a higher position) until they are sure that you will do their*

*work…..yes….those opportunities could be missed….but I don't' have any regrets. I don't think by doing what they did, will satisfy me. [P12]*

Apart from the individual level, political influence has its impact on organisational culture and work performance. Staff having political affiliation or acting as a member of trade unions make leadership challenging for public health leaders. These leaders experienced an unfavourable working climate because of the diverse political ideology of staff and their intention to fulfill personal interests as followers of political parties. Nonetheless, public health leaders accepted that, to some extent, their political ideology, political affiliation and political appointment also create bias in leadership.

### *4.5.7 Types and characteristics of public health leaders*

Based on the leadership enactment of public health officials (as discussed in previous paragraphs) along with the explored nature and competencies, analysis of data identified three types of public health leaders in Nepal. The basis of differences between these three types of leaders are – their individual capabilities, their concern with people and relationships, and the way they deal with system/structure/process inside the organisation. The characteristics describes the leadership qualities in each of the three types correspond with particular participants (table 4.4)

**Table 4.4 Types of public health leaders identified in Nepal**

| Characteristics | Type 1 leader | Type 2 leader | Type 3 leader |
|---|---|---|---|
| Leadership style | Free rein | Coaching/delegating and participatory | Transformational yet authoritarian |
| Leadership strategy | Reactive | Reactive and proactive | Proactive |
| Controlling staff | Prefer self-control among staff with no backup | Prefer self-control but backup by systematic/regulatory framework | Prefer self-control but backup by enough advice and guidance |
| Perception towards staff and system | Usually pessimistic | Realistic | Mostly optimistic |
| Decision making | Consultative within the team members | Participative and intuitive | Participative and consensus |
| Political pressure | Adjustment | Systematic and regulatory defence | Synchronizing and balancing |
| Credit for work | Expects from others | No expectation | No expectation |
| Motivating employees | Extrinsic motivation | Extrinsic and intrinsic motivation | Intrinsic motivation |
| Risk for change | Reluctant to risk | Risk for change but cautious with career and social prestige | Risk for change but cautious with social prestige |
| Method of work | Doing things inside the framework as defined | Doing things inside the framework but in different way | Thinking and doing out-of-the box |
| Approach to change | Prefer status quo; follow the rules | Prefer change; play with rules | Prefer change; modify the rules |
| Scope of work | More managerial and less leadership activities | Synchronization of managerial and leadership activities | More leadership and less managerial activities |
| Ways of influencing staff | Companionship | Performance and output | Vision and past achievements |
| Usual level and position | Bottom level | Mid-level | Top-level |
| Priority 1 | System, structure and processes | Individual (one's) capabilities | People and relationship |
| Priority 2 | People and relationship | System, structure and processes | Individual (one's) capabilities |
| Priority 3 | Individual (one's) capabilities | People and relationship | System, structure and processes |
| Individual characteristics | Limited expertise, more friendly | Academic and technical expertise, less friendly | Spirituality, honesty, loyalty, updated, cool personality |

## 4.6 Leadership Competencies

A number of qualities and competencies were explored and identified from the views presented by public health officials and their staff as well as from the life-course of the individuals and their practices on leadership. Based on the approach of analysis of data, these qualities and competencies can be referred as the required qualities for public health leadership in the Nepalese context (Table 4.5).

**Table 4.5 Qualities and competencies needed for public health leadership**

| Categories | Qualities and competencies |
|---|---|
| Change and innovation | Passion for change and innovation, vision, advocacy, networking |
| Influence | Influencing and convincing, role model |
| Knowledge | Studious (reading, writing and publishing), subject expertise, logical thinking, research mind (assessing problems, exploring solutions and utilizing evidence-based practices) |
| Socio-cultural intelligence | Understanding socio-cultural context, analysing public and social problems, thinking for social contribution, being loyal to people and state, consciousness towards social prestige |
| Managing people and organisation | Communication, coordination, collaboration, conflict management, decision making, inter-personal relationship, resource generation and utilization |
| Goodness | Trust, honesty, fairness, justice, transparency, selflessness, humanitarian, spiritual |
| Personality | Appearance, extraversion characteristics |

### *4.6.1 Change and innovation*

Public health leaders should be passionate for change and adoption of innovation and technology to improve the way the public health system works. Leaders need to be visionary and be able to make a breakthrough in the traditional way of managing public health programs. S/he should be able to advocate to relevant stakeholders to make them understand about the importance of public health. A sound network and relationship with professional organisations and political parties helps leaders to translate their vision into practice.

### *4.6.2 Influence*

Influencing others to be a part of one's leadership is one of the most desirable qualities of public health leaders. Convincing and counselling skills of a leader increases as well as maintains the influence that a leader possesses. Leaders themselves need to be a role model for each task they expect their staff to perform. Leaders who act as a role model become the inspiration for others.

### *4.6.3 Knowledge*

Public health leaders should have in-depth understanding of public health subject matter and be able to assess the existing issues and problems and the approaches to solve them. Being studious makes an individual explore new concepts and ideas. Academic habits, such as reading and writing, make them update their knowledge of contemporary matters in public health. Publishing of novel events/activities and experiences from public health leaders contributes to the knowledge gap. Public health leaders should think logically and be capable of utilizing evidence-based practices.

### *4.6.4 Socio-cultural intelligence*

Public health leaders should have contextual awareness regarding the social, cultural, economic and political dimensions of the place where they work. Contextual awareness helps in better understanding of issues and expectations of the community people and leadership adopted, based on particular circumstances. With a positive attitude, public health leaders should be loyal to people and state and always have a mindset to contribute to them. In serving the people and the state, public health leaders should be conscious of their social status and prestige and keep themselves away from anti-social behaviours which may occur, often in out-of-office hours.

### *4.6.5 Managing people and organisation*

Public health leaders should have sound capabilities to communicate, coordinate and collaborate with their staff, general public and different actors within and outside the

health sector that are responsible for improving the health of the population. They should also have the capability of generating as well as utilizing the resources, particularly in the resource constrained settings. Managing conflicts inside the working institutions and practising evidence-based decision-making help them to strengthen the influence of their leadership. Public health leaders should engage themselves in identifying the capabilities of their staff, as well as encouraging and mobilizing them for a combined effort. They should be friendly with their staff, listen to them and be ready to help them in their hard times. A leader's sense of belonginess enhances the inter-personal relationship. Acting as a facilitator, rather than a traditional bureaucrat/administrator, and taking staff problems as their own makes public health leaders more popular within their team. They should discourage the 'culture of flattery' and encourage performance in the workplace.

### *4.6.6 Goodness*

In the context of Nepal public health leaders need to have different features of goodness. They should be honest and transparent while carrying leadership responsibilities. Being trustworthy among staff and treating them with fairness and justice is needed to effectively mobilize the team members. Leaders are also expected to be humanitarian and spiritual. Being humanitarian, they should have self-awareness of who they are and what should they do for the welfare of people and society. These leaders perceive 'giving is more important than receiving'. Being spiritual motivates leaders to undertake good deeds and not hurt others as they tend to be more cautious with (another) life after death.

### *4.6.7 Personality*

Public health leaders are also expected to have a smart look or appearance, physically fit and healthy. Extraversion characteristics such as clear speaking, social interface, outgoing, optimistic, active and assertiveness are also required for public health leaders in the Nepalese context.

## 4.7 Conclusion

Development of leadership among public health officials in Nepal is found to be the result of personal characteristics, influence of socio-cultural factors, exposure and experiences as well as personal commitment and dedication. Observing social dimensions and having worthy engagement with public health activities and continuous self-directed learning helps in creating leadership competencies among those leaders. Public health leaders need to enact their leadership behaviours based on the level of socialization, knowledge and experiences in public health as well as the characteristics of their staff. Regarding leadership competencies required for public health leadership in the Nepalese context, public health leaders are supposed to be knowledgeable in subject matter as well as in the socio-cultural context, passionate, honest, and have expertise in managing people and organisation.

# CHAPTER 5 – DISCUSSION

## 5.1 Introduction

The last chapter described the overall findings of the study as well as the grounded theory developed. This chapter discusses those findings by comparing them with other relevant research and exploring the potential reasons behind those findings. As this research is about leadership in public health, efforts are made to discuss it in the same field or the nearest field such as medicine and nursing. However, due to limited literature in the health sector about the process of leadership development at the individual level, similar research from the non-health sector is also discussed, considering the fact that leaders in the health sector also come from other sectors of social sciences, and the factors in developing leadership skills among them could be comparable.

## 5.2 Existing concepts of leaders and leadership development

Leadership development theories are supposed to emphasize how leadership is developed throughout the lifetime. Brungardt (1996) defined leadership development as 'almost every form of growth or stage of development in the life cycle that promotes, encourages, and assists in one's leadership potential which includes all types of formal and informal learning activities from childhood development, education and adult life experiences'. This definition is closer to the individual perspectives of leadership development. However, there is other literature that describes the same concern using the term 'leader development' (McCauley and Van Velsor, 2004; Day et al., 2008; Avolio and Hannah, 2008; McDermott et al., 2011; Day and Sin, 2011; Van Velsor et al., 2013; Hammond et al., 2017; Solansky, 2014). Differences between 'leader development' and 'leadership development' also exist in literatures other than public health (Brungardt, 1996; Day, 2000). Leader development is defined as 'the expansion of a person's capacity to be effective in leadership roles and processes' (McCauley and Van Velsor, 2004) whereas leadership development is defined as the expansion of an ‘organisation's capacity to enact the basic leadership tasks needed for collective work‘ (McCauley and Van Velsor, 2004). Day (2000) prefers to identify leader development as human capital and leadership development as social capital.

However, literature in public health does not seem to identify the differences and application between these two terms. Leadership development in public health has been used to describe both the perspectives of individual development and organisational development. Leadership development in this research is about exploring the factors that an individual is exposed to during their lifetime and because of which they are positioned and identified as a leader in public health. Thus, this study adopted the concept of Brungardt (1996) to describe leadership development from an individual's perspectives.

### 5.3 Individual characteristics and role of family/social factors in leadership development

The theory developed from this research shapes leadership in public health as a journey and the result of multiple factors initiated from childhood/adolescence and gradually increased as the individual is exposed to public health activities. Figure 4.1 *(page 90)* Illustrates that the foundation of leadership starts in the early stages of life when the individual characteristics, family and social factors, influence the way an individual observes, understands and makes sense of the prerequisites for leadership. Observing social dimensions of leadership helps individuals to become aware of leadership and develop a sense of leadership competencies within themself. Awareness of existence of leaders in society and making perceptions of their qualities starts in adolescence (Komives et al., 2005). Social context and cultural context are considered important in leadership development among individuals (McDermott et al., 2011). Public health often opposes the role of innate characteristics in developing leadership and favours the competencies acquired through exposure and education (Hughes, 2009). However, many researchers showed that leaders are born with qualities that help them in leadership (Brungardt, 1996). This research also explored if individuals with stubborn and assertive personalities were able to create their career path in public health leadership because of their 'ego' to show others their capabilities. These participants, despite of unfavourable family environment and financial constraints, created the career progression and leadership journey on their own. This finding correlated with other findings where genetics and temperament (Murphy and Johnson, 2011), early childhood development (Bass, 1990; Conger, 1992) and

experiences during childhood (Brungardt, 1996; Bass and Avolio, 1994; Riggio and Mumford, 2011) played a role in developing leadership in adulthood. Experiences during childhood and adolescence influence personal characteristics such as assertiveness, confidence and need for achievement (Gardner, 1990) as well as attitude and behaviour towards leadership (Van Velsor et al., 2013). For example, personal qualities and underlying drivers such as values, faith and personal drive influenced leadership among Irish leaders in the public and private sector (McDermott et al., 2011). Nurses also believed that their innate qualities and personal life factors helped them to be a leader (Allen, 1998). Family factors such as role of the father, gender equality, socialization, family status and economy were found to be important among participants of this research that supported them in accessing and completing formal education as well as in motivating and facilitating them continuously for personal development. Among the four agencies of socialization (family, schools, peer groups and mass media) as stated by Eshleman et al. (1993), public health officials in this research were mostly influenced by family members, particularly the role of the father. It is also believed that socialization during childhood lasts longer (Smith and Rogers, 2000) and it also influences the way an individual makes sense of their organisational environment after they are employed (Posner and Powell, 1985). As an example, participants from this research who suffered financial hardship during childhood/adolescence were found to be more sensitive towards management of organisational resources and the services provided to the public. Studies have shown the importance of the role of family members (Komives et al., 2005; McDermott et al., 2011; Gibson et al., 2018) including the exceptional role of the father in building confidence (Allen, 1998), positive parenting (Bass, 1990; Murphy and Johnson, 2011) and family life with strong ethics (Day 1980; Gibbons, 1986) in successful leadership.

### 5.4 Caste/ethnicity acting as a backup in accessing leadership opportunities

In Nepal, more than two-thirds of public health officials were from the so-called upper castes/ethnicities such as Brahmin, Chhetri and Newar *(Table 1.2, page 14) and this study has also dominated by those ethnic groups*. Only two officials form ethnic minority (e.g. Dalit) was identified in sampling, among which only one participated. Since the participant stayed more reserved during interview and did not want to share

the ethnic perspective, the social issues of disadvantageous ethnic group could not be explored adequately. Research participants from upper caste/ethnic groups accepted the positive role of caste culture which increased their access to education and encouraged them to obtain employment in the government sector, thus positively supported their leadership journey. Ethnicity in Nepal is not just a person's race, it is about institutions, learned behaviour and customs (Upadhyay, 2013). Caste position was a critical issue in the past (Levine, 1987) and caste relations is still a predominant system of social stratification and inequality (Subedi and Maharjan, 2018). Since Nepal has a long history of marginalization and exclusion from access to resources, services and opportunities, discrimination and marginalization based on caste/ethnicity, gender, geographical remoteness and gender, most achievements in the past have gone to the governing caste and ethnic group (Upadhyay, 2013). For example, the traditional roles assigned to so-called upper caste groups were mostly priests for Brahmin, security for Chhetri and business for Newar. These roles ultimately helped individuals from those caste/ethnic groups to get easy access to educational opportunities and connections with bureaucrats and politicians because of the nature of their social role. This had developed a 'culture of education' and 'passion to lead' among those ethnic groups, who despite possible financial hardship and other limitations emphasized educating their children, mostly the male child. Brahmin and Chhetri, who shared almost two-thirds of Nepalese public health leadership positions, were the frontline social leaders in traditional Nepalese society. Participants of this study recalled the differences between upper class and lower-class families in traditional Nepalese society regarding their priority in education, and emphasis on government jobs and leadership opportunities. The ethnic minorities or the lower class/caste remain socially excluded because of low levels of literacy which further marginalize them from economic opportunities and lead to further dependence (Gurung, 2005). Thus, the minimal representation of disadvantaged or marginalized ethnic groups in leadership positions was the results of traditional caste culture, which is expected to be overcome by existing government policies. To fulfil the gap between upper and lower ethnic groups regarding position and power, Upadhyay (2013) suggests that marginalized groups need to enhance their aptitude in education and a feeling of leadership, whereas the dominant group need to change the stereotype thinking on caste/ethnicity issues. In recent days, there has been significant

improvement in schooling and income among lower caste/ethnic groups (Subedi, 2016).

### 5.5 Gender as a prominent social issue in leadership development

Similar with caste/ethnicity, gender is another prominent social dimension which influenced the process of leader and leadership development in public health *(figure 4.1, page 90)*. Workforce demographics *(table 1.2, page14)* show the immense gender gaps, the number of female public health officials being extremely small (one-tenth) compared to the number of men. This is in an important finding given that women make up more than half of the Nepalese population and that many of the health programs and interventions being delivered are directed specifically at women. This situation suggests that opportunities for leadership and career advancement are very different for women than for men in this setting. The reasons behind poor representation of women is most likely the wider, patriarchal nature of Nepalese society which is well documented as one of the systematic barriers to gender equality in the country (Aguirre and Pietropaoli, 2008). For example, if we just look three decades back when the female participants in this research were in their 20s, the birth of a girl child was not appreciable. The girl child (although growing up with her brother) had so many social and cultural restrictions because of which she was compelled to be fully engaged in household chores. This had a direct impact on enrolment in school, quality of education and its continuity. Fewer females in school and a high drop-out among them (due to early marriage and other social-cultural issues) resulted in very few graduates, which ultimately affected the employment status of females.

Male participants in this study were privileged by their family and society to stay outside home for education and/or employment opportunities. The role of mother was unnoticed in terms of career progression as an effect of patriarchal society which bounded females in household chores, depriving them from education/employment, and thus making them passive in decision making. Despite socio-cultural barriers and prevailing gender inequality, some females had unconditional support from their family (especially their father and their husband) and/or dared to accept the challenges. As a result, they were able to represent their gender in leadership positions. In a similar finding to that in this research, sexual orientation was one of the barriers for leadership

development among college students where being a male was considered as an asset to leadership (Komives et al., 2005). Gender equity, personal values, persistence and self-awareness were some of the important aspects of leadership development in females (Baroff, 2015) for whom gender stereotypes influence their underrepresentation in leadership positions (Castano et al., 2019).

### 5.6 Education and affiliation are needed to formally start the leadership journey

The foundations of leadership development during childhood and adolescence (figure 4.1) encourage, motivate and facilitate an individual to enrol in formal education, as a result of which they get an opportunity to initiate their career in public health. Formal education played a role in developing self-confidence via knowledge and skills required for specific jobs (Allen, 1998) and positively correlates with achievement of leadership positions and abilities (Bass, 1990). Focusing leadership in formal education helps individuals to progress in their experiences and successes (Allen, 1998). Being positioned as public health professionals in formal organisations, as well as being involved in community activities, makes an individual likely to be identified as a formal leader in public health. However, it doesn't guarantee that the individual has sufficient amount of leadership capabilities. It is more like being successful in education and employment opportunities, thus developing a career and backup for future leadership roles. A leadership identity development theory developed by Komives et al., (2006) showed that individuals engage themselves intentionally in group activities and take responsibilities, but they perceive themselves as a leader only after getting a positional leadership role. Since leadership is difficult to enact solely, there is need of affiliation with organisations to develop capabilities, connections, system and culture (McCauley and Van Velsor, 2004). Public health professionals begin their leadership journey as a team member, which gradually progresses to leadership positions to influence and motivate others (Krishnan, 2018). As this study explored, the leadership journey of an individual formally started with recognized leadership positions *(figure 4.2, page 96)*, the time an individual adopts delineated leadership roles and responsibilities (as the job description suggests) and utilizes the existing leadership abilities that were learned from the social, cultural and educational settings in the past.

### 5.7 Leadership development is more than being positioned

After being positioned and identified as a public health professional, an individual continuously endeavours to develop additional leadership abilities and desires to exercise additional leadership roles and responsibilities. Development of leadership capabilities is more than the achievement or upgradation of leadership positions inside the organisation. However, individuals cannot utilize and/or demonstrate their leadership capabilities without being positioned. Thus, striving for senior leadership positions is usual for public health leaders in Nepalese context. Multiple factors play a role in developing leadership capacity, such as shifting of personality, passion for change, observation and inspiration, exposure and experiences, and networking and collaboration *(figure 4.3, page 98)*. A study in India and China (neighbouring countries of Nepal) showed that factors responsible to improve leadership skills among managers were – supervisors who played a role model, coursework and training, working with difficult people, feedback and coaching, employing new initiatives, personal experiences and stakeholder engagement (Van Velsor et al, 2013). Participants from this research were also positively inspired from their seniors who support them in developing their skills and they then attempt to mimic their leadership styles. Observation/interaction with others (Gibson et al., 2018) as well as support from seniors (Flores et al., 2019) from the same field helps someone to prepare for leadership. Regular contacts, connections and high-level interactions with people from outside helps in accessing leadership opportunities (Ely et al., 2011) and developing leadership skills (Van Velsor et al., 2013). In the context of Nepal, participants mentioned that inter-ministerial meetings helped in understanding the way they lead and being in regular touch with seniors helps in developing additional leadership skills. Engagement in informal gatherings was challenging for female leaders because of socio-cultural restrictions, and traditional gender norms. This results in a lack of social capital among them and further limits their prospects for interconnections (Cormier, 2006), which in turns, affects their access to leadership opportunities.

The contribution of stakeholders' engagement in enhancing leadership is recognized by this study as well as by McDermott et al. (2011). Participants who were passionate for change and innovation believed in increment of their leadership status inside the

bureaucracy as well as within their professional circle. Doing innovative work also helped the Indian and Chinese managers to foster their leadership (Van Velsor et al., 2013). The role of training, workshops and other formal/informal courses in leadership were highly emphasized as effective in public health leadership (Dean et al., 2019; IOM, 2003; Miller et al., 2007; Ceraso et al., 2011; Olson, 2013; Dean et al., 2019). However, the role of training and coaching was found to be negligible in developing leadership among public health officials in Nepal. Participants in this research had no or very minimal exposure to coursework and training related to leadership, consequently they emphasized more on 'learning by doing' or experience. It is also argued in literature that traditional schools and programs in public health are not enough for public health professionals to develop practical leadership skills (Gianfredi et al., 2019; Baker, 2019), hence they emphasized the importance of leadership training and activities, as these activities are found helpful in improving the ability to cope with and lead changes (Saleh et al., 2004), increasing confidence and self-awareness (Miller et al., 2007) as well as improving communication, team building and conflict management (Dean et al., 2019).

### 5.8 Experience is the heart of leadership development

The theory developed from this study described the importance of experiences in public health leadership. In Nepal, there is a proverb – 'you learn either from study or from experience'. Experiences mattered significantly in developing and enhancing leadership capabilities among the participants of this research, being similar with various studies from non-health sectors (Bass, 1990; Brungardt, 1996; Allen, 1998; Van Velsor et al., 2013; Gibson et al., 2018; Avolio and Gardner, 2005, Komives et al., 2005; O'Connell, 2014; Flores et al., 2019). All participants mentioned that they learned most of their leadership skills through getting things done and emphasized the importance of experiences more than structured education. Day (2000) stated that leadership is developed through the enactment of leadership, the role of experiences in leadership could not be ignored. Leader development is a lifelong journey in which an individual learns lessons from experiences (Komives et al., 2005; O'Connell, 2014) and constructs meaning from those experiences (Avolio and Gardner, 2005; Van Velsor et al., 2013,). Engagement in more leadership positions develops greater

leadership efficacy and confidence to lead (Gibson et al., 2018) and exposure to difficult and challenging tasks is the best opportunity for professional growth in leadership (Kouzes and Posner, 1995). Nurses also believed that progression of experiences and encounters with and inspiration from significant people developed leadership among them (Allen, 1998). Similarly, team experience and good relationships with colleagues contributed to the preparation of leaders in medicine (Arnold et al., 2018). Public health workers perceived that receiving opportunities for new roles, as well as involvement in leading activities, supported their journey from technical to leadership roles in federal public health agencies (Flores et al., 2019). Experiences and career advancement help leaders to tackle emerging challenges (Day et al.,2008; Day, 2012), which is more meaningful in the public health context where leaders need to lead continuously despite the uncertainty and complexity of public health threats.

### 5.9 Role of internal drive and continuous learning in developing leadership

The theory indicates that developing leadership capabilities and being recognized by bureaucracy and/or the health system does not complete the journey of leadership development. Public health leaders with their self-confidence, self-determination and self-esteem, continually strive to increase their leadership capabilities and believe to move ahead in formal leadership positions/roles *(figure 4.4, page 102)*. A grounded theory on leader identification development among college students explored that as the time passes, individuals develop self-awareness, self-confidence and interpersonal efficacy, and barely need other's support and became self-directed (Komives et al., 2005). Continuous learning was one of the most important factors for leadership development among participants of this research, analogous with Uhl-Bien et al. (2007) and defined as 'the belief in the capacity to gain knowledge, integrate it into practice, and continuously gain more advanced skills always and everywhere, throughout the career and life spans' (Uhl-Bien et al., 2007). More effective leadership occurs though self-development of individual leaders (O'Connell, 2014). Self-determination was also found important in leader development (Solansky, 2014) which specifically focused on learning experiences in which leaders take primary responsibility for growth (Orvis and Ratwani, 2010). Emphasizing self-development,

public health officials in this study practiced resilience and optimism and were accepted by others as public health leaders.

### 5.10 Different ways of enacting leadership in public health

This study also explored the ways public health officials in Nepal exercise leadership in their day to day activities. Nepalese public health officials enacted leadership usually by leading the managerial activities, by emphasizing both people/relationship and system/structure, and by political interactions. During the initial stages of their profession, participants from this study engaged in performing leadership over managerial activities as their focus was to improve the health indicators, due to the culture of 'target versus achievements' in the Nepalese health system. Preference to choose action-oriented roles or acting as an implementer makes the chiefs of health institutions overexercise management rather than leadership (Stankunas et al., 2012). Although this brings better health outputs, it may impede the vision for creativity and spontaneity (Lauer, 2003) which was also felt by the participants of this study. Public health officials who work in the lower levels of hierarchy in Nepal, are usually confined by their job description and with the conventions set from the higher level. The job description of public health officials in Nepal, as explored by interviews, was more traditional, vague, non-scientific and especially focused on the essential functions of managing organisation. However, passion for change and innovation encourages Nepalese public health officials to think beyond the job description and enact leadership over the managerial activities *(figure 4.6, page 107)*. Although leadership and management are inter-related with each other, a distinction could be made between the two (Northouse, 2013). In some circumstances, leadership activities contribute to management and management functions can provide leadership (Hintea et al., 2009). As Bass and Avolio (1994) stated effective leadership is an optimal mix of various styles including practices of both leadership and management. The dichotomy between leadership and management is increasingly narrowing because of the changing social context of health care and due to the involvement of health professionals in leadership positions despite their background in management (Jennings et al., 2007). In the context of this study, management was found to be a foundation for leadership. Public health leaders in Nepal started their career by

engaging themselves in leading and/or implementing the basic functions of health management such as planning, organizing, staffing, directing, controlling, coordinating, recording, reporting and budgeting. Successful leadership experiences in these managerial activities, including achievements in health indicators, help an individual to move forward to core leadership activities.

This research explored the fact that officials adopted a wide range of leadership styles based on their socialization (during childhood and adolescence), characteristics of staff as well as the existing situation after thoroughly understanding the legitimate context of the health system, structure and processes. Commonly practised leadership styles were participatory/consultative mixed with coaching and delegating, transformational leadership yet authoritarian, and free rein leadership styles. It has been argued that public health needs visionary leadership (Wright et al., 2000), collaborative leadership (Kimberly, 2011; Koh, 2009), transformational leadership (Carlton et al., 2015b), shared leadership (Wirrmann and Carlson, 2005) and authentic leadership (Stander et al., 2015; Coxen et al., 2016) to address ever changing public health problems in the local, national and global context. Leadership in public health should be interdependent and requires a composite model to perform within a complex environment by engaging with diverse domains (Kimberly, 2011). As public health professionals are required to work with, through and for others (McAreavey et al., 2011), collaboration with stakeholders such as professionals from other health and non-health sectors, policymakers, community, press/media and political parties, is vital (Koh, 2009). Public health leaders working in government institutions should support the ideas and work from non-governmental sectors and local communities (Mullen, 2016). Participants in this study also believed that meetings and discussions with stakeholders improved their areas of learning and support of leadership performance.

### 5.11 Politics as an inevitable part of leadership enactment

Political affiliation and/or networking was identified as an inseparable and inevitable factor for leadership, the influence of which varied based on the extent public health officials listen to and negotiate with political leaders *(figure 4.7, page 117)*. Politics plays a critical role in health affairs, whether for better or worse (Oliver, 2006) and its influence on public health is not new (Brown, 2010). Public health officials working in

government institutions cannot ignore the political system because nearly all public health activities are derived through a political process (Hunter, 2016). Although the constructive engagement between public health and the political system is required to achieve public health goals (Hunter, 2016), partisan politics could be problematic for leadership. Influence of partisan politics is rampant in Nepalese bureaucracy as well as in the health sector (Sharma, 2010) which has a direct influence on the appointment of leadership positions and other human resource activities like placements, transfers and promotions. Participants in this study accepted or challenged undue political pressure, the extent of which depends on their leadership positions, maturity on leadership and negotiation skills. Public health professionals often view politics 'as a containment of an ideally rational decision-making process', not as an 'essential element of democratic governance' (IOM, 1988), and may face dilemmas as to whether to put public health values in front or to listen to the demands of politicians who mobilize them (Freudenberg and Kotelchuck, 2001). In the context of this study, the junior and mid-level officials who mostly valued system and processes, believed in politics as a containment, whereas the top-level officials who were more connected with the political system and have a passion for change, believed politics to be a part of governance. Experiences of public health leaders and their connections with political leaders facilitates the enactment of leadership (Nowell and Harrison, 2011). It is also argued that understanding political dimensions of health policy helps public health professionals in anticipating better opportunities and designing more effective policies and programs in public health (Oliver, 2006).

### 5.12 Qualities and competencies required for effective leadership

Apart from development and enactment of leadership, this research discovered qualities and competencies (both existing and expected) needed for effective public health leadership in the context of Nepal *(table 4.5, page 104)*. The qualities and competencies explored are classified into seven main categories – change and innovation, influence, knowledge, socio-cultural intelligence, managing people and organisation, goodness and personality. Most of the leadership competencies identified by this study resemble other studies done in European, American and developed countries' public health settings. Public health leaders are expected to be

visionary (Wright et al., 2000; Carlton et al., 2015b; Moodie, 2016), passionate for change and innovation (Wright et al., 2000; Carlton et al., 2015b), influential and role models (Carlton et al., 2015) and knowledgeable (Nowell and Harrison, 2011; Carlton et al., 2015b; Yphantides et al., 2015; Moodie, 2016). Skills such as communication, networking and collaboration (Wright et al., 2000; Yngve, 2006; Koh, 2015; Yphantides et al., 2015; Holsinger, 2015; Mullen, 2016; Reddy et al., 2017), system thinking (Smith et al., 2015), political negotiations (Wright et al., 2000) and contextual understandings (Czabanowska et al., 2013a) are considered vital as public health leaders need to work with and through others, even in an uncertain and ambiguous environment. Since public health is multidisciplinary and leadership is a social influence (Bryman, 1986; Yukl, 2006; Rost, 1993), competencies like technicality (subject expertise), influencing others, managing people and organisations, and social understandings are clearly mutual among public health leaders despite their areas of work. However, based on the socio-cultural settings where public health leaders have grown up and/or work, the qualities and competencies may vary. For example, leaders who have grown up in a western culture tend to focus more on system/mechanism, whereas the leaders from non-western cultures tend to focus more on human relations (Edmonstone, 2018). Participants from this study believed being humanitarian, spiritual, honest, loyal, altruistic, and socially prestigious to establish and sustain themselves as a public health leader; and perceived their job as 'dharma' (religion) – a way of living life and serving others. This could be the effects of socialization of Nepalese society that emphasizes relationships with others, achievements of stature and concern after death.

## 5.13 Conclusion

The components of grounded theory from this research resonate with the work on leader development presented by Brungdant (1996), Komives, et al. (2005), Komives et. al. (2006), Day (2008) and Murphy and Johnson (2011). However, not all those works represent the findings from the real ground as some of them just proposed the framework by gathering secondary data and recommended further exploration. The theory developed from this study is different from the existing theories because it is grounded in primary data and describes leadership development through the life-history perspectives of individuals. Apart from other models/frameworks in leader or

leadership development which focused on the role of either child/adolescent development (Murphy and Johnson, 2011) or adult development (Day, 2008; Day et al., 2009; O'Connell, 2014), this study explored the role of both childhood and adult development in leadership. This research adds a new theory in the field of leader/leadership development where further research was recommended by Brungardt (1996), Avolio and Hannah (2008), McDermott et al. (2011) and O'Connell (2014). Most importantly, this study laid a foundation to understand how leaders are developed in public health where there was absence of leader development theory. This study developed a comprehensive model *(figure 4.5, page 104)* by amalgamating leadership development, enactment and competencies that helps to understand the public health leadership in the context of developing countries.

# CHAPTER 6 – CONCLUSIONS

## 6.1 Introduction

This thesis has developed a grounded theory on how an individual becomes a leader in public health and represents a combined framework of leadership development, enactment and competencies in the context of Nepal. This theory captured the meaning and actions of participants' experiences and explained the role of individual characteristics, family environment, socio-cultural environment, and workplace settings in the development of leadership capabilities as well as in its application. It offers new concepts in the field of public health leadership which will contribute to fulfilling the knowledge gaps in literature. This chapter concludes the thesis by presenting a summary of the main findings, a plan for knowledge transfer and exchange (KTE) as well as implications and recommendations for future research.

## 6.2 Major findings of the study

The major findings of this study can be summarized based on the research questions from which the study was initiated.

### *6.2.1 How leadership (as a capability) is developed among public health officials in Nepal?*

The grounded theory illustrates that leadership development among public health officials is the result of interplay between individual characteristics and other factors within the family, society and working institutions. Individuals having a social mindset and stubborn personality, create their pathway for leadership with the support of other factors such as the role of the father/husband, social and financial status of the family, socialization, gender norms and behaviour, and caste culture. Achieving formal positions in health institutions and involvement in public health activities increases the professional networking as well as recognition from the community. Other ways by which public health officials develop their leadership capabilities are observing others' leadership practices, inspiration from the community, exposure and experiences, passion for change, and continuous learning. Having extroversion characteristics and

being resilient and optimistic helps those individuals to develop their leadership potentialities.

### *6.2.2 What leadership styles and values are being enacted by public health officials in Nepal?*

Public health officials in Nepal adopted free rein, participatory and transformative leadership styles based on their socio-cultural background, work experiences and characteristics of their staff. Enactment of leadership includes the emphasis on system/structure as well as on people and relationships. Early and mid-career officials followed legislative procedures/guidelines to improve public health indicators and to prevent leadership from criticism. Senior and experienced officials mostly used trust, motivation, encouragement, praise, recognition, and coaching/mentoring as leadership strategies to retain their status of acceptance and social prestige. Without ignoring the essence of managing people and organisations, public health officials performed leadership roles to bring significant changes in the health services/system.

### *6.2.3 What are the core qualities and competencies required for effective public health leadership in the Nepalese context?*

To be an effective public health leader in the context of Nepal, an individual should have subject specific knowledge and essential skills managing people and organisations. They should have an ability to understand the diverse socio-cultural and political context of the country as well as the contemplation for social contribution. Being passionate for change and innovation, these individuals should have skills in influencing and convincing others as well as the capacity to assess problems, explore solutions and utilize evidence-based practices. As a part of Nepalese culture, staff expect the characteristics of goodness such as trust, honesty, fairness, justice, selflessness, humanitarianism, and spirituality from their leaders.

## 6.3 Strengths of the study

A preliminary comprehensive literature review was done prior to the study to identify the existing knowledge gap in public health leadership, as a result of which, grounded theory methodology (GTM) was adopted to construct a leadership theory in public

health. Careful application of processes and methods of GTM ensured the originality, credibility, resonance and usefulness of the developed theory *(details in chapter 3, pages 79-80)*. This study included the participants from each level and position, working from district to central level, as well as from different localities, castes/ethnic groups, gender, and educational background, thus ensuring diversity in the sample. So, the theory is applicable in the Nepalese context and could also be generalized in other countries having similar socio-cultural characteristics, especially the countries in South-East Asia. The conceptual model and theory generated from this study will fulfill the knowledge gap in public health leadership and help other researchers to broaden the knowledge by adopting this theory as a reference.

### 6.4 Limitations of the study

This study had two main limitations – participants source and profile, and structural changes in the Nepalese health system.

First, I selected participants from government institutions based on their existing leadership positions. The reason behind doing this was the systematic access with preidentified leaders in public health along with the wider scope of government health services in Nepal. However, this might have missed potential participants who had leadership potentiality but were not engaged in leadership positions or who were working in non-government leadership positions. To overcome this limitation, the theory was validated by interviewing key participants (former and current public health leaders and pioneers) in government, non-government and the academic sector, as well as discussion with the Project Advisory Group (PAG), thus confirming the findings were reflecting the overall scenario of public health leadership in Nepal.

The second limitation was the changes in the Nepalese health system's structure due to federalism *(figure 1.2, page 11 and figure 1.3, page 12)*. When I started this study, Nepal was practising a unitary form of government but during the time of data collection, the country shifted to federalism. Federalism resulted in structural and functional changes in the Ministry of Health. Since my research was about exploring leadership from an individual perspective (for example – life history perspective of leadership development and leadership behaviours), changes in organisational structure did not affect the central focus of my research. My research participants were the public health bureaucrats whose positions and level remained unchanged despite

the structural changes. However, there were some problems that I faced which delayed the process of data collection. It was difficult to get appointments with participants, mostly because the senior officials were busy with structural modifications along with their regular tasks, and some officials were frequently transferred from one institution to another during that time-period (for example, I interviewed the same participant in two different institutions over two months). Despite limitations in accessing and getting time with participants, I included most of the participants that my sampling suggested, except the two participants who, despite their interest in research could not arrange a time for interview.

## 6.5 Knowledge Transfer and Exchange (KTE)

This section describes the prevailing concept and strategies of KTE in the health sector as well as the application of KTE in disseminating the findings from this study.

### *6.5.1 Concept of knowledge, transfer and exchange*

Knowledge transfer and exchange is known by various terms such as knowledge translation, research utilization, knowledge utilization, implementation research and diffusion of innovation (Graham et al., 2006). Despite the terminology used, the main theme is the application of research evidence. It is defined as a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of the people (Canadian Institutes of Health Research, 2016). Thus, it is about generating, disseminating and implementing the best available evidence, in which the researcher ensures the availability and accessibility of information for the target audience to use in practice (Van Eerd, 2019).

To effectively share the research findings in the health sector, researchers should consider six components as a basis for KTE – message, process, stakeholders, local context, wider social, economic and cultural context, and evaluation (Prihodova et al.; 2019), however the three components – message, stakeholder and process are considered crucial. Several strategies are implemented to transfer knowledge in the health sector. Nevertheless, the nature of those strategies and their application differ with various sub-fields of health, such as medicine (treatment of diseases), pharmacy

(use of medicine), nursing (patient care) and public health (behaviour change of people). Thus, not each strategy is applicable for every context. In a systematic review, Mitton et al. (2007) identified various strategies in health sector. Some of the common strategies are: active interaction between researcher and policy makers (Innvaer et al., 2002; Lavis et al., 2002; Lomas, 2000), involvement of decision makers in research, workshops, training and education (Grimshaw et al., 2012), local opinion leaders (Flodgren et al., 2011;Grimshaw et al., 2001), audit and feedback (Jamtvedt et al., 2003; Ivers et al., 2012), educational meetings (Forsetlund et al., 2009), reminders (Shojania et al., 2009), use of knowledge brokers (Dobbins et al., 2019) and individualized feedback (Davis et al. 1995; Grimshaw et al. 2001). Grimshaw et al. (2012) reviewed the effectiveness of KTE strategies in professional behaviour change and found a range of effectiveness of interventions such as printed educational materials (8 to 9.6%), educational meetings (1.8 to 15.3%), educational outreach (3 to 16%), local opinion leaders (6 to 14.5%), audit and feedback (3 to 11%) and reminders (0.8 to 18.8%).

### *6.5.2 Need and importance of KTE for this study*

Health and public health organisations are considered as knowledge intensive where the generation, storage, dissemination and application of knowledge is required in a complex network of professional interactions and functional interdependencies (Suárez-Gonzalo and Catalá-López, 2018). Researchers concluded there is inadequate application of research evidence in the health sector (Suárez-Gonzalo and Catalá-López, 2018; Van Eerd, 2019; Lavis et al., 2003). As a researcher, I agree that 'research without application is of no value'. The evidence generated from the research must be transferred to the relevant field so that the existing problems can be addressed or the knowledge gap be fulfilled to some extent. Single studies (for example – doctorate research projects) are more appropriate when researchers themselves act as a messenger in the local context where there is limited information available in a particular field. The existing knowledge gap makes audiences (for example – public health professionals) interested in new findings. This will utlimately assist in KTE. This study will act as a good reference for transferring knowledge to other researchers and academics in similar fields. Regarding the applicability of KTE

to health care professionals, the expertise of a Project Advisory Group (PAG) and their connection with the health system of Nepal could also used.

### *6.5.3 Application of KTE from this study*

I plan to transfer the knowledge generated from this study to the target audiences so that this study, to some extent, will contribute to filling the existing knowledge gap regarding public health leadership in Nepal. Based on the framework by Lavis et al. (2003) and Canadian Institutes of Health Research (2016), the processes of KTE for this study is explained by with following steps.

a) Identification of barriers and facilitators
b) Preparation of message
c) Selection of target audience
d) Selection of messenger
e) Selection of strategies
f) Evaluation of effects

***Identification of barriers and facilitators –*** For the successful application of KTE, it is important to select translation strategies after identifying potential barriers and facilitators (Grimshaw et al., 2012). As discussed above, there are barriers and facilitators based on the nature of study and its targeted audiences. For the application of my study findings, I have identified the following potential barriers and facilitators (Table 6.1) based on my knowledge, experience gained from the current study as well as prior experience with academic and professional settings of public health in Nepal.

**Table 6.1 Barriers for knowledge transfer and exchange**

| Potential barriers | Description |
|---|---|
| Single study | Since this is a single study, it is possible that audiences perceive it as a standard study done in academic settings for the fulfillment of requirements from the university. This may affect the way they perceive adoption of the findings recommended by this study. Thus, it is crucial for me to convince the audience about the time and effort done for this study as well as its significance and strengths. |
| Functional delays in decision making | Because of the complexity in bureaucratic structure and hierarchical relationship, decision making usually takes a long time in the Nepalese health system. This mostly happens when the decision making need to be done for new activities that are requested from outside the organisation. There is also a risk that the knowledge transfer from this study will be in the shadow of other existing functions under the Ministry of Health. |
| High turnover of staff | During the time of my research, I experienced high turnover of staff in leadership positions under the Ministry of Health. This condition will affect the implementation of KT at organisational level. |
| Lack of predefined mechanism to deliver research findings | To the best of my knowledge, there is no predefined mechanism of knowledge transfer in the health system and academic settings of the country. This condition will affect the knowledge translation as the target audiences (bureaucrats or policy makers) prefer defined guidelines/procedures to implement anything from outside their organisation. |
| Attitude of audiences towards change | Since this study is designed to transfer knowledge at individual levels, the audience cannot be guaranteed to be favourable all the time. As I have experienced during my data collection some officials were reluctant to change. Thus, it is likely that those audiences may not take the knowledge transfer activities in a genuine way. |

Besides the barriers identified, there are multiple facilitators that may favour the application of knowledge translation. Table 6.2 lists those facilitators and gives a description of how those facilitators could be helpful.

**Table 6.2 Facilitators for knowledge transfer and exchange**

| Facilitators | Description |
|---|---|
| Research relevancy | This study is relevant in the Nepalese context because of the dearth of research in public health leadership as well as the need to understand the socio-cultural and organisational dimensions needed to strengthen leadership in public health. |
| Researcher's engagement in academic sector | As I have been working at university since 2011, this would become my strengths in facilitating the process of knowledge translation in the academic sector. |
| Researcher's relationship with target audiences | I am familiar with most of the academics and public health professionals in Nepal because of my involvement in formal and informal social/professional groups. I will use this relationship in expanding my network with existing public health professionals and bureaucrats and continually advocate to incorporate the knowledge gained from my study. |
| Involvement of policy makers in research (as research participants) | I have included the senior public health officials who play a role in policy making in my study. Findings from this study also reflect the scenario of those policy makers. Knowledge transfer is most likely to succeed if the decision makers themselves are engaged in research because they may perceive the findings as their own and feel positive towards the application of those findings. |
| Researcher's understanding on Nepalese health system | This understanding will help me to implement the knowledge translation strategies through various formal and informal ways without compromising the ethics. |
| Limited number of public health professionals and leaders | Due to the limited number of public health leaders and professionals in Nepal, it is easy to have meetings and follow them up regarding the application of KTE strategies. |
| Project Advisory Group | The members of PAG have worthy experiences and good connections at university, the Ministry of Health and other health organisations in Nepal. The expertise of these members as well as their networking will act as a good facilitator for KTE. |

***Preparation of the message –*** Major findings of this research, which are practical and applicable, will be converted in the form of message. Relevant messages will be prepared for target audiences regarding leadership development, enactment and competencies. Not all of the findings may be relevant to convert into messages because some of the findings are historic and would not be suggested in recent days. For example, the disparity between male and female children regarding educational and job opportunities in the past does not completely become a practical message for today. Messages will be practical and made as simple as possible to make them easy to understand for audiences and relevant stakeholders. The role of a message could be one or more of the three – awareness, sensitisation and application; each could be different for different audiences. See Appendix 16 for specific messages.

***Selection of target audiences –*** I have identified five types of target audiences and/or relevant stakeholders for the transfer of knowledge. At the organisational level, the audiences will be the Ministry of Health and academic institutions that offer public health courses. At the individual level, the audiences will be public health officials working under the Ministry of Health, the students and faculties of public health working in different universities, and the researchers working in public health and/or the health system of Nepal. For transfer of knowledge, target audiences will be selected based on the type of message and its applicability to them.

***Selection of messenger –*** Since this is a single study, I am the most responsible person to disseminate the findings of this study. Thus, I will act as a messenger for transferring knowledge to targeted audiences by adopting appropriate strategies. In the meantime, some of the primary audiences can be used as a messenger such as academic faculties at university. Those faculties will receive messages initially being the audience: after that, they will play a role in providing knowledge to their students. Similarly, senior public health officials could also be encouraged to act as a messenger for their junior staff.

***Selection of strategies –*** I will adopt multiple strategies to transfer knowledge depending upon the message type and audiences such as educational outreach, one-on-one meetings, interactive workshops, knowledge-brokers, printed materials and publications. Educational outreach will be carried out with public health officials

including the participants of this research to provide information on individual perspectives of leadership application. Printed material (e.g. a simple flyer) containing the key messages about the best practices to develop leadership will be provided for these officials. Similarly, one-on-one meetings will be carried out with policy makers at the Ministry of Health, in which much emphasis will be given to those policy makers who played a role of participants in my study. Regarding the academic sector, I will conduct interactive workshops with public health faculties at different universities and encourage them to include my research findings in their teaching-learning process. They will act as a knowledge-broker in this context. I will also conduct direct meetings with the 'subject-committee of public health' at universities and request them to include the 'theory' generated from my research in the curriculum of public health courses. Members of subject committees will be reminded from time to time regarding the update of the curriculum. Other researchers in the same field will benefit from publication of research findings in national and international journals.

***Evaluation of effects* –** The effects of strategies could be measured in terms of possible visible outcomes in both academic and professional settings of public health. In the academic industry, inclusion of the developed theory in the curriculum and/or in supplementary educational activities will be considered as the effects of knowledge transfer. Providing messages on what types of leadership works best in context of Nepal will encourage public health officials to assess their existing behaviours as well as help in extension of knowledge. Regarding the context of professional settings, it is difficult to instantly observe the effects because the application of leadership is personalized and changes in behaviour take a long time. Thus, it requires additional research or other lengthy procedures, which are beyond the existing scope of knowledge transfer of this study. However, I will observe the addition of research in public health leadership during my continuous involvement as an academic in Nepal.

The summary of knowledge transfer process planned to use for the purpose of this study is listed in Appendix 16.

## 6.6 Implications of the study

The grounded theory developed from this study enhances the understanding the public health leadership in general and adds new insights on leadership development,

which can be applied specifically in context of developing countries. This study should have major implications in academic, policy and practice settings as described below.

### *6.6.1 Academic implications*

Literature lacks leadership models and theories in health and public health settings because of which public health academics are borrowing leadership theories from other disciplines. My own experience reemphasises this. As a public health academician, I taught leadership and management topics at the university level for more than seven years. During that time, I used leadership theories from other disciplines (mostly from business) and explained those from the perspective of public health. This study will help university teachers to use the leadership models suitable for public health setting and consequently the current scenario of using leadership theories from other discipline will decrease. Addition of this theory in the curriculum of public health degrees (for example in Nepal) will help future public health graduates to develop further interest in public health leadership.

### *6.6.2 Policy and practice implications*

This study explored the importance of gender equity and equality as well as other socio-cultural factors in the development of leaders and leadership in the Nepalese context. Consideration of these factors illustrates the need for government to continually address the issues existing in Nepalese society such as gender inequality, caste discrimination and access to education and employment. Regarding gender, this study explored the challenges faced by females in accessing leadership opportunities as well as in developing leadership capabilities. It reemphasizes the importance and continuity of the existing policy of the Nepal Government on female reservation (quota-system) in recruiting public health officials. It also emphasizes the changes in the perception of traditional bureaucrats (mostly male) who do not have confidence in female leadership. Since this study explored that leadership training was not sufficiently used as a means of developing leadership capabilities, the Ministry of Health should plan and execute strategies to develop and strengthen leadership among public health officials in Nepal. Regarding the enactment of leadership, this study explored the influence of political factors, favouritism and inter-professional

conflicts in leadership which are challenges for public health leadership in Nepal. To overcome this, individual leaders should be committed with systematic implementation of rules/regulations as well as with professional ethics to work without prejudice. This study also explored what sort of qualities and competencies the staff expect from their leaders. By referring to those findings, public health leaders can assess their existing leadership qualities and make improvements. From the theory generated from this research, public health leaders can understand the best way in which leadership works. This will eventually develop the best practices in leadership and further enhance the relationship between leader and followers.

### 6.7 Recommendations for future research

This study developed a theory on public health leadership based on the life-history of individuals as well as their practical experiences in leadership positions. For the development of theory, this study explored various empirical findings and conceptual models which will be the references for future research. For example, the model of 'political influence and public health' *(figure 4.7, page 117)* will be useful to other researchers who want to study and explore more in that topic. The grounded theory developed from this study could also be used as a conceptual framework for other qualitative and quantitative studies in public health. This study compiled individual factors to develop a comprehensive grounded theory, however, all the individual factors were not explored separately. So, further research is recommended to explore the leadership dimensions by using individual factors such as gender, caste culture, education, experiences and self-learning. This will help in broadening the theoretical base of public health leadership.

# BIBLIOGRAPHY


Abdelhafiz, I. M., Alloubani, A. M. & Almatari, M. (2016). Impact of leadership styles adopted by head nurses on job satisfaction: a comparative study between governmental and private hospitals in Jordan. *J Nurs Manag,* 24(3)**,** 384-92.

Aguirre, D. & Pietropaoli, I. (2008). Gender Equality, Development and Transitional Justice: The Case of Nepal. *International Journal of Transitional Justice*, 2(3), 356–377

Aij, K. H. & Rapsaniotis, S. (2017). Leadership requirements for Lean versus servant leadership in health care: a systematic review of the literature. *Journal of healthcare leadership,* 9, 1-14.

Aitken, J.M. (1994). Voices from the inside: Managing district health services in Nepal. *International Journal of Health Planning and Management,* 9(4), 309-40.

Alilyyani, B., Wong, C. A. & Cummings, G. (2018). Antecedents, mediators, and outcomes of authentic leadership in healthcare: A systematic review. *Int J Nurs Stud,* 83, 34-64.

Allen, G. P., Moore, W. M., Moser, L. R., Neill, K. K., Sambamoorthi, U. & Bell, H. S. (2016). The Role of Servant Leadership and Transformational Leadership in Academic Pharmacy. *Am J Pharm Educ,* 80(7)**:** 113.

Alshahrani, F. M. M. & Baig, L. A. (2016). Effect of Leadership Styles on Job Satisfaction Among Critical Care Nurses in Aseer, Saudi Arabia. *J Coll Physicians Surg Pak,* 26(5)**,** 366-70.

Al-Yami, M., Galdas, P. & Watson, R. (2018). Leadership style and organisational commitment among nursing staff in Saudi Arabia. *J Nurs Manag,* 26(5)**,** 531-539.

Antonakis, J. & House, R. J. (2002). *The full-range leadership theory: The way forward,* Amsterdam: JAI.

Arnold, K. A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *J Occup Health Psychol,* 22(3)**,** 381-

393.

Arnold, L., Cuddy, P. G., Hathaway, S. B., Quaintance, J. L. & Kanter, S. L. (2018). Medical School Factors That Prepare Students to Become Leaders in Medicine. *Acad Med,* 93(2)**,** 274-282.

Asante, A., Roberts, G. & Hall, J. (2012). A review of health leadership and management capacity in the Solomon Islands. *Pac Health Dialog,* 18(1)**,** 166-77.

Avolio, B. J. & Bass, B. M. (1991). *Manual for the Full Range of Leadership,* Binghamton, N.Y: Bass, Avolio & Associates.

Avolio, B. J. & Bass, B. M. (2002). *Developing potential across a full range of leadership: Cases on transactional and transformational leadership,* Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Avolio, B. J. & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly,* 16(3)**,** 315-338.

Avolio, B. J. & Hannah, S. T. (2008). Developmental readiness: Accelerating leader development. *Consulting Psychology Journal: Practice and Research,* 60(4)**,** 331-347.

Baker, E. L. (2019). Reflections on Public Health Leadership. *J Public Health Manag Pract,* 25(1)**,** 90-91.

Balio, C. P., Yeager, V. A. & Beitsch, L. M. (2019). Perceptions of Public Health 3.0: Concordance Between Public Health Agency Leaders and Employees. *J Public Health Manag Pract,* 25(2), S103-112.

Baroff, M. B. (2015). My Leadership Engine. *Frontiers in Public Health,* 3:137.

Bartol, K. M. & Martin, D. C. (1998). *Management,* New York: McGraw Hill.

Bass, B. M. (1961). Some aspects of attempted, successful, and effective leadership. *Journal of Applied Psychology,* 45(2)**,** 120-122.

Bass, B. M. (1985). *Leadership and performance beyond expectations,* New York: The Free Press.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics,* 18(3)**,** 19-31.

Bass, B. M. & Avolio, B. J. (1993). *Transformational leadership: A response to critiques,* San Diego, CA: Academic Press.

Bass, B. M. & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership,* Thousand Oaks: Sage Publications Inc.

Bass, M. B. & Riggio, E. G. (2006). *Transformational Leadership.* Mahwah, NJ: Lawrence Erlabaum Associates.

Batten, J. D. (1989). *Tough-minded Leadership,* New York: AMACOM.

Begun, J. W. & Malcolm, J. (2014). *Leading public health: a competency framework,* New York: Springer.

Benke, M. D. (2014). *A Descriptive Study of Leadership Behaviors and Coaching Practices Among Federal Public Health Leaders.* Thesis, Doctor of Education, Argosy University, Washington DC.

Bergman, J. Z., Rentsch, J. R., Small, E. E., Davenport, S. W. & Bergman, S. M. (2012). The shared leadership process in decision-making teams. *J Soc Psychol,* 152(1)**,** 17-42.

Bernard L. L. (1927). *Leadership and propaganda,* New York: Heath.

Betker, R. C. (2016). *Public Health Leadership to Advance Health Equity: A Scoping Review and Metasummary.* Degree of Doctor of Philosophy, University of Saskatchewan.

Blackmar F. W. (1911). Leadership in reform. *American Journal of Sociology,* 16, 626-44.

Blake R. R. & Mouton J. S. (1978). *The new managerial grid.* Houston: Gulf Publishing Company.

Boamah, S. A., Spence Laschinger, H. K., Wong, C. & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nurs*

*Outlook,* 66(2)**,** 180-189.

Bobbio, A. & Manganelli, A. M. (2015). Antecedents of hospital nurses' intention to leave the organization: A cross sectional survey. *Int J Nurs Stud,* 52(7)**,** 1180-92.

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal,* 9(2)**,** 27-40.

Brown, L. D. (2010). The Political Face of Public Health. *Public Health Reviews,* 32(1)**,** 155-173.

Brungardt, C. (1996). The Making of Leaders: A Review of the Research in Leadership Development and Education. *Journal of Leadership Studies,* 3(3)**,** 81-95.

Bryant, A. & Charmaz, K. (2011). *Asking Questions of the Data: Memo Writing in the Grounded Theory Tradition.* In: Bryant, A. and Charmaz, K., Eds., *The SAGE Handbook of Grounded Theory*. Los Angeles: Sage Publications, 245-264

Bryman, A. E. (1986). *Leadership and organizations.* London: Routledge & Kegan Paul.

Burger, P. L. & Luckmann, T. (1966). *The Social Construction of Reality*: *A Treatise in the Sociology of Knowledge*. Garden City, NY: Anchor Books.

Burns, J. M. (1978). *Leadership,* New York: Harper & Row.

Canadian Institute of Health Research. (2016). *Knowledge Translation - Definition* [Online]. Available: https://cihr-irsc.gc.ca/e/29418.html [Accessed 21/04/2020].

Canadian Institute of Health Research. (2019). *Knowledge translation* [Online]. Available: https://cihr-irsc.gc.ca/e/29529.html [Accessed 24/04/2020].

Carlton, E. L., Holsinger, J. W., Jr., Riddell, M. & Bush, H. (2015). Full-range public health leadership, part 1: quantitative analysis. *Front Public Health,* 3:73.

Carlton, E. L., Holsinger, J. W., Jr., Riddell, M. C. & Bush, H. (2015). Full-Range Public Health Leadership, Part 2: Qualitative Analysis and Synthesis. *Front Public Health,* 3:174.

Carman, A. L. (2015). The Journey toward Voluntary Public Health Accreditation Readiness in Local Health Departments: Leadership and Followership Theories in Action. *Front Public Health,* 3:43.

Carson, J. B., Tesluk, P. E. & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal,* 50(5)**,** 1217-1234.

Castaño, A. M., Fontanil, Y. & García-Izquierdo, A. L. (2019). "Why Can't I Become a Manager?" A Systematic Review of Gender Stereotypes and Organizational Discrimination. *International journal of environmental research and public health,* 16(10)**,** 1813.

Central Bureau of Statistics. (2012). National Population and Housing Census 2011. Kathmandu: Government of Nepal.

Ceraso, M., Gruebling, K., Layde, P., Remington, P., Hill, B., Morzinski, J. & Ore, P. (2011). Evaluating community-based public health leadership training. *J Public Health Manag Pract,* 17(4)**,** 344-9.

Charmaz, K. (2006). *Constructing Grounded Theory.* Great Britain: SAGE Publications Inc.

Charmaz, K. (2014). *Constructing Grounded Theory.* Great Britain: SAGE Publications Inc.

Charmaz, K. (2016). The Power of Constructivist Grounded Theory for Critical Inquiry. *Qualitative Inquiry,* 23(1)**,** 34-45.

Choi, S. L., Goh, C. F., Adam, M. B. & Tan, O. K. (2016). Transformational leadership, empowerment, and job satisfaction: the mediating role of employee empowerment. *Hum Resour Health,* 14(1)**,** 73.

Cohen, W. A. (1990). *The Art of a Leader.* Englewood Cliffs: NJ, Prentice Hall.

Conger, J. A. (1992). *Learning to Lead: Art of Transforming Managers into Leaders.* New York: John Wiley & Sons Inc.

Cormier, D. (2006). Why top professional women still feel like outsiders. *Employment Relations Today,* 33(1)**,** 27-32.

Cottey, L. & Mckimm, J. (2019). Putting service back into health care through servant leadership. *Br J Hosp Med (Lond),* 80(4)**,** 220-224.

Cowden, T., Cummings, G. & Profetto-Mcgrath, J. (2011). Leadership practices and staff nurses' intent to stay: a systematic review. *J Nurs Manag,* 19(4)**,** 461-77.

Coxen, L., Van Der Vaart, L. & Stander, M. W. (2016). Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust. *SA Journal of Industrial Psychology,* 42(1)**,** 1-13.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage Publications Inc.

Creswell, J. W. & Poth, C. N. (2018). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches.* Thousand Oaks, CA: Sage Publications Inc.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* London: Sage Publications.

Czabanowska, K., Popa, D. & Smith, T. (2013). Fit-for-purpose: developing curriculum for meeting the needs of public health leaders in the 21st century. *Zdrowie publiczne i zarzadzanie,* 11(2)**,** 225-233.

Czabanowska, K., Smith, T., Könings, K. D., Sumskas, L., Otok, R., Bjegovic-Mikanovic, V. & Brand, H. (2014). In search for a public health leadership competency framework to support leadership curriculum-a consensus study. *European Journal of Public Health,* 24(5)**,** 850.

Czabanowska, K., Smith, T., Stankunas, M., Avery, M. & Otok, R. (2013). Transforming public health specialists into public health leaders. *The Lancet,* 381(9865)**,** 449-50.

Dahal, G. P. & Subedi, M. (2015). Social Determinants of Health in Nepal: A Neglected Paradigm. *In:* ADHIKARI, A. P. & DAHAL, G. P. (eds.) S*ustainable Livelihood Systems in Nepal: Principles, Practices and Prospects.* IUCN and CFFN.

Daire J, Gilson L & S., C. (2014). Developing leadership and management competencies in low and middle-income country health systems: a review of the literature. London: Resilient and Responsive Health Systems (RESYST).

Davis, D. A., Thomson, M. A., Oxman, A. D. & Haynes, R. B. (1995). Changing physician performance. A systematic review of the effect of continuing medical education strategies. *Jama,* 274(9)**,** 700-5.

Day, D. V. (2000). Leadership development: A review in context. *The Leadership Quarterly,* 11(4)**,** 581-613.

Day, D. V., Harrison, M. M. & Halpin, S. M. (2008). *An Integrative Approach to Leader Development: Connecting Adult Development, Identity and Expertise*. New York: Routledge Publication

Day, M., Shickle, D., Smith, K., Zakariasen, K., Moskol, J. & Oliver, T. (2014). Training public health superheroes: five talents for public health leadership. *J Public Health (Oxf),* 36(4)**,** 552-61.

Day, M., Shickle, D., Smith, K., Zakariasen, K., Oliver, T. & Moskol, J. (2012). Time for heroes: public health leadership in the 21st century. *The Lancet,* 380(9849)**,** 1205-6.

De Brun, A., O'donovan, R. & Mcauliffe, E. (2019). Interventions to develop collectivistic leadership in healthcare settings: a systematic review. *BMC Health Serv Res,* 19(1)**,** 72.

De Zulueta, P. C. (2016). Developing compassionate leadership in health care: an integrative review. *J Healthc Leadersh,* 18(8), 1-10.

Dean, H. D., Myles, R. L., Porch, T., Parris, S. & Spears-Jones, C. (2019). Changing Leadership Behaviors in a Public Health Agency Through Coaching and Multirater Feedback. *J Public Health Manag Pract*. doi: 10.1097/PHH.0000000000001044 (ahead of print)

Denzin, N. & Lincoln, Y. (2005). *The SAGE handbook of qualitative research,* Thousand Oaks: Sage Publications.

Department of Health Services. (2014). *Annual Report.* Kathmandu: Department of Health Services.

Department of Health Services. (2015). *Annual Report.* Kathmandu: Department of Health Services.

Department of Health Services. (2016). *Annual Report*. Kathmandu: Department of Health Services.

Dixit, H. (1995). *The Quest for Health,* Kathmandu, Educational Enterprise.

Dixit, H. (2013). Public Health in the Past, Present and Future. Kathmandu: Nepal Public Health Foundation.

Dixit, H. (2014). Many a slip. *Journal of Kathmandu Medical College,* 3(2), 47-48.

Dobbins, M., Greco, L., Yost, J., Traynor, R., Decorby-Watson, K. & Yousefi-Nooraie, R. (2019). A description of a tailored knowledge translation intervention delivered by knowledge brokers within public health departments in Canada. *Health Res Policy Syst,* 17(1)**,** 63.

Dorfman, P. W., Howell, J. P., Hibino, S., Lee, J. K., Tate, U. & Bautista, A. (1997). Leadership in Western and Asian countries: Commonalities and differences in effective leadership processes across cultures. *The Leadership Quarterly,* 8(3)**,** 233-274.

Drucker P. F. (1998). *The leader of the future.* San Francisco: Jossey Bass.

du Plessis, E. and P. Marais (2015). A Grounded Theory Perspective on Leadership in Multicultural Schools." Journal of Asian and African Studies 52(5): 722-737

Ely, R. J., Ibarra, H. & Kolb, D. M. (2011). Taking gender into account: Theory and design for women's leadership development programs. *Academy of Management Learning & Education,* 10(3)**,** 474-493.

Edmonstone, J. (2018). Leadership development in health care in low and middle-income countries: Is there another way? *Int J Health Plann Manage,* 33(4)**,** e1193-e1199.

Engward, H. (2013). Understanding grounded theory. Nurs Stand 28(7): 37-41

Erdogan, B., Liden, R. C. & Kraimer, M. L. (2006). Justice and Leader-Member Exchange: The Moderating Role of Organizational Culture. *The Academy of Management Journal,* 49(2)**,** 395-406.

Eshleman, J. R., Cashion, B. G. & Basirico, L. A. (1993). *Sociology: An introduction*. Pearson.

Fawkes, S. (2012). Leadership for Systems Change in Preventive Health: Review of the literature and current activity. Melbourne: Victorian Government Department of Health.

Fiedler, F. E. (1967). *A theory of leadership effectiveness.* New York: McGraw-Hill.

Fiedler, F. E. & Garcia, J. E. (1987). *New approaches to leadership: Cognitive resources and organizational performance.* New York: Wiley.

Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., Levin, K. Y., Korotkin, A. L. & Hein, M. B. (1991). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *The Leadership Quarterly,* 2(4)**,** 245-287.

Flodgren, G., Parmelli, E., Doumit, G., Gattellari, M., O'brien, M. A., Grimshaw, J. & Eccles, M. P. (2011). Local opinion leaders: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev,* 2011(8)**,** Cd000125.

Flores, A. L., Risley, K., Zanoni, J., Welter, C., Hawkins, D., Pinsker, E. & Quintana, K. (2019). Factors of Success for Transitioning From a Scientific Role to a Supervisory Leadership Role in a Federal Public Health Agency. *Public Health Reports,* 134(5)**,** 466-471.

Forsetlund, L., Bjørndal, A., Rashidian, A., Jamtvedt, G., O'brien, M. A., Wolf, F., Davis, D., Odgaard-Jensen, J. & Oxman, A. D. (2009). Continuing education meetings and workshops: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev,* 2009(2)**,** Cd003030.

Fraser, M., Castrucci, B. & Harper, E. (2017). Public Health Leadership and Management in the Era of Public Health 3.0. *J Public Health Manag Pract,* 23(1)**,** 90-

92.

Freudenberg, N. & Kotelchuck, D. (2001). Political competencies and public health leadership. *American Journal of Public Health,* 91(3)**,** 468.

Fried, L. P., Piot, P., Frenk, J. J., Flahault, A. & Parker, R. (2012). Global public health leadership for the twenty-first century: Towards improved health of all populations. *Global Public Health,* 7(sup1)**,** S5-S15.

Galaviz, K. I., Narayan, K. M. V., Manders, O. C., Torres-Mejia, G., Goenka, S., Mcfarland, D. A., Reddy, K. S., Lozano, R., Valladares, L. M., Prabhakaran, D. & Ali, M. K. (2019). The Public Health Leadership and Implementation Academy for Noncommunicable Diseases. *Prev Chronic Dis,* 16: E49.

Gardner, J. W. (1990). *On leadership.* New York: Free Press.

Gergen, K. J. (1999). *An invitation to social construction.* London: Sage Publication Inc.

Gianfredi, V., Balzarini, F., Gola, M., Mangano, S., Carpagnano, L. F., Colucci, M. E., Gentile, L., Piscitelli, A., Quattrone, F., Scuri, S., Mantovani, L. G., Auxilia, F., Silvana, C., Capolongo, S., Pelissero, G., Odone, A. & Signorelli, C. (2019). Leadership in Public Health: Opportunities for Young Generations Within Scientific Associations and the Experience of the "Academy of Young Leaders". *Front Public Health,* 7:378.

Gibson, D. M., Dollarhide, C. T., Moss, J. M., Aras, Y. & Mitchell, T. (2018). Examining leadership with american counseling association presidents: A grounded theory of leadership identity development. *Journal of Counseling & Development,* 96(4)**,** 361-371.

Gifford, W. A., Squires, J. E., Angus, D. E., Ashley, L. A., Brosseau, L., Craik, J. M., Domecq, M. C., Egan, M., Holyoke, P., Juergensen, L., Wallin, L., Wazni, L. & Graham, I. D. (2018). Managerial leadership for research use in nursing and allied health care professions: a systematic review. *Implement Sci,* 13(1)**,** 127.

Glaser, B. (1978). *Theoretical sensitivity: advances in the methodology of grounded theory.* California: Sociology Press.

Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory: strategies for qualitative research.* New York: Aldine Publishing Company.

Goyet, S., Touch, S., Ir, P., Saman, S., Fassier, T., Frutos, R., Tarantola, A. & Barennes, H. (2015). Gaps between research and public health priorities in low income countries: evidence from a systematic literature review focused on Cambodia. *Implementation Science,* 10(32).

Graen, G. B. & Uhl-Bien, M. (1991). The transformation of professionals into self-managing and partially self-designing contributions: Toward a theory of leader-making. *Journal of Management Systems,* 3(3)**,** 33-48.

Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W. & Robinson, N. (2006). Lost in knowledge translation: time for a map? *J Contin Educ Health Prof,* 26(1)**,** 13-24.

Gray, M. (2009). Public health leadership: creating the culture for the twenty-first century. *Journal of Public Health,* 31(2)**,** 208-209.

Green, J. & Thorogood, N. (2014). *Qualitative Methods for Health Research.* Great Britain: SAGE Publications Inc.

Greenleaf, R. K. (1970). *The servant as leader.* Greenleaf Publishing Centre.

Grimm, B., Tibbits, M., Maloney, S., Johansson, P. & Siahpush, M. (2017). Suggestions for Strengthening the Public Health Leadership Development Model. *Pedagogy in Health Promotion,* 4(2)**,** 88-94.

Grimm, B. L., Watanabe-Galloway, S., Britigan, D. H. & Schumaker, A. M. (2015). A Qualitative Analysis to Determine the Domains and Skills Necessary to Lead in Public Health. *Journal of Leadership Studies,* 8(4)**,** 19-26.

Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J. & Squires, J. E. (2012). Knowledge translation of research findings. *Implementation Science,* 7(1)**,** 50.

Grimshaw, J. M., Shirran, L., Thomas, R., Mowatt, G., Fraser, C., Bero, L., Grilli, R., Harvey, E., Oxman, A. & O'brien, M. A. (2001). Changing provider behavior: an overview of systematic reviews of interventions. *Med Care,* 39(8) Suppl 2**,** Ii2-45.

Guba, E. & Lincoln, Y. (1994). *Competing paradigms in qualitative research. In: Denzin, N.K. and Lincoln, Y.S.* Thousand Oaks: Sage Publications Inc.

Gurung, G., Derrett, S., Hill, P. C. & Gauld, R. (2016). Governance challenges in the Nepalese primary health care system: time to focus on greater community engagement? *The International Journal of Health Planning and Management,* 31(2)**,** 167-174.

Gurung, H. (2005). The Dalit Context. *Occasional Papers on Sociology and Anthropology,* 9, 1-21.

Hammond, M., Clapp-Smith, R. & Palanski, M. (2017). Beyond (just) the workplace: A theory of leader development across multiple domains. *The Academy of Management Review,* 42(3)**,** 481-498.

Han, S. S. & Kim, N. E. (2012). Effects of nurses' perception of servant leadership on leader effectiveness, satisfaction and additional effort: focused on the mediating effects of leader trust and value congruence. *J Korean Acad Nurs,* 42(1)**,** 85-94.

Hartley, J., Martin, J. & Benington, J. (2008). Leadership in Healthcare: a review of the literature for health care professionals, managers and researchers. Available: http://www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1601-148_V01.pdf

Heifetz, R. A. (1994). *Leadership without easy answers.* Cambridge, MA: Belknap Press.

Heifetz, R. A., Grashow, A. & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world.* Boston, MA: Harvard Business School Press.

Hemphill, J. K. (1949). *Situational factors in leadership.* Columbus: Ohio State University, Bureau of Educational Research.

Hersey, P. & Blanchard, K. (1988). *Management of Organizational Behavior.* Englewood Cliffs, NJ: Prentice Hall.

Hintea, C., Mora, C. & Ticlau, T. (2009). Leadership and management in the health care system: leadership perception in cluj county children's hospital. *Transylvanian*

*Review of Administrative Sciences,* 27(3).

Hollander, E. P. (1978). Leadership Dynamics. *The Academy of Management Review,* 4(2).

Holsinger, J. W., Jr., Carlton, E. L. & Jadhav, E. D. (2015). Editorial: Leading People - Managing Organizations: Contemporary Public Health Leadership. *Front Public Health,* 3:268.

House, R. J. (1971). A Path Goal Theory of Leader Effectiveness. *Administrative Science Quarterly,* 16(3)**,** 321-339.

House, R. J. & Mitchell, T. R. (1974). Path-goal theory of leadership. *Journal of Contemporary Business,* 3, 81-98.

Hughes, R. (2009). Time for leadership development interventions in the public health nutrition workforce. *Public Health Nutrition,* 12(8)**,** 1029.

Hunter, D. J. (2009). Leading for Health and Wellbeing: the need for a new paradigm. *Journal of Public Health,* 31(2)**,** 202-204.

Hunter, E. L. (2016). Politics and Public Health—Engaging the Third Rail. *Journal of Public Health Management and Practice,* 22(5)**,** 436-441.

Huynh, H. P., Sweeny, K. & Miller, T. (2018). Transformational leadership in primary care: Clinicians' patterned approaches to care predict patient satisfaction and health expectations. *J Health Psychol,* 23(5)**,** 743-753.

Hyett, E. (2003). What blocks health visitors from taking on a leadership role? *J Nurs Manag,* 11(4)**,** 229-33.

Innvaer, S., Vist, G., Trommald, M. & Oxman, A. (2002). Health policy-makers' perceptions of their use of evidence: a systematic review. *J Health Serv Res Policy,* 7(4)**,** 239-44.

IOM. (1988). *The Future of Public Health.* Washington DC: National Academy Press.

IOM. (2003). *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century.* Washington DC: National Academies Press.

Ivers, N., Jamtvedt, G., Flottorp, S., Young, J. M., Odgaard-Jensen, J., French, S. D., O'brien, M. A., Johansen, M., Grimshaw, J. & Oxman, A. D. (2012). Audit and feedback: effects on professional practice and healthcare outcomes. *Cochrane Database Syst Rev,* 2012(6)**,** Cd000259.

Jacobs, T. O. & Jaques, E. (1990). Military executive leadership. *Measures of leadership.* West Orange, NJ, US: Leadership Library of America.

Jadhav, E. D., Holsinger, J. W., Anderson, B. W. & Homant, N. (2017). Leadership for Public Health 3.0: A Preliminary Assessment of Competencies for Local Health Department Leaders. *Front Public Health,* 5:272.

Jambawo, S. (2018). Transformational leadership and ethical leadership: their significance in the mental healthcare system. *Br J Nurs,* 27(17)**,** 998-1001.

Jamtvedt, G., Young, J. M., Kristoffersen, D. T., Thomson O'brien, M. A. & Oxman, A. D. (2003). Audit and feedback: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev,* 2003(3)**,** Cd000259.

Janssens, S., Simon, R., Beckmann, M. & Marshall, S. (2018). Shared Leadership in Healthcare Action Teams: A Systematic Review. *J Patient Saf*. Jun 4, doi: 10.1097/PTS.0000000000000503.

Jaques, E. & Clement, S. D. (1994). *Executive leadership: a practical guide to managing complexity.* Blackwell: Malden.

Jennings, B. M., Scalzi, C. C., Rodgers, J. D. 3rd & Keane, A. (2007). Differentiating nursing leadership and management competencies. *Nurs Outlook,* 55(4)**,** 169-175.

Jodar, I. S. G., Gené, I. B. J., Hito, P. D., Osaba, M. A. & Del Val García, J. L. (2016). Self-perception of leadership styles and behaviour in primary health care. *BMC Health Serv Res,* 16(1)**,** 572.

Karlberg, I. (2016). Conflicts, political leadership and public health. *Scandinavian Journal of Public Health,* 44(1)**,** 1-1.

Kempster, S. & Parry, K. (2011). Grounded theory and leadership research: A critical realist perspective. *Leadership Quarterly,* 22(1)**,** 106.

Kimberly, J. R. (2011). Preparing Leaders in Public Health for Success in a Flatter, More Distributed and Collaborative World. *Public Health Reviews,* 33(1)**,** 289-299.

Kirkpatrick, S. A. & Locke, E. A. (1991). Leadership: Do traits matter? *The Executive,* 5(2), 48-60.

Knickerbocker, I. (1948). Leadership: a conception and some implications. *Journal of Social Issues,* 4(3)**,** 23-40.

Koh, H. K. (2009). Leadership in public health. *Journal of Cancer Education,* 24, S11-8.

Koh, H. K. (2015). Educating Future Public Health Leaders. *American Journal of Public Health,* 105(S1)**,** S11-S13.

Koh, H. K. & Jacobson, M. (2009). Fostering public health leadership. *Journal of Public Health,* 31(2)**,** 199-201.

Koh, H. K., Nowinski, J. M. & Piotrowski, J. J. (2011). A 2020 Vision for Educating the Next Generation of Public Health Leaders. *American Journal of Preventive Medicine,* 40(2)**,** 199-202.

Komives, S. R., Longerbeam, S. D., Owen, J. E., Mainella, F. C. & Osteen, L. (2006). A Leadership Identity Development Model: Applications from a Grounded Theory. *Journal of College Student Development,* 47(4)**,** 401-418.

Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C. & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development,* 46(6)**,** 563-611.

Kouzes Jm & Posner Bz. (2012). *The leadership challenge: how to make extraordinary things happen in organizations.* San Francisco (CA): Jossey-Bass.

Kouzes, J. M. & Posner, B. Z. (1995). *The leadership challenge: How to keep getting extraordinary things done in organizations. 2nd ed,* San Francisco: Jossey-Bass.

Krishnan, A. (2018). Public health leadership in India: Reflections from my journey. *Indian J Public Health,* 62(3)**,** 171-174.

Kumar, R. D. C. (2013). Leadership in healthcare. *Anaesthesia & Intensive Care Medicine,* 14(1)**,** 39-41.

Laub Ja. (1999). *Assessing the Servant Organization.* Doctoral Dissertation, Atlantic University.

Lauer, C. S. (2003). Leading the way: Managers are important, but leaders really make things happen. *Modern Healthcare,* 33(10).

Lavis, J. N., Robertson, D., Woodside, J. M., Mcleod, C. B. & Abelson, J. (2003). How can research organizations more effectively transfer research knowledge to decision makers? *Milbank Quarterly,* 81(2)**,** 221-48, 171-2.

Lavis, J. N., Ross, S. E., Hurley, J. E., Hohenadel, J. M., Stoddart, G. L., Woodward, C. A. & Abelson, J. (2002). Examining the role of health services research in public policymaking. *Milbank Quarterly,* 80(1)**,** 125-54.

Lawton, L. (2013). Public health and crisis leadership in the 21st century. *Perspectives in Public Health,* 133(3)**,** 144-5.

Lega, F., Prenestini, A. & Tosso, M. (2017). Leadership research in healthcare: A realist review. *Health Services Management Research,* 30(2)**,** 94-104.

Leung, K. (2012). Indigenous Chinese Management Research Like It or Not, We Need It. *Management and Organization Review,* 8(1)**,** 1-5.

Levine, N. E. (1987). Caste, State, and Ethnic Boundaries in Nepal. *The Journal of Asian Studies,* 46(1)**,** 71-88.

Lewin, K., Lippitt, R. & White, R. K. (1939). Patterns of Aggressive Behavior in Experimentally Created Social Climates. *Journal of Social Psychology,* 10(2)**,** 271-299.

Li, P. P., Leung, K., Chen, C. C. & Luo, J.-D. (2012). Indigenous Research on Chinese Management: What and How. *Management and Organization Review,* 8(1)**,** 7-24.

Liamputtong, P. (2013). *Qualitative Research Methods.* Melbourne, Australia: Oxford University Press.

Lo, D., Mckimm, J. & Till, A. (2018). Transformational leadership: is this still relevant to clinical leaders? *Br J Hosp Med (Lond),* 79(6)**,** 344-347.

Loi, R., Mao, Y. & Ngo, H.-Y. (2009). Linking Leader-Member Exchange and Employee Work Outcomes: The Mediating Role of Organizational Social and Economic Exchange. *Management and Organization Review,* 5(3)**,** 401-422.

Lomas, J. (2000). Using 'linkage and exchange' to move research into policy at a Canadian foundation. *Health Aff (Millwood),* 19(3)**,** 236-40.

Lord, R. G., Devader, C. L. & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology,* 71(402-410).

Lussier, R. N. & Achua, C. F. (2018). *Leadership Theory, Application and Skill Development.* USA: Cengage Learning.

Mann, R. D. (1959). A review of the relationship between personality and performance in small groups. *Psychological Bulletin,* 56(4), 241-270.

Manning, J. (2016). The Influence of Nurse Manager Leadership Style on Staff Nurse Work Engagement. *J Nurs Adm,* 46(9)**,** 438-43.

Marasini, B. (2003). Health and Hospital Development in Nepal: Past and Present. *Journal of Nepal Medical Association,* 42(149)**,** 306-311.

Mcalearney, A. S. (2006). Leadership development in healthcare: a qualitative study. *Journal of Organizational Behavior,* 27(7)**,** 967-982.

Mcareavey, M. J., Alimo-Metcalfe, B. & Connelly, J. (2001). How do directors of public health perceive leadership? *Journal of Management in Medicine,* 15(6)**,** 446-462.

Mccauley, C. D. & Van Velsor, E. (2004). *The Center for Creative Leadership handbook of leadership development.* San Francisco: Jossey-Bass.

Mccay, R., Lyles, A. A. & Larkey, L. (2018). Nurse Leadership Style, Nurse Satisfaction, and Patient Satisfaction: A Systematic Review. *J Nurs Care Qual,* 33(4)**,** 361-367.

Mcdermott, A., Kidney, R. & Flood, P. (2011). Understanding leader development: learning from leaders. *Leadership and Organization Development Journal,* 32(4)**,** 358-378.

Miao, R. & Cao, Y. (2019). High-Performance Work System, Work Well-Being, and Employee Creativity: Cross-Level Moderating Role of Transformational Leadership. *International journal of environmental research and public health,* 16(9)**,** 1640.

Miller, D. L., Umble, K. E., Frederick, S. L. & Dinkin, D. R. (2007). Linking learning methods to outcomes in public health leadership development. *Leadership in Health Services,* 20(2)**,** 97-123.

Milliken, P. (2020). Grounded Theory. *In: Salkind, N.J.(ed.) Encyclopedia of Research Design.* Thousand Oaks, CA: Sage Publications.

Minichiello, V. (1990). Interview Process. *In:* Minichiello, V. (ed.) *In-depth interviewing: researching people.* South Melbourne: Longman Cheshire.

Mitton, C., Adair, C. E., Mckenzie, E., Patten, S. B. & Waye Perry, B. (2007). Knowledge transfer and exchange: review and synthesis of the literature. *The Milbank Quarterly,* 85(4)**,** 729-768.

Moodie, R. (2016). Learning About Self: Leadership Skills for Public Health. *J Public Health Res,* 5(1)**,** 679.

Moore, B. V. (1927). The May conference on leadership. *Personnel Journal,* 6, 124–128.

Morse, J. M. (2000). Determining Sample Size. *Qualitative Health Research,* 10(1)**,** 3-5.

Mullen, J. (2016). Being a Good Follower: An Important Component of Effective Public Health Leadership: An Important Component of Effective Public Health Leadership. *Public Health Reports,* 131(6)**,** 739-741.

Murphy, S. E. & Johnson, S. K. (2011). The benefits of a long-lens approach to leader development: Understanding the seeds of leadership. *The Leadership Quarterly,* 22(3)**,** 459-470.

Musinguzi, C., Namale, L., Rutebemberwa, E., Dahal, A., Nahirya-Ntege, P. & Kekitiinwa, A. (2018). The relationship between leadership style and health worker motivation, job satisfaction and teamwork in Uganda. *J Healthc Leadersh,* 10, 21-32. doi: 10.2147/JHL.S147885

Northouse, P. G. (2013). *Leadership: Theory and Practice.* Thousand Oaks: Sage Publications Inc.

Northouse, P. G. (2016). *Leadership: Theory and practice.* Thousand Oaks: Sage Publications Inc.

Nowell, B. & Harrison, L. M. (2011). Leading Change Through Collaborative Partnerships: A Profile of Leadership and Capacity Among Local Public Health Leaders. *Journal of Prevention & Intervention in the Community,* 39(1)**,** 19-34.

O'connell, P. K. (2014). A simplified framework for 21st century leader development. *The Leadership Quarterly,* 25(2)**,** 183-203.

Oliver, T. R. (2006). The politics of public health policy. *Annu Rev Public Health,* 27(195-233.

Olson, L. G. (2013). Public health leadership development: factors contributing to growth. *J Public Health Manag Pract,* 19(4)**,** 341-7.

Orvis, K. A. & Ratwani, K. L. (2010). Leader self-development: A contemporary context for leader development evaluation. *The Leadership Quarterly,* 21(4)**,** 657-674.

Pandey, A. R. (2018). Researches related to public health leadership approved by Nepal Health Research Council. *In:* Interview 23/8/2018, Kathmandu.

Parry, K. (1998). Grounded theory and social process: A new direction for leadership research. *Leadership Quarterly,* 9(1)**,** 85-105.

Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods.* USA: SAGE Publications Inc.

Paudel, L. (1994). *Development of Education in Nepal.* Kathmandu: Bidyarthi Pustak Bhandar.

Perceval, L. (2001). *History of Nepal.* Kathmandu: Aadarsha Enterprises.

Pondy L. R. (ed.) (1989). *Leadership as a language game/* Durham: Duke University Press.

Popescu, G. H. & Predescu, V. (2016). The role of leadership in public health. *American Journal of Medical Research,* 3(1)**,** 273-279.

Posner, B. & Powell, G. (1985). Females and males socialization experiences: An initial investigation. *Journal of Occupational Psychology,* 58, 81-85.

Prihodova, L., Guerin, S., Tunney, C. & Kernohan, W. G. (2019). Key components of knowledge transfer and exchange in health services research: Findings from a systematic scoping review. *Journal of Advanced Nursing,* 75(2)**,** 313-326.

Public Health Agency of Canada. (2007). *Core competencies for public health in Canada: release 1.0* [Online]. Ottawa: PHAC. Available: http://www.phacaspc.gc.ca/php-psp/ccph-cesp/pdfs/cc-manual-eng090407.pdf [Accessed 16/04/2020].

Public Health Update. Organogram and Reporting Mechanism of Nepalese Health System in Federal Context [Internet]. Available: https://www.publichealthupdate.com/organogram-and-reporting-mechanism-of-nepalese-health-system-in-federal-context/ [Accessed 09/12/2020].

Rabarison, K., Ingram, R. & Holsinger, J., James. (2013). Application of Situational Leadership to the National Voluntary Public Health Accreditation Process. *Frontiers in Public Health,* 1:26.

Rabbani, F., Shipton, L., White, F., Nuwayhid, I., London, L., Ghaffar, A., Ha, B. T., Tomson, G., Rimal, R., Islam, A., Takian, A., Wong, S., Zaidi, S., Khan, K., Karmaliani, R., Abbasi, I. N. & Abbas, F. (2016). Schools of public health in low and middle-income countries: an imperative investment for improving the health of populations? *BMC Public Health,* 16:941.

Raducan, R. & Raducan, R. (2014). Leadership and Management. *Procedia - Social and Behavioral Sciences,* 149, 808-812.

Ranjbar, M., Rafiei, S., Shafiei, M. & Kargar, V. (2019). Transformational Leadership Style and Employee Creativity: A Case Study in Yazd Medical University. *Health Care Manag (Frederick),* 38(3)**,** 282-288.

Reddy, K. S., Mathur, M. R., Negi, S. & Krishna, B. (2017). Redefining public health leadership in the sustainable development goal era. *Health Policy Plan,* 32(5)**,** 757-759.

Riggio, R. E. & Mumford, M. D. (2011). Introduction to the special issue: Longitudinal studies of leadership development. *The Leadership Quarterly,* 22(3)**,** 453-456.

Rost, J. C. (1993). *Leadership for the twenty-first century.* Westport, Connecticut: Praeger.

Rowitz, L. (2014). *Public health leadership: putting principles into practice.* Burlington, Mass: Jones & Bartlett Learning.

Russell, R. F. & Stone, A. G. (2002). A review of servant leadership attributes: Developing a practical model. *Leadership & Organization Development Journal,* 23(3)**,** 145-157.

Saleh, S. S., Williams, D. & Balougan, M. (2004). Evaluating the Effectiveness of Public Health Leadership Training: The NEPHLI Experience. *American Journal of Public Health,* 94(7)**,** 1245-9.

Schwartz, R. W. & Tumblin, T. F. (2002). The power of servant leadership to transform health care organizations for the 21st-century economy. *Arch Surg,* 137(12)**,** 1419-27.

Sharma, G. (1999). *Development of Educational Administration of Nepal.* Kathmandu: Lumbini Book Store.

Sharma, S. P. (2010). Politics and corruption mar health care in Nepal. *The Lancet,* 375, 2063-64.

Shickle, D., Day, M., Smith, K., Zakariasen, K., Moskol, J. & Oliver, T. (2014). Mind the public health leadership gap: the opportunities and challenges of engaging high-profile individuals in the public health agenda. *J Public Health (Oxf),* 36(4)**,** 562-7.

Shojania, K. G., Jennings, A., Mayhew, A., Ramsay, C. R., Eccles, M. P. & Grimshaw, J. (2009). The effects of on-screen, point of care computer reminders on processes and outcomes of care. *Cochrane Database Syst Rev,* 2009(3)**,** Cd001096.

Smith, A. & Rogers, V. (2000). Ethics-related responses to specific situation vignettes: Evidence of gender-based differences and occupational socialization. *Journal of Business Ethics,* 28(1), 73-86.

Smith, T., Stankunas, M., Czabanowska, K., De Jong, N., O'connor, S. & Fowler Davis, S. (2015). Principles of all-inclusive public health: developing a public health leadership curriculum. *Public Health,* 129(2)**,** 182-184.

Solansky, S. T. (2014). Self-determination and leader development. *Management Learning,* 46(5)**,** 618-635.

Spears, L. C. (ed.) (2002). *Tracing the past, present and future of servant-leadership,* New York: Wiley.

Srinivasan, J. & Holsinger, J. W. (2012). The yin-yang of followership-leadership in public health. *Journal of Public Health,* 20(1)**,** 95-98.

Stander, F. W., De Beer, L. T. & Stander, M. W. (2015). Authentic leadership as a source of optimism, trust in the organisation and work engagement in the public health care sector. *SA Journal of Human Resource Management,* 13(1)**,** 1-12.

Stankunas, M., Sauliune, S., Smith, T., Avery, M., Sumskas, L. & Czabanowska, K. (2012). Evaluation of leadership competencies of executives in Lithuanian public health institutions. *Medicina (Kaunas),* 48(11)**,** 581-7.

Steinmann, B., Klug, H. J. P. & Maier, G. W. (2018). The Path Is the Goal: How Transformational Leaders Enhance Followers' Job Attitudes and Proactive Behavior. *Frontiers in psychology,* 9:2338-2338.

Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology,* 25(1), 35-71.

Stogdill, R. M. (1950). Leadership, membership and organization. *Psychological Bulletin,* 47(1)**,** 1-14.

Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research.* New York: Free Press.

Strauss, A. & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Thousand Oaks, CA: Sage Publications Inc.

Strauss, A. & Corbin, J. M. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* Thousand Oaks, CA: Sage Publications Inc.

Suárez-Gonzalo, L. & Catalá-López, F. (2018). Knowledge translation strategies to improve health care. *Medicina Clínica (English Edition),* 151(6)**,** 239-241.

Subedi, M. (2016). Caste/Ethnic Dimensions of Change and Inequality: Implications for Inclusive and Affirmative Agendas in Nepal. *Nepal Journal of Contemporary Studies,* 16 (Jan-Dec 2016)**,** 1-16.

Subedi, M. & Maharjan, R. (2018). Cast or class? Formation of social strata in Nepal. *Citizen participation on governance,* Kathmandu, Nepal.

Tannenbaum R. J. (1961). *Leadership and organizations: A behavioral science approach.* New York: McGraw Hill.

Topp, S. M., Abimbola, S., Joshi, R. & Negin, J. (2018). How to assess and prepare health systems in low- and middle-income countries for integration of services-a systematic review. *Health Policy Plan,* 33(2)**,** 298-312.

Trastek, V. F., Hamilton, N. W. & Niles, E. E. (2014). Leadership models in health care - a case for servant leadership. *Mayo Clin Proc,* 89(3)**,** 374-81.

Turning Point. (2002). *Collaborative Leadership: Fundamental Concepts* [Online]. Available: http://216.92.113.133/Pages/pdfs/lead_dev/curriculum/manual_sections/CL_fundamentals_Participants.pdf [Accessed].

Uhl-Bien, M., Marion, R. & Mckelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly,* 18(4)**,** 298-318.

Umble, K., Steffen, D., Porter, J., Miller, D. & Et Al. (2005). The National Public Health Leadership Institute: Evaluation of a Team-Based Approach to Developing Collaborative Public Health Leaders. *American Journal of Public Health,* 95(4)**,** 641-4.

Uno, H. & Zakariasen, K. (2010). Public health leadership education in North America. *Journal of Healthcare Leadership,* 2, 11-15.

Upadhyay, P. (2013). Ethnicity, stereotypes and ethnic movements in Nepal. *Crossing the Border: International Journal of Interdisciplinary Studies,* 1(1).

Van Eerd, D. (2019). Knowledge transfer and exchange in health and safety: a rapid review. *Policy and Practice in Health and Safety,* 17(1)**,** 54-77.

Van Velsor, E., Wilson, M., Criswell, C. & Chandrasekar, N. A. (2013). Learning to lead: A comparison of developmental events and learning among managers in China, India and the United States. *Asian Business & Management,* 12(4)**,** 455-476.

Vroom, V. H. & Jago, A. G. (2007). The role of the situation in leadership. *American Psychologist,* 62(1)**,** 17-24.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S. & Peterson, S. J. (2007). Authentic Leadership: Development and Validation of a Theory-Based Measure†. *Journal of Management,* 34(1)**,** 89-126.

Whetten, D. A. (2009). An Examination of the Interface between Context and Theory Applied to the Study of Chinese Organizations. *Management and Organization Review,* 5(1)**,** 29-55.

WHO. (2007). Everybody's business - Strengthening health systems to improve health outcomes: WHO's Framework for action. Geneva: World Health Organization.

WHO. (2007). Health System in Nepal: Challanges and Strategic Options. Geneva: World Health Organization.

WHO. (2007). Towards Better Leadership and Management in Health: Report on an International Consultation on Strengthening Leadership and Management in Low-Income Countries. Geneva: World Health Organization.

Wirrmann, E. J. & Carlson, C. L. (2005). Public health leadership in primary care practice in England: Everybody's business? *Critical Public Health,* 15(3)**,** 205-217.

World Bank. (2019). *World Bank Open Data* [Online]. Available: https://data.worldbank.org/country/nepal [Accessed 10/05/2019].

Wright, K., Rowitz, L., Merkle, A., Reid, W. M., Robinson, G., Herzog, B., Weber, D., Carmichael, D., Balderson, T. R. & Baker, E. (2000). Competency development in public health leadership. *American Journal of Public Health,* 90(8)**,** 1202-1207.

Yadav, C. B. (2010). List of Research Reports in Nepal Health Research Council's Library.

Yadav, P. L. (1996). *Political History of Nepal*. Kathmandu.

Yngve, A. (2006). Challenges for Public Health Nutrition are immense--to be a good public health nutrition leader requires networking and collaboration. *Public Health Nutr,* 9(5)**,** 535-7.

Yphantides, N., Escoboza, S. & Macchione, N. (2015). Leadership in public health: new competencies for the future. *Front Public Health,* 3:24.

Yukl, G. (2006). *Leadership in organizations.* Upper Saddle River, NJ: Pearson-Prentice Hall.

Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist,* 62(1), 6-16.

# APPENDICES

## Appendix 1 – Ethical approval from Flinders University, Australia

Flinders University
Social & Behavioural Research Ethics Committee

Research Development & Support
Union Building

GPO Box 2100
Adelaide SA 5001
P: +61 72218353

human.researchethics@flinders.edu.au

Date: 3rd May, 2018

Ref Reference: SBREC 7939

Dear Sudarshan,

The Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. This means that you now have approval to commence your research. Your ethics final approval notice can be found below.

**FINAL APPROVAL NOTICE**

| | |
|---|---|
| Project No.: | **7939** |
| Project Title: | Public Health Leadership in Nepal: Development, Enactment and Competencies |
| Principal Researcher: | Mr Sudarshan Subedi |
| Email: | sube0023@flinders.edu.au |
| Approval Date: | 3 May 2018 |
| Ethics Approval Expiry Date: | **20 February 2021** |

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment(s):

**Additional information required following commencement of research:**

1. Permissions
   Please ensure that copies of the correspondence granting permission to conduct the research from the Ministry of Health, Nepal, are submitted to the Committee *on receipt*. Please ensure that the SBREC project number is included in the subject line of any permission emails forwarded to the

INSPIRING ACHIEVEMENT

Flinders UNIVERSITY

Committee. Please note that data collection should not commence until the researcher has received the relevant permissions (item D8 and Conditional approval response – number 10).

2. Other Ethics Committees
Please provide a copy of the ethics approval notice from the Institutional Review Committee (IRC) at Pokhara University, Nepal, *on receipt*. Please note that data collection should not commence until the researcher has received the relevant ethics committee approvals (item E3 and Conditional approval response – number 11).

**RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS**

1. **Participant Documentation**
Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.
- the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

*This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). 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.*

2. **Annual Progress / Final Reports**
In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (March 2007)* an annual progress report must be submitted each year on the **3 May** (approval anniversary date) for the duration of the ethics approval using the report template available from the Managing Your Ethics Approval SBREC web page. *Please retain this notice for reference when completing annual progress or final reports.*

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires

Flinders UNIVERSITY

please submit either (1) a final report; or (2) an extension of time request and an annual report.

Student Projects
The SBREC recommends that current ethics approval is maintained until a student's thesis has been submitted, reviewed and approved. This is to protect the student in the event that reviewers recommend some changes that may include the collection of additional participant data.

Your first report is due on **3 May 2019** or on completion of the project, whichever is the earliest.

3. **Modifications to Project**
Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such proposed changes / modifications include:

- change of project title;
- change to research team (e.g., additions, removals, principal researcher or supervisor change);
- changes to research objectives;
- changes to research protocol;
- changes to participant recruitment methods;
- changes / additions to source(s) of participants;
- changes of procedures used to seek informed consent;
- changes to reimbursements provided to participants;
- changes / additions to information and/or documentation to be provided to potential participants;
- changes to research tools (e.g., questionnaire, interview questions, focus group questions);
- extensions of time.

To notify the Committee of any proposed modifications to the project please complete and submit the *Modification Request Form* which is available from the Managing Your Ethics Approval SBREC web page. Download the form from the website every time a new modification request is submitted to ensure that the most recent form is used. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details
Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

4. **Adverse Events and/or Complaints**
Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or 8201-7938 human.researchethics@flinders.edu.au immediately if:

Flinders UNIVERSITY

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that effects participants;
- an unforeseen event occurs that may affect the ethical acceptability of the project.

Kind regards

A/Prof David Hunter

---

**Ms Andrea Mather** (formerly Fiegert) **and Ms Rae Tyler**
Ethics Officers and Executive Officers, Social and Behavioural Research Ethics Committee

| | |
|---|---|
| Ms Andrea Mather \| Monday - Friday | T: +61 8201-3116 \| E: human.researchethics@flinders.edu.au |
| Ms Rae Tyler \| Monday, Wednesday and Friday mornings | T: +61 8201-7938 \| E: human.researchethics@flinders.edu.au |
| A/Prof David Hunter \| SBREC Chairperson | T: +61 7221-8477 \| E: david.hunter@flinders.edu.au |
| Dr Deb Agnew \| SBREC Deputy Chairperson | T: +61 8201-3456 E: deb.agnew@flinders.edu.au |
| SBREC Website | Social and Behavioural Research Ethics Committee (SBREC) |

## Appendix 2 – Ethical approval from Pokhara University, Nepal

पोखरा विश्वविद्यालय
POKHARA UNIVERSITY
Kaski, Nepal

चलानी नं.:/Ref. No. 195/074/75

Thursday, June 07, 2018

**Mr. Sudarshan Subedi**
Principal Investigator
School of Health and Allied Sciences
Faculty of Health Sciences
Pokhara University

Ref: **Ethical Approval of Research Proposal** entitled ***"Public Health Leadership in Nepal : Development, Enactment and Competencies"***

***Dear Mr. Sudarshan Subedi***

It is my pleasure to inform you that the above mentioned proposal has been approved by Pokhara University Research Center (PURC) and Institutional Review Committee (IRC).

As per IRC rules and regulations, the investigator has to strictly follow the protocol mentioned in the proposal. Any change in objective(s), problem statement, research questioner hypothesis methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this center. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol.

Further, the researchers are directed to strictly abide by the IRC during the implementation of their research proposal and submit progress report and full copy of summary report upon completion.

If you have any questions, please contact the IRC Section at PURC.

Thank You.

GM Kh.

Associate Professor Gulam Muhammad Khan
Executive Director Pokhara University Research Centre (PURC)
Pokhara Lekhnath- 30 Dhungepatan Kaski, Nepal.
gulamkhan@gmail.com / purc@pu.edu.np , http://pu.edu.np/university/purc/
+9841203704

# Appendix 3 – Approval from Ministry of Health, Nepal

नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
(नीति,योजना तथा अन्तर्राष्ट्रिय सहयोग महाशाखा)

२२३५८०
२६२६९६
२६९७३६
२६२८०२
२६२९८७
२६२४६८
२६२५४३

पत्र संख्याः- (१) ०७४/७५
च.न ४२४

नेपाल सरकार
स्वास्थ्य तथा जनसंख्या मन्त्रालय
रामशाहपथ, काठमाडौं

रामशाहपथ
काठमाडौं, नेपाल

मिति : २०७५/२/१६

श्री सुदर्शन सुबेदी
उपप्राध्यापक, पोखरा विश्वबिध्यालय
हाल: Flinders University,Australia

बिषय: अनुसन्धानका लागि सहमति सम्बन्धमा

प्रस्तुत बिषयमा तपाईले Flinders University, Australia मा बिध्याबारिधि(PhD)तहको अध्ययन प्रयोजनार्थ **"नेपालको जनस्वास्थ्य क्षेत्रमा नेतृत्व (Public Health Leadership)"** शीर्षकमा अनुसन्धान कार्य गर्नको लागि नेपाल सरकार स्वास्थ्य मन्त्रालय र मातहतका कार्यालयहरुमा कार्यरत जनस्वास्थ्य क्षेत्रका कर्मचारीहरुसंग अन्तर्वार्ता गर्न एबम सूचना संकलनका कार्यहरु गर्न अनुमति माग गरि मिति २०७५/१/२० मा स्वास्थ्य तथा जनसंख्या मन्त्रालयमा निवेदन पेश गर्नु भएको सन्दर्भमा, नेपाल सरकार स्वास्थ्य अनुसन्धान परिषदको नियमानुसार Ethical Aproval लिएर मात्र अनुसन्धान कार्य गर्ने गरि स्वास्थ्य मन्त्रालय अन्तर्गतका निकायहरुमा कार्यरत जनस्वास्थ्य क्षेत्रका कर्मचारीहरुसंग अनुसन्धान प्रयोजनार्थ अन्तर्वार्ता लिन एबम सूचना संकलन गर्न सहमति प्रदान गरिएको व्यहोरा अनुरोध छ ।

२०७५।२।१६

भीमप्रसाद सापकोटा
जनस्वास्थ्य प्रशासक
जन स्वास्थ्य प्रशासक

**बोधार्थ:**
Flinders University
*Adelaide, Australia*

## Appendix 4 – Letter of Introduction (English)

Flinders
UNIVERSITY

Content removed for privacy reason

### LETTER OF INTRODUCTION

Dear Sir/Madam

This letter is to introduce Mr. Sudarshan Subedi who is a student researcher of 'Doctor of Public Health' (DrPH) at College of Medicine and Public Health, Flinders University. He will produce his student card, which carries a photograph, as proof of identity.

Mr. Subedi is undertaking research leading to the production of a thesis or other publications on the subject of "Public Health Leadership in Nepal". Your voluntarily participation in this project would be highly appreciable. As a participant, you would be invited for either an interview (2 sessions) or a focus group discussion (1 session) which includes some subject matters related to this research. Each session of interview or focus group discussion will take around 60 minutes.

Anonymity could not be guaranteed for interview because it is more likely that introduction prior to interview will be done by exchanging each other's name or the researcher may know your name by any means. Similarly, in focus group discussion, the participants may already know each other and they may pronounce each other's name while discussing. However, in this situation, your identification and personal matters will be considered sensitive. I can assure that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

*Since Mr. Subedi intends to make a tape recording of the interview and focus group discussion, he will seek your consent on this matter (consent form attached) along with to use the recording or it's transcription in preparation of thesis, report and other publications, on condition that your name or identity is not revealed, and to make the recording available to other researchers (supervisors) on the same conditions.*

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on +..... or e-mail .....

Thank you for your attention and assistance.

Yours' sincerely

……

Prof. .....

## Appendix 5 – Letter of Introduction (Nepali)

Content removed for privacy reason

Flinders UNIVERSITY

# परिचय पत्र

महोदय,

यो परिचय पत्र श्री सुदर्शन सुबेदीलाई तपाईंसंग परिचित गराउनका लागि लेखिएको हो जो हाल फिलन्डर्स विश्वविद्यालय, चिकित्साशास्त्र तथा जनस्वास्थ्य महाविद्यालय (Flinders University, College of Medicine and Public Health) मा जनस्वास्थ्य विद्यावारिधि (Doctor of Public Health/ DrPH) कोर्षका विद्यार्थी अनुसन्धानकर्ता हुन् । निज सुबेदीले प्रमाणको लागि आफ्नो परिचय पत्र ( फोटो सहितको) पेश गर्नुहुनेछ ।

श्री सुदर्शन सुबेदीले हाल "नेपालको जनस्वास्थ्य क्षेत्रमा नेतृत्व : विकास, अभ्यास र दक्षता" बिषयमा अनुसन्धान गर्दै हुनुहुन्छ जसबाट निकट भविष्यमा थेसिस, रिपोर्ट वा अन्य प्रकारका रिसर्च पेपरहरु प्रकाशित हुनेछन् । यस अनुसन्धानमा तपाईंको स्वेच्छिक सहभागीताको उच्च कदर गरिनेछ । सहभागी भएको खण्डमा तपाइले यस अनुसन्धान संग सम्बन्धित केही बिषयलाई समेट्ने गरी हुने अन्तर्वार्ता ( २ चरण) वा समूहगत छलफल (१ चरण) मध्ये कुनै एक मा भाग लिनुपर्ने हुन्छ । प्रत्येक अन्तर्वार्ता वा समूहगत छलफलको समय करिब ६० मिनेटको हुनेछ ।

*अन्तर्वार्तालाई बेनामी (नाम अज्ञात रहने) गरी गर्न प्रायः असम्भव छ किनकी यसमा एक अर्काको नाम लिएर परिचयको सुरुवात गरिन सक्छ वा अनुसन्धानकर्तालाई कुनै माध्यमबाट तपाईंको नाम थाहा हुन सक्छ । साथै समूहगत छलफलमा समेत सहभागीहरू एक अर्कासंग पहिल्यै परिचित हुन सक्छन् वा छलफलको समयमा एक अर्काको नाम उच्चारण गर्न सक्छन् । तर पनि यस्तो अवस्थामा तपाईंको पहिचान र निजी कुराहरूलाई संवेदनशील रुपमा हेरिने छ । अनुसन्धानबाट प्रकाशित हुने थेसिस, रिपोर्ट वा अन्य कुनै पनि कागजातमा तपाईंको नाम उल्लेख गरिने छैन साथै अन्य व्यक्तिगत*

*विवरणलाइ समेत पूर्णतया गोप्य राखिने कुरामा तपाईंलाई विश्वस्त बनाउन चाहन्छु । तपाईंले चाहेको खण्डमा कुनै पनि बेला अन्तर्वार्ता वा समूहगत छलफलबाट बाहिरिन सक्नुहुनेछ वा कुनै निश्चित प्रश्नहरूको उत्तर नदिन पनि पाउनुहुनेछ ।*

*अन्तर्वार्ता वा समूहगत छलफलको क्रममा अडियो रेकर्डिङ गर्नुपर्ने भएकोले सो सन्दर्भमा श्री सुदर्शन सुबेदीले तपाईंको मन्जुरी माग्नुहुनेछ (मन्जुरीनामाको पत्र संलग्न छ) । साथै तपाईंको नाम कहीं कतै नआउने गरी रेकर्डिङ वा त्यसको ट्रान्सक्रिप्टलाई थेसिस, रिपोर्ट वा अन्य प्रकाशनमा प्रयोग गर्नका लागि, अनुसन्धान टोलीका अन्य सदस्यहरु (सुपरभाइजर) लाई सो रेकर्डिङ प्रदान गर्नका लागि समेत तपाईंसंग अनुमति मागिने छ ।*

यस अनुसन्धानसंग सम्बन्धित बिषयमा तपाईंलाई कुनै पनि जिज्ञासा भएमा माथि दिइएको ठेगानामा वा फोन नं. ..... अथवा ..... मा इमेल गर्न सक्नुहुनेछ ।

सहयोगको लागि धन्यवाद ।

भवदीय

.....

# Appendix 6 – Information sheet for interview (English)

## INFORMATION SHEET

**Research Title:** Public Health Leadership in Nepal

**Investigator:**

Mr Sudarshan Subedi

College of Medicine and Public Health

Flinders University, South Australia

Ph:

**Description of the study:**
This study is a part of the research project entitled 'Public Health Leadership in Nepal: Development, Enactment and Competencies' which will investigate the ways of leadership development among public health officials along with the exploration of leadership qualities in context of Nepalese public health settings. This project is technically supported by Flinders University, Public Health Department.

**Purpose of the study:**

This project aims to find out the followings:

- Describe the public health workforce and their leadership roles, strategies and competencies in Nepal
- Explore the construction and enacting of leadership styles and behaviours among public health officials of Nepal
- Explore and recommend opportunities for leadership development in public health settings of Nepal

**What will I be asked to do?**

You are invited to attend a one-on-one interview with the principal investigator of this research project. Interview will be of two phases. In first phase, investigator will ask you few questions about your job roles and responsibilities including day to day managerial/administrative activities, and context in which you inspire and motivate your employees. In the second and/or third phase, you will be asked to describe your journey to be a public health officials including the favourable and unfavourable environment, supporting and hindering factors on your journey. The time for each interview would be about 60 minutes. The interview will be recorded by using a digital voice recorder. Once recorded, the interview will be transcribed (typed-up) and you will be requested to review what you said. The recorded version would be stored as a computer file and then destroyed once the research results have been finalised.

**What benefit will I gain from being involved in this study?**

You may not receive directly benefit from this study. However, sharing of your views and experiences will help a lot in understanding leadership perspective in public health of Nepal. The results of this study would act as a reference to leadership interventions program that are targeted to health officials. After completion of this project, you and other participants would bring together for some interactive session to share the findings so that you can get information regarding the application of leadership behaviours. You will receive some amount of financial incentive for your time and travel expenses.

**Will I be identifiable by being involved in this study?**

In interview, anonymity could not be guaranteed because it is most likely that researcher may know your name or calling each other by name is quite common. However, your name wouldn't be used in any part of the research including the publication of its results. Once the interview will be transcribed and saved as a file in computer, the audio file will also be destroyed. Your name will not be mentioned during transcribing. Information given from you would be confidential and no identifiable information would be shown. The transcribed file will be stored as a password protected file in a computer in which only principal investigator have access to. Your statements from the interview will not directly linked to you.

**Are there any risks or discomforts if I am involved?**

Since this study only collect information on your experience and view, it won't have any type of risk to you nor do any type of harm (physical, psychological, social, economical and legal) to you. However, if you feel discomfort or any form of insecurity in sharing your view and experience, please raise them with the investigator. You have the right to withdraw from study at any time without showing any reason.

Only one burdens that you may feel would be the "donation of your time and travel expenses". You will be reimbursed for your time on the basis of your job positions as per the standard of one hour remuneration when you act as a trainer in governmental institutions.

**How do I agree to participate?**

Participation in this study is voluntary. You may not agree to participate at all. If you agree to participate and feel discomfort during the interview, you can answer 'no comment' or refuse to answer any question or even can withdraw from interview at any time. Your non response or withdrawn will not have any effect or consequences both for you and this study. This information sheet comes with a consent form. Once you finish reading this information sheet, you can go through the consent form. If you agree to participate, you can sign the form and return back to me. You can keep a copy of information sheet and consent form for your future reference.

**How will I receive feedback on this study/research?**

You will be given the transcript of your interview to ensure that it reflects your sayings and you should return that within a week. You can ask the investigator to revise the transcript if that doesn't reflect your statement in a proper way. Outcomes from the study/research will be

communicated with you by the investigator in the form of summarized report if you would like to see them.

**Thank you for taking the time to read this information sheet and I hope that you will accept the invitation to be involved in this research.**

## Appendix 7 – Information sheet for interview (Nepali)

# जानकारी पत्र

### अनुसन्धानको शीर्षक : नेपालको जनस्वास्थ्य क्षेत्रमा नेतृत्व

**अनुसन्धानकर्ता :**
श्री सुदर्शन सुबेदी
चिकित्साशास्त्र तथा जनस्वास्थ्य महाविद्यालय
फिलन्डर्स विश्वविद्यालय, दक्षिण अष्ट्रेलिया
फोन : .....

**अध्ययनको बारेमा :**
यो अध्ययन "नेपालमा जनस्वास्थ्य क्षेत्रमा नेतृत्व : विकास, अभ्यास र दक्षता" नामक अनुसन्धान प्रोजेक्टको एउटा अंश हो जसले नेपालको सन्दर्भमा जनस्वास्थ्य अधिकृत/प्रशासकहरूमा नेतृत्व विकास हुने विधि/तरिका पत्ता लगाउनुका साथै जनस्वास्थ्यको क्षेत्रमा आवश्यक पर्ने नेतृत्व सम्बन्धि विशेषताहरूको पहिचान गर्नेछ ।

**अध्ययनको उद्देश्य :**
१) नेपालको जनस्वास्थ्य क्षेत्रका मानवशक्ति तथा तिनीहरुको नेतृत्वको भूमिका, रणनिती र दक्षताहरूको बारेमा वर्णन गर्ने ।
२) नेपालका जनस्वास्थ्य अधिकृत/प्रशासकहरूको नेतृत्वको शैली तथा व्यवहारको निर्माण र अभ्यासको खोजी गर्ने ।
३) नेपालको जनस्वास्थ्य क्षेत्रको नेतृत्व विकासको लागि अवसरहरूको खोजी र सिफारिस गर्ने ।

**यस सन्दर्भमा मलाई के कुरा सोधिनेछ ?**
यस अनुसन्धान प्रोजेक्टको मुख्य अनुसन्धानकर्ताले तपाईंलाई एकल तथा प्रत्यक्ष अन्तर्वार्ताका लागि आमन्त्रण गर्नेछन् । अन्तर्वार्ता २ चरणको हुनेछ । पहिलो चरणमा अनुसन्धानकर्ताले तपाईंको काम ( जागिर) को भूमिका तथा उत्तरदायित्व साथसाथै दैनिक रुपमा गर्ने व्यवस्थापकीय/प्रशासकीय कार्यहरू र आफ्ना कर्मचारीहरूलाई उत्प्रेरित वा प्रोत्साहन गर्ने सन्दर्भमा केही प्रश्नहरू सोध्नेछन् । दोस्रो चरणमा तपाईंको जनस्वास्थ्य क्षेत्रको यात्रा तथा त्यस सन्दर्भमा भएका सहज र असहज परिस्थिति, समर्थन र बाधा पुऱ्याएका तत्वहरूको बारेमा सोधिनेछ । प्रत्येक अन्तर्वार्ताको समय करिव १ घण्टाको हुनेछ । अन्तर्वार्तालाई डिजीटल भ्वाइस रेकर्डरद्वारा अडियो रेकर्डिङ गरिनेछ । रेकर्डिङ गरिसकेपछि अन्तर्वार्तालाई लिखित रूपान्तरण गरेर तपाईलाई दिइनेछ जसमा तपाईले आफूले भनेका कुराहरूको समीक्षा गर्नुहुनेछ । रेकर्ड गरिएको कुरालाई कम्प्युटरमा सुरक्षित गरेर राखिनेछ र अनुसन्धानको नतिजा निष्कर्षमा पुगेपछि त्यसलाई नष्ट गरिनेछ ।

**यस अनुसन्धानमा भाग लिएमा मलाई के फाइदा हुन्छ ?**

तपाईंलाई यस अनुसन्धानबाट प्रत्यक्ष फाइदा नहुन सक्छ । तर तपाईंले व्यक्त गर्नुभएको विचार र अनुभवले नेपालको जनस्वास्थ्य क्षेत्रमा हुने नेतृत्व (पब्लिक हेल्थ लिडरशीप) को बिषयमा बुझ्नका लागि सहयोग गर्नेछ । यस अनुसन्धानबाट प्राप्त हुने नतिजाले स्वास्थ्य प्रशासकहरूलाई लक्षित गरेर गरिने बिभिन्न प्रकारका नेतृत्व सम्बन्धि कार्यक्रमहरूलाई समेत सन्दर्भ स्रोतको रुपमा काम गर्नेछ । अनुसन्धान पश्चात तपाईं र अन्य सहभागीहरूलाई समेटेर यस अनुसन्धानबाट प्राप्त नतिजाबारे एउटा अन्तर्क्रिया कार्यक्रम संचालन गरिनेछ जसबाट नेपालको जनस्वास्थ्यको क्षेत्रमा हुने नेतृत्व व्यवहारहरू बारे जानकारी पाउनुहुनेछ । तपाईंले यस अनुसन्धानका लागि दिनुपर्ने समय र यातायात खर्चलाई समेत ख्याल गरी केही मात्रामा आर्थिक भुक्तानी गरिनेछ ।

**यस अनुसन्धानमा भाग लिंदा मेरो व्यक्तिगत परिचय वा विवरण के हुन्छ ?**

अन्तर्वार्तालाई बेनामी बनाउन प्राय असम्भव हुन्छ किनकी अनुसन्धानकर्तालाई कुनै माध्यमबाट तपाईंको नाम थाहा हुन सक्छ वा परिचय गर्दा एक अर्काको नाम लिने कुरा सामान्य हुन सक्छ । तथापि अनुसन्धानको कुनै पनि अंशमा वा यसको नतिजा प्रकाशित हुने कुनै पनि माध्यममा तपाईंको नाम आउने छैन । अन्तर्वार्तालाई लिखित रूपमा उतारेर कम्प्युटरमा सुरक्षित गरेपछि अडियो रेकर्डिङ नष्ट गरिनेछ । अन्तर्वार्तालाई लिखीत रुपमा उतार्दा तपाईंको नाम कहीं कतै आएमा पनि त्यसलाई हटाइनेछ । तपाईंले दिएका सम्पूर्ण जानकारीहरू पूर्णतया गोप्य रहनेछन् र निजी/व्यक्तिगत विवरणहरू देखाइने छैन । लिखित रूपान्तरण गरिएको फाइललाई अनुसन्धानकर्ताको मात्र पहुच हुने पासवर्डद्वारा सुरक्षित गरिएको कम्प्युटरमा राखिनेछ । अन्तर्वार्तामा तपाईंले दिएका अभिव्यक्तिहरू समेत तपाईंसंग प्रत्यक्ष रूपमा सम्बन्धित हुने छैनन् ।

**यस अनुसन्धानमा भाग लिंदा मलाई केही हानी नोक्सानी वा असजह हुन्छ ?**

यस अनुसन्धानमा तपाईंको विचार र अनुभव संग सम्बन्धित जानकारी मात्र लिइने हुनाले यसबाट तपाईंलाई कुनै प्रकारको जोखिम वा हानी (शारीरिक, मानसिक, सामाजिक, आर्थिक र कानुनी) हुने छैन । तथापि तपाईंलाई आ^नो विचार वा अनुभव व्यक्त गर्दा कुनै प्रकारको असहज वा असुरक्षित महसुस भएमा अनुसन्धानकर्तालाई बताउन सक्नुहुनेछ । तपाईंलाई यस अनुसन्धानबाट कुनै पनि समयमा विनाकारण बाहिरिने अधिकार छ ।

तपाईंले महसुस गर्न सक्ने एउटा अप्ठ्यारो वा बोझ भनेको तपाईंले यस अनुसन्धानमा दिने समय र आउने जाने यातायात खर्च हुन सक्छ । यसलाई समाधान गर्नका लागि तपाईंको पद तथा श्रेणी अनुसार सरकारी संस्थामा प्रशिक्षक हुदा प्राप्त गर्ने पारिश्रमिक अनुसार तपाईंलाई आर्थिक भुक्तानी गरिनेछ ।

**सहभागिताका लागि मैले कसरी सहमति जनाउन सक्छु ?**

यस अध्ययनमा सहभागिता स्वेच्छिक छ । तपाईं सहभागी हुनका लागि असहमति जनाउन पनि सक्नुहुन्छ । यदि तपाईं अध्ययनमा सहभागी हुन चाहनुभयो तर पछि अन्तर्वार्ताको समयमा अप्ठ्यारो वा असहज महसुस गर्नुभयो भने कुनै प्रश्नको उत्तर नदिन वा अन्तर्वार्ता छोड्न पनि सक्नुहुनेछ । तपाईंले उत्तर नदिदा वा अर्न्तवार्ताबाट बाहिरिंदा त्यसले तपाइ स्वयंलाई वा यो अध्ययनलाई कुनै प्रकारको असर पर्ने छैन । यो जानकारी पत्र सागै अध्ययनमा सहभागी हुने मन्जुरीनामा संलग्न गरिएको छ । यो जानकारी पत्र पढिसकेपछि मन्जुरीनामा हेर्नुहोला । यदि तपाईं यो अध्ययनमा सहभागी हुन चाहनुभयो भने मन्जुरीनामामा दस्तखत गरेर अनुसन्धानकर्तालाई फिर्ता पठाउन सक्नुहुनेछ । यो जानकारी पत्र र मन्जुरीनामाको एक प्रति भविष्यको सन्दर्भका लागि तपाइले राख्न सक्नुहुनेछ ।

**मैले यस अध्ययन/अनुसन्धानको पृष्ठपोषण/प्रतिक्रिया कसरी प्राप्त गर्न सक्छु ?**

अन्तर्वार्ताको लिखित रूपान्तरण पुनरावलोकन गर्नका लागि तपाईंलाई दिइनेछ । त्यसमा तपाईंले आफूले भनेका कुराहरु प्रतिविम्वित भएका छन् कि छैनन भनेर निश्चित गरेर एक हप्तामा फिर्ता गर्न सक्नुहुनेछ । यदि तपाईले भनेका कुराहरु त्यस रूपान्तरणमा सही तरिकाले प्रतिविम्बित भएका छैनन् भने त्यसलाई संशोधन गर्नका लागि अनुसन्धानकर्तालाई भन्न सक्नुहुनेछ । तपाईले चाहेको खण्डमा यस अध्ययन/अनुसन्धानको नतिजा/निष्कर्ष एउटा संक्षिप्त रिपोर्टको रुपमा अनुसन्धानकर्ता मार्फत प्रदान गरिनेछ ।

यो जानकारी पत्र पढ्नका लागि समय निकाल्नु भएकोमा धन्यवाद । तपाईं यस अनुसन्धानमा सहभागी हुनुहुनेछ भन्नेमा विश्वस्त छु ।

धन्यवाद ।

## Appendix 8 – Information sheet for focus group (English)

# INFORMATION SHEET

**Research Title:** 'Public Health Leadership in Nepal'

**Investigator:**
Mr Sudarshan Subedi
College of Medicine and Public Health
Flinders University
Ph:

**Description of the study:**
This study is part of the project entitled 'Public Health Leadership in Nepal: Development, Enactment and Competencies'. This project will investigate the ways of leadership development among public health officials along with the exploration of leadership qualities in context of Nepalese public health settings. This project is technically supported by Flinders University, Public Health Department.

**Purpose of the study:**
This project aims to find out the followings:

- Describe the public health workforce and their leadership roles, strategies and competencies in Nepal
- Explore the construction and enacting of leadership styles and behaviours among public health officials of Nepal
- Explore and recommend opportunities for leadership development in public health settings of Nepal

**What will I be asked to do?**
You are invited by principal investigator to attend a focus group discussion along with other participants who will be similar like you in context of working organisation, level of job and position. The purpose of the discussion is to explore the leadership qualities that are essential for public health officials in context of Nepal. The time for this would be about 60 minutes which would be recorded using a digital voice recorder. The recorded version would be stored as a computer file and then destroyed once the research results have been finalised.

Investigator will moderate the whole discussion session and will guide the group whenever required. You will be asked to discuss with other participants about the qualities you think and have experience in terms of public health leadership.

During discussion, you may have to speak as per your experience with your mangers/supervisors and other staff but you will try to make sure that you won't reveal any private information of those peoples.

**What benefit will I gain from being involved in this study?**
You may not feel directly benefit from this study. However, the sharing of your views and experiences will provide a way to understand leadership perspective in public health of Nepal. The results of this study would act as a reference to leadership interventions program that are targeted to health officials like you. After completion of this project, you and other participants would bring together for some interactive session to share the findings so that you can get information regarding the application of leadership behaviours. You will receive a small amount of financial incentive for your time and travel expenses.

**Will I be identifiable by being involved in this study?**
In focus group discussion, anonymity could not be guaranteed because it involves many people and it is most likely that the participants may know each other. It is better that you try not to pronounce the name of any participants, even the name of your manager when you will be discussing. However, if in case your name (and other participants too) is recorded in audio format, it will be removed during transcribing. No personal information including your and other participant's name wouldn't be used in any part of the research including the publication of its results.

Once the discussion will be transcribed and saved as a file in computer, the audio file will also be destroyed. Information received from you would be confidential and no identifiable information would be shown. The transcribed file will be stored as a password protected file in a computer in which only principal investigator have access to. Your statements from the discussion will not be directly linked with you.

**Are there any risks or discomforts if I am involved?**
Since this study only collect information on your experience and view, it won't have any type of risk to you nor do any type of harm (physical, psychological, social, economical and legal) to you. Although each participants will be requested not to disclose personal information of other participants, it couldn't be guaranteed that personal issues may not arise. Investigator (the moderator) will try his best to prevent or control the private matter being discussed. However, if you feel any form of insecurity in sharing your view and experience or if you feel discomfort during the discussion, please raise them with the investigator. You have the right to withdraw from study at any time.
One burden that the investigator is feeling from your side is the "donation of your time and travel expenses". You will be reimbursed for your time on the basis of your job positions as per the standard of one-hour remuneration when you act as a trainer in governmental institutions.

**How do I agree to participate?**
Participation in this study is voluntary. You may not agree to participate at all. If you agree to participate and feel discomfort during the interview, you can answer 'no comment' or refuse to answer any question or even can withdraw from interview at any time. Your non response or withdrawn will not have any effect or consequences both for you and this study. This information sheet comes with a consent form. Once you finish reading this information sheet, you can go through the consent form. If you agree to participate, you can sign the form and return back to the investigator. You can keep a copy of information sheet and consent form for your future reference.

**How will I receive feedback?**
Once the discussion would be finished, you won't be asked to do anything. However, if you want to know the outcomes of the project, it will be communicated with you by the investigator in the form of summarized report if you would like to see them.

**Thank you for taking the time to read this information sheet and I hope that you will accept this invitation to be involved.**

## Appendix 9 – Information sheet for focus group (Nepali)

# जानकारी पत्र

### अनुसन्धानको शीर्षक : नेपालको जनस्वास्थ्य क्षेत्रमा नेतृत्व

**अनुसन्धानकर्ता :**
श्री सुदर्शन सुबेदी
चिकित्साशास्त्र तथा जनस्वास्थ्य महाविद्यालय
फिलन्डर्स विश्वविद्यालय, दक्षिण अष्ट्रेलिया
फोन : .....

**अध्ययनको बारेमा :**
यो अध्ययन "नेपालमा जनस्वास्थ्य क्षेत्रमा नेतृत्व : विकास, अभ्यास र दक्षता" नामक अनुसन्धान प्रोजेक्टको एउटा अंश हो जसले नेपालको सन्दर्भमा जनस्वास्थ्य अधिकृत/प्रशासकहरुमा नेतृत्व विकास हुने बिधी/तरिका पत्ता लगाउनुका साथै जनस्वास्थ्यको क्षेत्रमा आवश्यक पर्ने नेतृत्व सम्बन्धि विशेषताहरुको पहिचान गर्नेछ ।

**अध्ययनको उद्देश्य :**
१) नेपालको जनस्वास्थ्य क्षेत्रका मानवशक्ति तथा तिनीहरूको नेतृत्वको भूमिका, रणनीति र दक्षताहरूको बारेमा वर्णन गर्ने ।
२) नेपालका जनस्वास्थ्य अधिकृत/प्रशासकहरुको नेतृत्वको शैली तथा व्यवहारको निर्माण र अभ्यासको खोजी गर्ने ।
३) नेपालको जनस्वास्थ्य क्षेत्रको नेतृत्व विकासको लागि अवसरहरूको खोजी र सिफारिस गर्ने ।

**यस सन्दर्भमा मलाई के कुरा सोधिनेछ ?**
यस अनुसन्धान प्रोजेक्टको मुख्य अनुसन्धानकर्ताले तपाईंलाई समूहगत छलफलका लागि आमन्त्रण गर्नेछन् जसमा तपाईं जस्तै (काम गर्ने संस्था, नोकरीको तह र श्रेणीको आधारमा) अन्य सहभागीहरू पनि हुनेछन् । त्यस समूहगत छलफलको उद्देश्य नेपालको जनस्वास्थ्यको क्षेत्रमा कार्यरत अधिकृत/प्रशासकमा आवश्यक पर्ने नेतृत्वका गुणहरूको उजागर गर्नु हो । समूहगत छलफलको समय करिव १ घण्टाको हुनेछ । छलफललाई डिजीटल भ्वाइस रेकर्डरद्वारा अडियो रेकर्डिङ गरिनेछ । रेकर्ड गरिएको कुरालाई कम्प्युटरमा सुरक्षित गरेर राखिनेछ र अनुसन्धानको नतिजा निष्कर्षमा पुगेपछि त्यसलाई नष्ट गरिनेछ ।
अनुसन्धानकर्ताले छलफलको सहजीकरण तथा आवश्यक मार्गदर्शन गर्नेछन् । तपाईंले आफूलाई लागेको र आफ्नो अनुभव अनुसार जनस्वास्थ्य क्षेत्रको नेतृत्व गर्ने व्यक्तिहरूमा हुनुपर्ने गुणहरूको बारेमा अन्य सहभागीहरूसंगै छलफल गनुपर्ने हुन्छ ।

छलफलमा तपाईंले बोल्ने कुराहरू आफ्नो सुपरभाइजर वा अन्य कर्मचारीसंग काम गरेको अनुभवमा आधारित हुन सक्छन तर त्यस्तो अवस्थामा उनीहरुको बिषयमा कुनै प्रकारका निजी/व्यक्तिगत कुराहरू नबोल्ने कुराको सुनिश्चित गर्नुपर्नेछ ।

**यस अनुसन्धानमा भाग लिएमा मलाई के फाइदा हुन्छ ?**

तपाईंलाई यस अनुसन्धानबाट प्रत्यक्ष फाइदा नहुन सक्छ । तर तपाईंले व्यक्त गर्नुभएको विचार र अनुभवले नेपालको जनस्वास्थ्य क्षेत्रमा हुने नेतृत्व (पब्लिक हेल्थ लिडरशीप) को बिषयमा बुझ्नका लागि सहयोग गर्नेछ । यस अनुसन्धानबाट प्राप्त हुने नतिजाले स्वास्थ्य प्रशासकहरूलाई लक्षित गरेर गरिने बिभिन्न प्रकारका नेतृत्व सम्बन्धि कार्यक्रमहरूलाई समेत सन्दर्भ स्रोतको रुपमा काम गर्नेछ । अनुसन्धान पश्चात तपाईं र अन्य सहभागीहरूलाई समेटेर यस अनुसन्धानबाट प्राप्त नतिजाबारे एउटा अन्तर्क्रिया कार्यक्रम संचालन गरिनेछ जसबाट नेपालको जनस्वास्थ्यको क्षेत्रमा हुने नेतृत्व व्यवहारहरू बारे जानकारी पाउनुहुनेछ । तपाईंले यस अनुसन्धानका लागि दिनुपर्ने समय र यातायात खर्चलाई समेत ख्याल गरी केही मात्रामा आर्थिक भुक्तानी गरिनेछ ।

**यस अनुसन्धानमा भाग लिंदा मेरो व्यक्तिगत परिचय वा विवरण के हुन्छ ?**

समूहगत छलफललाई बेनामी बनाउन प्राय असम्भव हुन्छ किनकी यसमा धेरै व्यक्तिहरूको सहभागिता हुन्छ साथै सहभागीहरू एक अर्काप्रति परिचित पनि हुन सक्छन् वा छलफलको समयमा एक अर्काको नाम उच्चारण गर्न पनि सक्छन् । छलफलको समयमा तपाईंले अन्य सहभागीहरूको वा आफ्नो सुपरभाइजरको नाम लिएर नबोल्नु वेश हुनेछ । तथापी कुनै पनि हिसाबले तपाईं (वा अन्य सहभागी) को नाम छलफलको समयमा अडियो रेकर्डिङ भए पनि लिखित रूपान्तरणको समयमा त्यसलाई हटाइनेछ । तपाईं लगायत अन्य सहभागीहरूको नाम तथा अन्य व्यक्तिगत विवरणहरू यस अनुसन्धानमा कहींकतै पनि वा यस अनुसन्धानको नतिजा प्रकाशित हुने कुनै पनि माध्यममा समेत आउने छैन ।

छलफललाई लिखित रूपमा उतारेर कम्प्युटरमा सुरक्षित गरेपछि अडियो रेकर्डिङ नष्ट गरिनेछ । तपाईंले दिएका सम्पूर्ण जानकारीहरु पूर्णतया गोप्य रहनेछन् र निजी/व्यक्तिगत विवरणहरू देखाइने छैन । लिखित रूपान्तरण गरिएको फाइललाई अनुसन्धानकर्ताको मात्र पहुच हुने पासवर्डद्वारा सुरक्षित गरिएको कम्प्युटरमा राखिनेछ । छलफलमा तपाईंले दिएका अभिव्यक्तिहरू समेत तपाईंसंग प्रत्यक्ष रुपमा सम्बन्धित हुने छैनन् ।

**यस अनुसन्धानमा भाग लिंदा मलाई केही हानी नोक्सानी वा असजह हुन्छ ?**

यस अनुसन्धानमा तपाईंको विचार र अनुभव संग सम्बन्धित जानकारी मात्र लिइने हुनाले यसबाट तपाईंलाई कुनै प्रकारको जोखिम वा हानी (शारीरिक, मानसिक, सामाजिक, आर्थिक र कानुनी) हुने छैन । तथापी तपाईंलाई आफ्नो विचार वा अनुभव व्यक्त गर्दा कुनै प्रकारको असहज वा असुरक्षित महसुस भएमा अनुसन्धानकर्तालाई बताउन सक्नुहुनेछ । तपाईंलाई यस अनुसन्धानबाट कुनै पनि समयमा विनाकारण बाहिरिने अधिकार छ ।

तपाईंले महसुस गर्न सक्ने एउटा अप्ठ्यारो वा बोझ भनेको तपाईंले यस अनुसन्धानमा दिने समय र आउने जाने यातायात खर्च हुन सक्छ । यसलाई समाधान गर्नका लागि तपाईंको पद तथा श्रेणी अनुसार सरकारी संस्थामा प्रशिक्षक हुदा प्राप्त गर्ने पारिश्रमिक अनुसार तपाईंलाई आर्थिक भुक्तानी गरिनेछ ।

**सहभागीताका लागि मैले कसरी सहमति जनाउन सक्छु ?**

यस अध्ययनमा सहभागिता स्वेच्छिक छ । तपाईं सहभागी हुनका लागि असहमति जनाउन पनि सक्नुहुन्छ । यदि तपाईं अध्ययनमा सहभागी हुन चाहनुभयो तर पछि अन्तर्वार्ताको समयमा अप्ठ्यारो वा असहज महसुस गर्नुभयो भने कुनै प्रश्नको उत्तर नदिन वा अन्तर्वार्ता छोड्न पनि सक्नुहुनेछ । तपाईंले उत्तर नदिंदा वा अर्न्तवार्ताबाट बाहिरिंदा त्यसले तपाईं स्वयंलाई वा यो अध्ययनलाई कुनै प्रकारको असर पर्ने छैन । यो जानकारी पत्र संगै अध्ययनमा सहभागी हुने मन्जुरीनामा संलग्न गरिएको छ । यो जानकारी पत्र पढिसकेपछि मन्जुरीनामा हेर्नुहोला । यदि तपाईं यो अध्ययनमा सहभागी हुन चाहनुभयो भने मन्जुरीनामामा दस्तखत गरेर अनुसन्धानकर्तालाई फिर्ता पठाउन सक्नुहुनेछ । यो जानकारी पत्र र मन्जुरीनामाको एक प्रति भविष्यको सन्दर्भका लागि तपाईंले राख्न सक्नुहुनेछ ।

**मैले यस अध्ययन/अनुसन्धानको पृष्ठपोषण/प्रतिक्रिया कसरी प्राप्त गर्न सक्छु ?**

समूहगत छलफल सकिएपछि तपाईंले केही पनि गर्नुपर्ने छैन । तपाईंले चाहेको खण्डमा यस अध्ययन/अनुसन्धानको अन्तिम नतिजा/निष्कर्ष एउटा संक्षिप्त रिपोर्टको रुपमा अनुसन्धानकर्ता मार्फत प्रदान गरिनेछ ।

यो जानकारी पत्र पढ्नका लागि समय निकाल्नु भएकोमा धन्यवाद । तपाईं यस अनुसन्धानमा सहभागी हुनुहुनेछ भन्नेमा विश्वस्त छु ।

धन्यवाद ।

## Appendix 10 – Consent form (English)

**CONSENT FORM FOR PARTICIPATION IN RESEARCH**
**(by interview and focus group)**

**'Public Health Leadership in Nepal: Development, Enactment and Competencies**

I … ... ... ... ... ... ... ... ... ... ..... being over the age of 18 years hereby consent to participate as requested in the interview/focus group discussion for the research project on 'Public Health Leadership in Nepal: Development, Enactment and Competencies'.

1. I have read the information sheet 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, although the anonymity could not be guaranteed in interview.
    - Whether I participate or not, or withdraw after participating, will have no effect on me and my professional circle.
    - I may ask that the recording 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 tape/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.

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…….**

*NB: Two signed copies should be obtained. The copy retained by the researcher may then be used for authorisation of Items 8 and 9, as appropriate.*

8. I, the participant whose signature appears below, have read a transcript of my participation and agree to its use by the researcher as explained.

**Participant's signature…… Date……**

9. I, the participant whose signature appears below, have read the researcher's report and agree to the publication of my information as reported.

**Participant's signature…… Date……**

## Appendix 11 – Consent form (Nepali)

Flinders UNIVERSITY
ADELAIDE • AUSTRALIA

# अनुसन्धानमा सहभागी हुनका लागि दिइने मन्जुरीनामा
# (अन्तर्वार्ता/समूहगत छलफलका लागि)

**नेपालमा जनस्वास्थ्य क्षेत्रमा नेतृत्व : विकास, अभ्यास र दक्षता**

म ..... (१८ बर्ष पूरा भैसकेको) ले **नेपालमा जनस्वास्थ्य क्षेत्रमा नेतृत्व : विकास, अभ्यास र दक्षता** नामक अध्ययन अनुसन्धानका लागि अन्तर्वार्ता/समूहगत छलफल मा सहभागी हुनका लागि मन्जुर छु ।

१) मलाई उपलब्ध गराइएको जानकारी पत्र मैले पढिसकेको छु ।

२) अन्तर्वार्ता/समूहगत छलफलको प्रक्रिया तथा जोखिमबारे मलाई विस्तृत जानकारी गराइएको छ ।

३) मेरो सहभागिता र मैले दिने जानकारीको अडियो रेकर्डिङमा मेरो सहमती छ ।

४) यो मन्जुरीनामा र जानकारी पत्रको एक एक प्रति (भविष्यमा आवश्यक पर्ने सन्दर्भमा) मैले राख्नु पर्छ भन्ने मलाई थाहा छ ।

५) मलाई थाहा छ :

- यो अनुसन्धानमा सहभागी भएर मलाई कुनै प्रकारको प्रत्यक्ष फाइदा छैन ।
- यो अनुसन्धानबाट कुनै पनि बेला म बाहिरिन सक्छु तथा कुनै निश्चित प्रश्नको उत्तर दिन अस्वीकार गर्न पनि सक्छु ।
- यो अनुसन्धानबाट प्राप्त गरिने नतिजा तथा जानकारीहरु भविष्यमा कुनै पनि माध्यममा प्रकाशित हुन सक्नेछन् । अन्तर्वार्ता/समूहगत छलफलमा व्यक्तिको नाम अज्ञात राख्न सम्भव नभएतापनि भोलिका दिनमा प्रकाशित हुन सक्ने कागजात (जस्तैः थेसिस, रिपोर्ट, रिसर्च पेपर, आदि) मा मेरो नाम हुने छैन तथा अन्य व्यक्तिगत विवरण समेत गोप्य रहने छन् ।
- म यो अनुसन्धानमा सहभागी भएपनि/नभएपनि, वा सहभागीता जनाएर बीचमै छोडे पनि यसले मेरो व्यक्तिगत वा पेशागत क्षेत्रमा कुनै प्रकारको असर गर्ने छैन ।

- मैले अन्तर्वार्ता/समूहगत छलफलको समयमा गरिने अडियो रेकर्डिङलाई कुनै पनि बेला बन्द गर्नका लागि आग्रह गर्न सक्नेछु साथै त्यसबाट कुनै पनि बेला बाहिरिन पनि सक्नेछु र त्यसको म माथि कुनै पनि असर पर्ने छैन ।

६. यस अनुसन्धानमा संलग्न सदस्यहरु बाहेक अन्य अनुसन्धानकर्ताहरु (जो यस अनुसन्धान संग सम्बन्धित बिषयका भनी अनुसन्धान टोलीले मुल्यांकन गरिएका) लाई अन्तर्वार्ता वा समूहगत छलफलमा गरिने अडियो रेकर्डिङ वा त्यसको रुपान्तरण (ट्रान्सक्रिप्ट) उपलब्ध गराउने बिषयमा मेरो मन्जुरी छ/छैन ।

७) मलाई यस अनुसन्धानमा सहभागी हुने/नहुने बारे आफ्नो परिवार वा साथीभाईसंग छलफल गर्ने अवसर तथा समय पनि मिलेको थियो ।

**सहभागीको दस्तखत :** ..... **मिति :** .....

माथि उल्लेखित सहभागी (स्वयंसेवक) लाई मैले अनुसन्धानको बिषयमा आवश्यक पर्ने सम्पूर्ण जानकारी प्रदान गरेको छु । निजलाई सम्बन्धित बिषयमा के गर्नुपर्ने भन्ने जानकारी छ साथै निजले सहभागिताका लागि दिएको मन्जुरीनामा स्वतन्त्र हो ।

**अनुसन्धानकर्ताको नाम :** .....

**अनुसन्धानकर्ताको दस्तखत :** ..... **मिति :** .....

नोट : यो मन्जुरीनामा दुइ प्रति हुनुपर्ने छ । एक प्रति सहभागीको लागि तथा एक प्रति अनुसन्धानकर्ताको लागि । आवश्यक परेको खण्डमा अनुसन्धानकर्ताले लिएको मन्जुरीनामा बुदा नं. ८ र ९ लाई प्रमाणिकरण गर्नका लागि प्रयोग गर्नुपर्ने छ ।

८) म, यस अनुसन्धानको सहभागी (जसको दस्तखत निम्नानुसार छ) ले मेरो सहभागिताको ट्रान्सक्रिप्ट (माथि उल्लेखित) पढें र त्यसलाई अनुसन्धानकर्ताले व्याख्या गरे अनुसार प्रयोग गर्न दिनका लागि मेरो सहमति छ ।

**सहभागीको दस्तखत :** ..... **मिति :** .....

९) म, यस अनुसन्धानको सहभागी (जसको दस्तखत निम्नानुसार छ) ले अनुसन्धानकर्ताले तयार पारेको रिपोर्ट पढें र त्यसमा लेखिएको विवरणलाई प्रकाशन गर्नका लागि मेरो सहमति छ ।

**सहभागीको दस्तखत :** ..... **मिति :** .....

# Appendix 12 – Questions/prompts for interview

## Interview – Phase I

| Aims/objectives of research | Subject matters to be included | Questions and/or prompts |
|---|---|---|
| Leadership and management roles and strategies (with reference to job description) | Job roles and responsibilities | 1. Your position at office?<br>2. Your overall role and responsibilities?<br>3. Your authority? |
| | For officials who are working at program implementation level or district/local level (e.g. DHO, DPHO) | 4. What leadership do you bring in terms of program planning and budgeting?<br>5. What leadership roles do you play in different district level programs (e.g. family planning, immunization, safe motherhood, nutrition, malaria and kala-azar, epidemic control, and health education program)?<br>6. How you are doing monitoring and supervision of staff and health facilities under your authority?<br>7. What about leadership in terms of your contact and relationship (coordination) with other members of district health team including other stakeholders of local government (e.g. municipality and DDC)? |
| | For officials who are working at program planning level or central/national level (e.g. DHS, MoH) | 8. What about your involvement in preparation of national level policies, plan and programs? Have you ever played a leadership role in this matter? If yes, ask in details<br>9. How you are leading and/or handling the state/local level health institutions including the officials and program over there?<br>10. What about leadership in terms of your contact and relationship (coordination) with other central level health institutions at DHS and MOH? What about other non-health central level stakeholders like MoF? |

| | | |
|---|---|---|
| Construction and enactment of leadership | Journey to be a PH official | Here I would like to hear your story about how you become the person you are now.<br>1. How you choose public health field (both as a part of study and job).<br>2. How you came to do a governmental job instead of doing other jobs in private and non-governmental sector?<br>3. Were there any social and cultural factors that increased/decreased your career development as a PH official? Further prompts: social and economic status of family, residence or locality, etc.<br>4. In relation to cast/ethnicity, have you ever experienced that it influenced your journey to be a PH official or your existing position?<br>5. In relation to gender, how has it influenced your journey and position? (only for female) |
| | Inspiration for leadership, adoption of insights and its consequences | 7. Have you ever been inspired by someone in the area that you are working? OR from other area that you are inspired of?<br>8. What made you inspired by that person?<br>9. Have you ever tried to be like the person who inspired you? If so, please tell me an event and its consequences in your field. |

**Interview – Phase II (after a couple of weeks of first interview)**

| **Aims/objectives of research** | **Subject matters to be included** | **Questions and/or prompts** |
|---|---|---|
| -- | Continuity and linking | 1. How everything is going?<br>2. How you felt after the last interview we did?<br>3. Do you have any queries regarding last interview? |
| Leadership style and behaviours | Leadership style and behaviour | 4. What comes in your mind when you heard the term leadership? |

| | | |
|---|---|---|
| | | 5. Being a PH official, how you lead your staff in your organisation?<br>6. What difference you experienced between leading and managing people while you are in charge of a particular project or program?<br>7. How you motivate your staff for a better performance?<br>8. How you handle conflicts in your team? Tell me about the most difficult team that you ever lead. How did you cope with that team?<br>9. How you make decision during work? Describe your decision making process. One example when you did a tough decision and its consequences.<br>10. Do you have any particular leadership style (pre-occupied in your mind) that you follow? How would you describe your leadership style and/or behaviours?<br>11. Have you ever changed your existing/usual (or favourite) leadership style in specific conditions like as in emergency (outbreak/epidemic control), shortage of staff and in meeting deadlines?<br>12. How you position yourself as a PH official – a leader or a manager? |
| Leadership qualities and competencies for PH | Understanding to successful leadership | 1. What you think about the important aspects for people who are successful in their life or who have name and fame in their group/organisation? |
| | Leadership traits and qualities for PH | 2. What you think about the qualities of a good leader (in general)?<br>3. How important you think leadership in public health?<br>4. What specific qualities that a public health official needs to be an effective leader -- in general and specific in context of Nepal? |

| | | |
|---|---|---|
| | | 5. Do you think we have a good leadership in Nepalese public health system?<br>6. Is public health about leading (leadership) or managing (management)? Which you think the most important aspect? |

## Appendix 13 – Questions/prompts for focus group

### For staff of public health officials

| Aims/objectives of research | Subject matters to be included | Questions and/or prompts |
|---|---|---|
| Leadership traits and qualities needed in public health | Understanding to leadership | 1. What comes in your mind when you hear the term ‘’leadership”’?<br>2. What you think about the important aspects for people who are successful in their life or who have name and fame in their group/organisation? |
| | Leadership traits and qualities for PH | 3. What are the qualities of a good leader (in general)?<br>4. How important you think leadership in public health?<br>5. What specific qualities that a public health official needs to be an effective leader -- in general and specific in context of Nepal?<br>6. Do you think we have a good leadership in Nepalese public health system?<br>7. Is public health about leading (leadership) or managing (management)? Which you think the most important aspect? |

## Appendix 14 – Example of memo writing

**Memo Writing – Interview No. 11**

It became very difficult to arrange interview time with this participant. I had to wait for 3 weeks to conduct an interview with her. She was very busy, most specifically in the sense that she always keeps herself busy in doing official work and she usually had the habits of accepting the invitation to participate in meetings, group work, workshop and the like.

I remember the first day when I met her for the purpose of providing research relevant information and to arrange a time for interview. I was just telling her about my research objectives and aims, when she started sharing her experiences working in a remote area as a female. She spoke in such a way that it was an interview. She was speaking in such a way that she found a platform to share her experience for which she was proud. I did not obstruct her. When she stopped speaking, I received her consent and arranged a schedule for interview which was revised for three times.

Social setting and culture are important for individuals' career development. However, family culture dominates the social culture. If a family strongly support a girl child in developing her career, then the social contexts are of less value. This participant developed a sense of self-confidence and so-called male personality (strong, brave, and defensive) from her childhood. During her childhood, she preferred herself calling a boy rather than a girl. By considering herself equal to male in existing society, he worked in very remote areas, tackled with the political pressures, and defence with the male stereotypes' bureaucrats. Because of her nature of defencing and tackling, she often missed the invitation in some of the meetings and workshops. However, she was okay with her habits of spoke out without which initiation to change does not occur.

Participant took confidentiality as a very serious matter. Even she provided written consent; she was anxious whether she will be identified by any means. I assured her about the anonymity, confidentiality of audio recording, transcript, and its secure storage. I told her that she will get a transcript via mail and she have the right to edit and revise the interview. This made her comfortable.

## Appendix 15 – Members of Project Advisory Group

| Name of the member | Position and affiliation | Expertise |
|---|---|---|
| Prof. Madhusudan Subedi | Professor<br>School of Public Health, Patan Academy of Health Sciences, Nepal | Sociology and Anthropology in health; qualitative research |
| Dr. Binjwala Shrestha | Assistant Professor,<br>Department of Community Medicine and Public Health,<br>Institute of Medicine,<br>Tribhuvan University,<br>Nepal | Public health sociology; qualitative research; gender and health |
| Dr. Mahendra Sapkota | Visiting Faculty<br>School of Arts,<br>Kathmandu University,<br>Nepal | Grounded theory |
| Dr. Baburam Marasini | Ex. Director<br>Epidemiology and Disease Control Division, Department of Health Services, Ministry of Health, Nepal | Nepalese health services/system |
| Mr. Shree Krishna Bhatta | Ex. Regional Director<br>Department of Health Services, Ministry of Health, Nepal | Nepalese health services/system |

## Appendix 16 – Summary of KTE plan

| What | For whom | How | With what effects |
|---|---|---|---|
| Grounded theory on 'public health leadership' in Nepalese context | Public health subject committees at university | Direct meetings<br>Interactive workshops | Inclusion of theory in the curriculum |
| | Faculties and students at universities | Interactive workshops<br>Knowledge broker | Knowledge expansion |
| | Researchers and public health professionals | Publications in national and international journals | Addition of researches in public health leadership |
| Good practices for leadership:<br>a) The more you engage in additional roles and responsibilities, the more you flourish your ability to lead<br>b) Perfection in managerial activities ease the pathway for leadership<br>c) Be fair and friendly with staffs and prefer coaching and delegation<br>d) Be passionate for change and innovation<br>e) Observe and be inspired from your seniors as well as from the community that you work for.<br>f) Be extroversion and try to increase political dialogue and connections for the betterment of public health<br>g) Never give up and learn from everything and everyone | Public health officials | Educational outreach<br>Printed material (flyer) | Sensitization and knowledge expansion |
| Trainings and/or workshops particularly focused on leadership topics are important in developing leadership skills | Ministry of Health | Active interactions with public health leaders and policy makers | |
| Qualities and competencies needed for effective public health leadership | Academic sector<br>Researcher and public health professionals | Publications | |

# Appendix 17 – Poster presented on International Institute of Qualitative Methods Conference, 2019

## Job Description and Leadership Practices Among Public Health Officials in Nepal
## A Grounded Theory Study

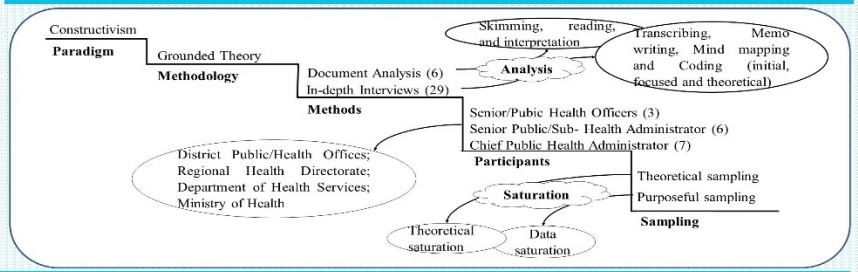
*Sudarshan Subedi, Colin MacDougall, Darlene McNaughton*

### INTRODUCTION

A doctorate research project adopting grounded theory was started in 2018 to understand public health leadership in Nepalese context. The aims were to explore the ways and factors by which leadership is developed and enacted, and to discover the core qualities and competencies required to be an effective public health leader. The research project had three stages of data collection adopting three different methods (document and database analysis, in-depth interviews and focus group discussion) with governmental bureaucrats and their staffs working under Ministry of Health. This research project was significant because of the existing research gap in public health leadership globally [1], and in context of developing countries [2] including Nepal [3]. As the country still borrowing the leadership theories from others' context which may not fit its distinct socio-cultural setting, having leadership theory of its own makes a greater sense of significance.

This poster presentation is one of the parts of the research project which represents the initial findings. It is particularly about comparing and analysing the leadership components that the bureaucrats had in their job description and its actual practice in their work.

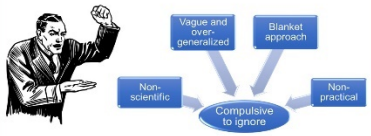
### METHODOLOGY




### FINDINGS

#### Job Description: A Ceremonial Policy Document

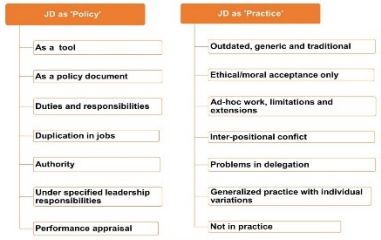

*"JD is like our past king… it is ornamental, not functional…being a policy document, we can't say we ignore….but actually we do…"*




**Ignorance of traditional and generic job description is a compulsion rather than a choice**

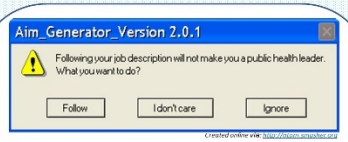
#### Job Description and Leadership: A Policy-Practice Deviation


*"….it is different, extremely different. I cannot do what my job description asked me to do…."*

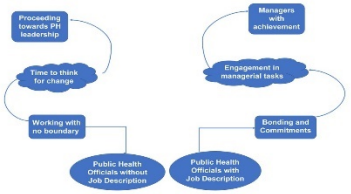



**The more concise and specific duties and responsibilities in JD, the more its application**

#### Leadership in Public Health: Beyond Job Description



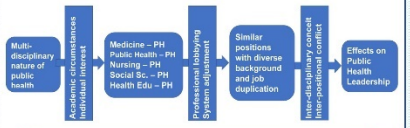

*"We are the top-level public health administrator, we don't have JD, we don't need it either…."*




**Job description is for public health managers, not for public health leaders**

#### Medicine Vs Public Health: Leadership Issue in Health System


*"It's all about adjustment….creating positions to fit people….and of course, multiple groups and their eligibility for public health is a major problem"*




**Professional groupism and favouritism inhibiting the development of public health leadership**

### CONCLUSIONS

Anticipation and practice of leadership increases as the positions of public health officials' increase. However, the vagueness in job description and micromanagement of public health programs impede the vision for leadership. Public health leaders often manipulate the job description and the bureaucratic processes for betterment in public health. Inter-disciplinary conflict and professional favouritism needs to keep aside for further enhancement of public health leadership in the country.

### REFERENCES

1. Lega F, Prenestini A and Tosso M. Leadership research in healthcare: A realist review. *Health Services Management Research* 2017; 30: 94-104.
2. Goyet S, Touch S, IR P, et al. Gaps between research and public health priorities in low income countries: evidence from a systematic literature review focused on Cambodia. *Implementation Science* 2015; 10.
3. Yadav CB. List of Research Reports in Nepal Health Research Council's Library. 2010.

**Further Information:**

This study is a part of doctoral research project entitled "Public Health Leadership in Nepal: Development, Enactment and Competencies" at College of Medicine and Public Health, Flinders University, Adelaide, South Australia. Researcher expects collaboration with potential individual having interest in public health, leadership, qualitative methods, grounded theory, and the like. Contact: sube0023@flinders.edu.au; subedisudarshan@gmail.com

## Appendix 18 – Accepted abstract of oral presentation at Australian Public Health Conference 2018

**Title – Contribution of leadership in public health: A systematic narrative review**

**Purpose –** To identify the contribution of leadership in public health services delivery and outcomes.

**Methodology/approach –** A systematic search was conducted in ProQuest, PubMed, Emerald, InterNurse and Google Scholar in April 2017. A total of 19 studies (qualitative and quantitative) were included and reviewed by adopting thematic analysis and narrative synthesis.

**Findings –** Studies examined and observed leadership from two perspectives, 1) applying and assessing leadership as an intervention 2) observing leadership in its original/existing status. The contribution of leadership in public health was categorized and described into two parts, 1) health service delivery 2) health outputs/outcomes. The themes extracted in terms of health service delivery were human resource performance, institutional performance and partnership/participation, whereas the themes extracted for health outputs/outcomes were maternal health, child health, sexual behaviour/AIDS and psychosocial status.

**Conclusion –** Health workers in leadership role/position emphasize on staffs' motivation/empowerment and stakeholders' coordination to attain health care quality. Leadership intervention programs are useful in increasing instantaneous health services delivery and outcomes but the sustainability of these interventions is uncertain. Further comprehensive, in-depth original researches on public health leadership including the exploration of leadership behaviour/styles of public health managers and its impact on public health systems are quite essential.

**Implications –** The results from this review would be beneficial for public health managers and/or organizations in applying leadership behaviours and/or interventions by identifying the ways how leadership works in public health settings.

**Keywords –** Leadership, public health, health services delivery, health outcomes.

*Sudarshan Subedi is a doctorate student (public health) at Flinders University, South Australia and also a Lecturer (public health) at Pokhara University, Nepal. He has been working in public health academia since 2011 with specific focus on human resources management and health services management. His current research project is 'Public Health Leadership in Nepal', the ultimate goal of which is to develop a theory in Nepalese public health leadership.*

**Appendix 19 – Publication in Journal of Nepal Health Research Council, 2019**

DOI https://doi.org/10.33314/jnhrc.v17i3.16

# Job Description of Public Health Officials in Nepal

Sudarshan Subedi,[1,2] Colin MacDougall[2]

[1]School of Health and Allied Sciences, Pokhara University, Nepal, [2]College of Medicine and Public Health, Flinders University, Australia.

## ABSTRACT

**Background:** Job description of public health officials in Nepal has been prepared for assigning the definite role, responsibilities and authorities to exercise in different positions and circumstances. The purpose of this study was to analyse the job description of public health officials emphasizing the perspective of leadership and management.

**Methods:** Document analysis method was used following the sequential process of skimming, reading and interpretation, and the themes were extracted by content analysis.

**Results:** Job description of public health officials is mostly process and/or function oriented. Most of the officials are responsible for managing program and people rather than leading. Staff inspiration, motivation and encouragement, being one of the most important aspects of leadership, has been ignored in job description. District level officials are specifically assigned to manage programs and staff. As the position increases, the extent of practicing leadership increases and management decreases. Public health administrators have more leadership role as compared to public health officers; however, the proportion of management outweighs the leadership. Regional Directors have more leadership roles than other officials do.

**Conclusions:** Role of public health officials vary from being a manager to a leader. Junior officials are predominantly the managers, mid-level officials are leadership-oriented managers, and top-level officials are leaders having managerial roles . In revising the job description (e.g., for the federal context), emphasis should be given to remove job duplication and role conflict, and should ensure role clarity, functions' precision and output.

**Keywords:** Document analysis; job description; leadership; Nepal; public health.