AMERICAN UNIVERSITY OF BEIRUT

ADVANCED PUBLIC HEALTH NURSING: A GUIDING PRACTICE MODEL

by
HANA KHALED SAHYOUNI

A project
submitted in partial fulfillment of the requirements
for the degree of Master of Science in Nursing – Community and Adult Track
to the Rafic Hariri School of Nursing
of the Faculty of Medicine
at the American University of Beirut

Beirut, Lebanon
April 2016

AMERICAN UNIVERSITY OF BEIRUT

ADVANCED PUBLIC HEALTH NURSING: A GUIDING PRACTICE MODEL

by

HANA KHALED SAHYOUNI

Approved by:

Mary Arevian

Ms. Mary Arevian, Clinical Associate Professor — First Reader
Rafic Hariri School of Nursing

Dr. Lina Abi Fakhr Kantar, Assistant Professor — Second Reader
Rafic Hariri School of Nursing

Date of project presentation: April 27th, 2016.

AMERICAN UNIVERSITY OF BEIRUT

THESIS, DISSERTATION, PROJECT RELEASE FORM

Student Name:	Sahyouni	Hana	Khaled
	Last	First	Middle

○ Master's Thesis ☑ Master's Project ○ Doctoral Dissertation

☑ I authorize the American University of Beirut to: (a) reproduce hard or electronic copies of my thesis, dissertation, or project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

☐ I authorize the American University of Beirut, **three years after the date of submitting my thesis, dissertation, or project,** to: (a) reproduce hard or electronic copies of it; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

Hana Sahyouni — May 3, 2016

Signature Date

ACKNOWLEDGMENTS

A special thank you to Mrs. Mary Arevian and Dr. Lina Abi Fakhr for all their support and guidance throughout this project.

AN ABSTRACT OF THE PROJECT OF

Hana Khaled Sahyouni for Master of Science
Major: Nursing

Title: Advanced Public Health Nursing: A Guiding Practice Model.

Public health nursing is facing a great underutilization of its advanced roles to the extent that the future of the specialty is threatened. Underutilization is attributed to the confusion surrounding the advanced public health nursing roles. This project is a qualitative descriptive search aiming at exploring the roles of advanced public health nursing. The search involved an extensive review of the literature and a qualitative inductive content analysis of six milestone documents of public health nursing. Major concepts emerged from the analysis to revolve around the roles of advanced public health nursing. A guiding model of practice was developed using these major concepts. The model of practice represents the cornerstones of advanced public health nursing as well as the roles and the different competencies and attributes related to each role. The ultimate goal of the model is to improve the health and wellness of populations through appropriate implementation of the advanced public health nursing roles.

CONTENTS

ILLUSTRATIONS

TABLES

To My

Beloved Family

CHAPTER I

INTRODUCTION

Nursing encompasses different specialties and areas of practice. Community/Public health nursing constitutes one of the oldest yet underutilized nursing specialties. In the United States of America, public health nursing was the initial specialty formed within nursing practice (Canales & Drevdahl, 2014) and the first nursing specialty taught in a university setting with its establishment at Columbia University in 1910 (Canales & Drevdahl, 2014). Despite its history, community/public health nursing has been struggling as a nursing specialty to express its roles and benefits (Canales & Drevdahl, 2014).

According to Canals and Drevdahl (2014), community/public health nursing roles are underutilized to the extent that the future of this nursing specialty is threatened. Robertson and Baldwin (2007) concurred regarding underutilization of the community/public health nurse specialist's role, yet highlighted the skills required by the advanced community/public health nurses (APN), such as conducting community assessment and developing and implementing wide health promotion programs.

Public health nursing is shaped according to the surrounding environmental, socio-economic, political, and health circumstances. Globally, the main triggers leading to the development of public health nursing have been poverty, inequity, unavailability of health services, environmental hazards, and infectious diseases (World Health Organization, 2001). APN roles in community settings had first been initiated and documented in rural areas (Burgener & Moore, 2002). Moreover, the roles in urban areas were initially established to serve the underprivileged and low socioeconomic

populations (Burgener & Moore, 2002). The fact that APN roles in community settings were created in rural and underprivileged areas explains the underutilization and perplexity surrounding the advanced community/public health nurse specialist's roles.

Reflecting on my clinical experience throughout the master's program, I could definitely sense the underutilization and confusion surrounding APN roles in community health settings. I had the chance to practice in five primary health care centers in Beirut, Lebanon. All of these centers, except for one, have at most two RNs with a Bachelor's degree. None of the primary health care centers have a community/public health APN. In other words, none of the primary health care centers has an RN with a master in community/public health nursing.

More importantly, the essential community/public health nursing skills, including community assessment, development and implementation of health promotion programs and working in interdisciplinary teams and community partnerships, were not prominent in the implemented nursing roles. Nevertheless, the roles focused more on individualized care and health education. Thus, the roles entailing the wider picture of public health, constituting the heart of community/public health nursing, were lacking.

Based on personal communication with the president of the Lebanese Order of Nurses, the Lebanese nurses are more immersed in acute care than in community health care. The Lebanese Ministry of Public Health (MOPH, 2016) developed the primary health care network to provide primary and secondary care to the distinct communities in Lebanon. Nevertheless, the nurses are neither involved in the development of the primary health care network nor in the overall structuring of the public health in the country. How can primary health care networks be shaped without an integral involvement of nurses in the decision making and management levels? How can the public health of a country be shaped without the involvement of its nurses in large

macro level public health programs.

Purpose

The main aim of this project was to explore and describe the roles of advanced community/public health nurse specialists. Another objective is to develop a guiding practice model for community/public health APNs.

Significance

This project will highlight the roles of community/public health APNs to diminish the ambiguity surrounding this specialty. This project addresses the nursing profession before it addresses other health care professions and the public, thus uncovering the role confusion and underutilization of community/ public health nursing as a specialty. Hence, the project can be considered an initial step towards attracting more nurses into the community/ public health nursing specialty. Moreover, the project can be considered an initial milestone for nurses to speak up in order to become more involved in nationwide health promotion programs and public health policy making.

In Lebanon, community/public health nursing is underutilized and its roles are extremely ambiguous and not well articulated (H. Samaha, Personal Communication, May, 2015). Public health nursing, as a specialty, is not well defined to the extent that at times Lebanese nurses question the existence of this specialty rather than its roles and scope of practice. It is very helpful and resourceful for us as Lebanese nurses to gain insight from countries who have been leading in practicing advanced community/public health nursing roles for the past five decades. Accordingly, an extensive literature review is required to relate the advanced community/public health nurse specialist's roles, competencies, and models of practice. The review will target the countries that are

perceived leading in community/public health nursing roles.

Historical Background of Community/Public Health Nursing

Definition

Defining community/public health nursing is a preliminary step before reviewing the historical cornerstones of the specialty. There has always been confusion and inconsistency in defining community/public health nursing as a specialty. Confusion around the definition, meaning and purpose of the specialty has always existed both within and outside the nursing profession. This confusion and disagreement may be attributed to the overlapping and interrelated concepts of community health, public health and population health that constitute community/public health nursing (Canales & Drevdahl, 2014).

In 1996, the Public Health Nursing section of the American Public Health Association (APHA) approved a new definition of the specialty thereby resolving persisting confusion and conflict. In their definition, APHA referred to the specialty as "public health nursing" instead of "community health nursing" since the specialty incorporated concepts of social and public health sciences as well as nursing science (Canales & Drevdahl, 2014). In 2013, APHA updated their definition of public health nursing to read:

Public health nursing is the practice of promoting and protecting the health of populations using knowledge from nursing, social and public health sciences. Public health nursing is a specialty practice within nursing and public health. It focuses on improving population health by emphasizing prevention and attending to multiple determinants of health. Often used interchangeably with community health nursing, this nursing practice includes advocacy, policy development and planning, which addresses

issues of social justice. With a multilevel view of health, public health nursing action occurs through community applications of theory, evidence and a commitment to health equity. In addition to what is put forward in this definition, public health nursing practice is guided by the American Nurses Association *Public Health Nursing: Scope and Standards of Practice* and the Quad Council of Public Health Nursing Organizations' *Core Competencies for Public Health Nurses*.

The Nightingale Era

The evolution of public health nursing emerged through distinct phases. The history of public health and nursing started with the mother of modern nursing, Florence Nightingale. With her statistical records and work on surveillance, Nightingale is recognized as an early innovator in epidemiology (Savage & Kub, 2009). In mid19th century, Nightingale's efforts during the Crimean War had not only founded for modern nursing but had also founded the intertwined history of public health and nursing. However, Nightingales' contribution to health care reform and adoption of public health principles are often under recognized by many historians (Nies & McEwen, 2011).

The following is a review of Nightingales use of public health principles. During the Crimean War Nightingale focused on assessing the needs of the aggregate of the British soldiers. In her community needs assessment, Nightingale considered the social and environmental determinants of health. During her work with the British soldiers, Nightingale recognized that soldiers are dying because of preventable conditions such as sanitation. Furthermore, Nightingale was the first to use statistical graphs, circles and squares to present the preventable deaths of soldiers (Nies & McEwen, 2011). Nightingale was successful in implementing major reforms in the army through statistics.

In addition to her contribution to nursing education, Nightingale had started

population based statistics to bring about transformations in health policy and public health. After returning to London, Nightingale devoted her efforts to generate social and political reforms. For instance, she started assessing sanitary conditions in London. Nightingale emphasized to share her community assessments and statistical reports with members of the parliament in order to shape health policy for the benefit of public health (Nies & McEwen, 2011).

Evolution of Modern Public Health Nursing

After reviewing the early underpinnings of the interwoven relationship between nursing and public health, it is worth to review the evolution of modern public health nursing. The holistic approach of modern public health nursing was established in the late nineteenth and early twentieth centuries. Public health nursing stemmed from home-based care, community organizations, and political interventions concerning aggregates. It started with providing care for the sick poor communities to empower them in improving their health conditions (Nies & McEwen, 2011). This past history of public health nursing is congruent with the more recent history of advanced community/public health nurse specialists. Therefore, public health nursing has always been evolving in underprivileged communities and has always been advocating for health equity, health promotion, and social reform.

Initially, Public health nursing developed in England with what was called district nursing. District nursing was established between 1854 and 1856 by the Epidemiological Society of London. The goal of district nursing was to prepare and assign designated poor women to provide care for the sick in the poor communities. The theory behind the development of district nursing was that nurses would be more available in the community. People tend to believe that nurses belonging to the same social class of their patients are more effective caregivers (Nies & McEwen, 2011).

In 1859, William Rathbone in Liverpool developed a plan that divided the community into 18 districts and assigned a nurse and a social worker to each district. Rathbone had pursued the assistance of Nightingale in training and educating the district nurses. District nurses provided health education, nursing care and social work to their communities. This practice model of district nursing was very successful and hugely supported by the communities. Hence, voluntary organizations adopted this model and implemented it on a national level. The British model of district nursing constituted the key stones of public health nursing that eventually started arising in other countries (Nies & McEwen, 2011).

Lilian Wald's Era

Influenced by the British model of district nursing, public health nursing started emerging in the United States in 1893 (Nies & McEwen, 2011). It was founded by Lillian Wald who is nowadays referred to as the "mother of public health nursing" (Ruel, 2014). Wald "coined the term public health nurse" through her pivotal contributions to the health and social needs of the poor immigrant communities (Fee & Bu, 2010; McKay, 2009; Savage & Kub, 2009). Furthermore, a new holistic nursing paradigm of practice was developed through Wald's emphasis on the distinct determinants of health and the relation between environment and health (Savage & Kub, 2009).

Lilian Wald, a graduate of the New York Hospital School of Nursing, moved to lower east side of New York to start her public health nursing practice. The Lower East Side of New York city was an area for the poor and immigrants. Initially, Wald began by providing the poor communities with milk, ice, meals, medicine and referrals to hospitals. Then, through her connections, Wald was able to get from a philanthropist a house on the Lower East Side of New York where she founded the Henry Street

Nurses Settlement in 1895. Henry Street House provided the poor communities with nursing care and social services concurrently (Fee & Bu, 2010). Afterwards, Wald founded the Visiting Nurse Service of New York (VNSNY) which is now the country's largest non-profit community health organization (Ruel, 2014).

Henry Street is considered as the foundation of what is nowadays known as home health care for it provided visiting nursing services to the community. Henry Street nurses would visit the houses in their communities and provide care for the sick. Moreover, Henry Street built partnerships and collaborations with physicians and social agencies to provide better care and referral of patients (Fee & Bu, 2010; Ruel, 2014).

Henry Street visiting nurses provided care based on the different determinants of health and the needs of the aggregates. According to these nurses, health was influenced and determined by income, environment, and level of education. The other services provided by these nurses include improving surrounding environmental conditions, finding jobs for the unemployed, finding schools for the poor children and arranging wages for the unemployed women from charitable organizations (Hardill, 2007). These services had not only expanded the scope of nursing practice, but created a new era of nursing practice known as the holistic approach of nursing practice.

Our current notion of school health was also founded by Wald's pivotal and marvelous efforts. Wald was interested in the school aggregate based on certain incidents encountered among school-aged children in the homes such as infections. Therefore, Wald and her colleagues at Henry Street initiated individual observations and kept anecdotal reports of school children. The needs assessment conducted by the Henry Street nurses revealed social health neglect of school children. Children were deprived from school because of illness without providing them or their parents with any care or health education. Moreover, preventable infections were occurring among the children.

Hence, the Henry Street nurses' assessment led the Department of Health to assign a physician to assess and screen children in schools for one hour every day (Nies & McEwen, 2011).

In 1902, Wald succeeded in convincing the Commissioner of Health in New York City to try having a nurse in a school. Thus, Linda Rogers, one of the Henry Street Nurses, was the first public health school nurse assigned by the Department of Health in New York City. This school nurse trial was successful and schools started assigning school nurses on a widespread level. School nurses performed physical assessments, did screening, treated minor infections and provided health education to students and parents (Nies & McEwen, 2011). In other words, school nurses were implementing the basic principles of primary and secondary health prevention.

Wald introduced new public health nursing roles and a new paradigm of nursing practice. Nevertheless, Wald's accomplishments entailed the broader picture of public health through shaping national health policies and legislations. The children's Bureau and the Social Security Act Legislation were the result of Wald's remarkable and innovative efforts. Wald motivated, supported, and fought along with the mothers of the communities she served to achieve these legislations. Wald guided the mothers to speak up for the rights and needs of the whole community. They fought for needs such as schools, health services, traffic lights, unemployment insurance and garbage collection services (Nies & McEwen, 2011).

Global Landmarks of Modern Public Health Nursing

Reflecting on the global context of public health, there are three major landmarks shaping the recent history of public health. The following will highlight these three essential landmarks that are Lalonde report, Alma Ata Declaration and the Ottawa Charter for Health Promotion. In response to the rising health care costs, the Lalonde

Report was released in 1974. Lalonde Report, entitled A New Perspective on the Health of Canadians, shifted the emphasis from chronic disease treatment to chronic disease prevention (Kirk, Tomm-Bonde & Schreiber, 2014). With the help of mortality statistics, Lalonde revealed that the leading causes of death were chronic diseases rather than infections. Therefore, decreasing the expensive cost burdens imposed by chronic disease treatments requires preventing their occurrence (MacDougall, 2007).

In his report, Lalonde viewed health as the result of the interplay between human biology, environment, lifestyle and health care organizations. Thus, Lalonde Report focused on the social determinants of health that were first addressed by the past founders of public health nursing. The main health promotion approach embraced by this report was lifestyle and behavioral modifications. Other strategies proposed by the report included targeting populations at risk, health and social marketing and addressing environmental issues (Kirk *et al.*, 2014).

The Lalonde report represented a turning point in the Canadian health system and in the international health context. It was the first report that evidently shifted the existing emphasis on infectious disease prevention and chronic disease cure towards chronic disease prevention. As well as, this report clearly highlighted the social determinants of health for the first time. Nevertheless, Lalonde report had little impact on the Canadian health system due to several reasons. One reason was the 1973-oil crisis inflation whereby health care budgets were cut down (MacDougall, 2007). Another reason was that the report was considered somehow vague because it didn't identify specific targets and time frames. Moreover, Lalonde Report was misinterpreted since it was highly associated with diet and exercise programs rather than addressing the social determinants of health (Kirk *et al.*, 2014).

The second landmark in recent public health history was the Alma Atta

Declaration. Soon after the Lalonde Report was released the Alma Atta Declaration was established in 1978 (Fee & Brown, 2015). Alma Atta Declaration was complimentary to Lalonde Report however it was more international. The main goal of this declaration was "health for all by the year 2000" (Kirk *et al.,* 2014). According to Alma Atta Health is "a state of complete physical, mental and social wellbeing and not merely the absence of disease" (Kirk *et al.*, 2014). This definition of health makes the concepts of health promotion and disease prevention more prominent and more essential to the delivery of health services.

Furthermore, Alma Atta launched the universal notion of primary health care. Primary health care is an essential health care that should be accessible and available to all communities. It is based on sound scientific evidence and socially acceptable strategies. Moreover, primary health care should meet the various needs of the communities in providing promotive, preventive, curative and rehabilitative care. Addressing the social determinants of health is also rooted in primary health care. As well as, primary health care should be incorporated in the health care system of every country based on its political, economic and sociocultural conditions (Fee & Brown, 2015).

In reviewing the main goals of Alma Atta, one notices that the spirit of Alma Atta was distorted and the ultimate goals were not appropriately achieved. In many developed countries the medical model continued in dominance thus opposing the expansion of community/public health professionals. While in other countries lack of resources such as finances, equipment and drug supply rendered primary health care unachievable. In the developing countries lack of resources and pressing community need made the implementation of primary health care unfeasible. Thus, primary health care was implemented selectively narrowing down its essential values of social justice

and health equity (Gillam, 2008).

Following Alma Atta Declaration, the European WHO office asked Canada to host the first international health promotion conference in Ottawa (MacDougall, 2007). The conference releases the third landmark in public health history entitled Ottawa Charter for Health Promotion in 1986. This report came to reiterate and support what was released in Alma Atta and further it created a dramatic shift in the concept of health promotion. Ottawa Charter identified clearly that peace, shelter, income, education, food, stable ecosystem, sustainable resources, social justice and equity are the fundamentals of health. The Ottawa Charter resonated widely because it was a more inclusive approach emphasizing the broader perspective of health beyond human biology, risk factors and behavioral modification. The charter's broad perspective of health exerted a great emphasis on the social and environmental factors impacting health (Kirk *et al.*, 2014).

According to Ottawa Charter health promotion was defined as "the process that enables communities to take control over and improve their health" (Kirk *et al.*, 2014). This process of health promotion can be achieved through constructing healthy public policies, empowering community actions, creating supportive environments, developing personal skills and reorienting health services (Kirk *et al.*, 2014). Therefore, the Ottawa charter suggested a new model of health promotion that was soon referred to as the "new public health" or the "new health promotion" (Kirk *et al.*, 2014). The new health promotion model with its emphasis on the social determinants of health especially the socio-environmental factors and the notions of health equity and social justice is still prominently featured in public health nowadays.

Indeed, there are lots of arguments entailing the Ottawa Charter and its implementation. Some argue that the Charter presented insufficient guidance on how to

translate its principles and goals into practice. Thus, the Ottawa Charter health promotion model was inadequately applied. Others argue that the Charter overemphasized the socio-environmental and political factors on the extent of the more individualistic health education and empowerment programs. Obviously, the Ottawa Charter was not implemented adequately irrespective of the reasons. The increased prevalence of chronic diseases in both developed and developing countries and the ever existing health inequities undoubtedly reflect this inadequate implementation. Finally, one questions the relevancy of the Ottawa Charter in today's political and business climates, where business models are dominating the practice of many health care organizations (Kirk *et al.*, 2014).

Conclusion

In conclusion, public health nursing originated in underprivileged areas according to the emerging needs of the communities. It emerged in response to the social, political and environmental conditions shaping the health of communities. The spread of infectious diseases and the advances in medicine such as the creation of the germs theory and antibiotics constituted a turning point in the evolution of public health nursing. The main goals of public health nursing were health promotion and disease prevention. Public health nursing improves the health of communities through health education and behavioral modification. Moreover, health promotion can't be achieved without addressing the various social determinants of health. Historically, social reforms and health policy development lie in the heart of the public health nursing.

Overall, the history of public health nursing can be divided into past and recent. The past history was founded by both Nightingale and Wald. Nightingale was a pioneer in epidemiological statistics, changing environmental conditions and developing

health policies. In addition to being a pioneer in developing health policies and bringing about social reforms, Wald founded home health care and school health. In other words, Wald coined the term public health nurse.

The recent history was shaped by the Lalonde report, the Alma Atta Declaration and the Ottawa Charter for Health Promotion. Canada had a great impact on modeling the recent history of public health and particularly the notion of health promotion. The Canadians, through the Lalonde Report, were pioneers in tackling the social determinants of health and introducing the concepts of lifestyle, behavioral modification and at risk populations. Indeed, the history of public health nursing was engraved in the West.

Speaking of advanced public health nursing, its history doesn't begin with the emergence of clinical nurse specialists or nurse practitioners. Instead, the history of advanced public health nursing dates back to the early beginnings of public health that started with Nightingale and Wald. The accomplishments of Nightingale and Wald are not only considered advanced but rather innovative. Obviously, the current practice of the advanced community/public health nurse specialists in the different community settings such as home, school, workplace, is an extension of the achievements of the founders of public health nursing.

CHAPTER II

EVOLVEMENT OF COMMUNITY/PUBLIC HEALTH NURSING: AN ADVANCED PRACTICE SPECIALTY

The emergence of the advanced practice nursing roles was influenced by societal needs as well as political and economic circumstances. Trends that laid the foundation of these roles include cost containment, advances in technology, increased prevalence of chronic disease and a shift from institutional health care to population based health care (Edgecombe, 2001). Therefore, the clinical nurse specialist's (CNS) role first emerged in the early 1960s and aimed at improving the health of individuals, families, groups and communities. It involved client education, consultation with communities and health care professionals, fulfillment of nursing leadership roles and conduction of nursing research (Smith & Rose, 2011).

The nurse practitioner's (NP) role also began in the 1960s; however, it mainly emerged due to a shortage in physicians (Smith & Rose, 2011). Primary health care was seriously threatened by the massive shortage of physicians who were accompanying the new medical advancements and shifting to specialization. In an attempt to ensure the delivery of adequate primary health care services, the NP's movement started in 1965 at the University of Colorado. The NP role was founded by Dr. Loretta Ford and Dr. Henry Silver to provide well child care to children of all ages. The NP roles focus on assessment, diagnosis, management of acute and chronic illnesses and referral of complex cases to physicians (Smith & Rose, 2011). Obviously, the NP role was founded based on a medical model.

Overall, the two advanced practice roles had first emerged in community settings rather than acute care settings. Although both roles focus on improving the

health of communities and preventing disease, their scope of practice varies remarkably. The CNS role emphasizes health promotion and education; community needs assessment; program planning, implementation and evaluation; and conducting research. Additionally, population focused health care is predominant in the CNS role, whereby the CNS serves the whole community as a client. On the other hand, the NP role focuses on assessment, diagnosis and management of diseases. Though the NP role includes health education as an important part of practice, the notions of health promotion and disease prevention are more striking in the CNS's role. The NP's role emphasizes an individualistic approach to health care rather than population focused.

As advanced practice nursing roles have evolved, the community/public health nursing clinical specialist role has been outside the mainstream of advanced practice nursing. Many nursing stakeholders excluded community/public health nursing from their definitions of advanced practice nursing. The American Association of Colleges of Nursing (AACN) 1996 document excluded community/public health nursing from its advanced practice model (Ervin, 2007). Similarly, Hamric, Spross & Hanson (2009) placed community/public health nursing outside their advanced practice nursing model. In their definition of advanced practice nursing, ANA (2003) also omitted community/public health nursing from their definition (Ervin, 2007). Can a nursing specialty be totally omitted from advanced practice? How can the scope of community/public health nursing not include any advanced practice?

Community/public health nursing lies in the mainstream of advanced practice. It is true that the term clinical nurse specialist was not used in the specialty until the late 1980s; however, the scope of community/public health nursing has always involved advanced practice roles. According to many stakeholders, community/public health nursing does not meet the definition of advanced practice because it does not provide

direct patient or family care. Well, community needs assessment, health policy reforms, program planning, implementation and evaluation form the core of advanced practice community/public health nursing. Program implementation can be applied at the individual, family, aggregate, or population level. Therefore, direct care is often present in the advanced community/public health nursing practice; nevertheless, it may be directed to individuals or to the population as a whole (Ervin, 2007).

Throughout history, community/public health nursing had perceived the whole community as a client. Moreover, the specialty has always been defined as the care for individuals, families and communities (ANA, 2012; APHA, 2013; Ervin, 2007). Thus, it has been historically defined that community/public health nurses provide direct care to individuals and families or to communities. The definition of direct care cannot be narrowed to the care of individuals and families only. The advanced community/public health CNS requires more complex and advanced skills to be able to perform at the population level (Robertson, 2004; Robertson & Baldwin, 2007).

There has been a striking shift in public health, from institutional-based health care to population-based health care. Globally, the modern health care systems are constructed on the notions of health promotion and disease prevention. Such notions cannot be solely achieved on an individual/family level. All health promotion and disease prevention interventions are to be considered as direct practice irrespective of the level of implementation. Moreover, the practice of community/public health CNS is very analogous to the practice of CNSs of other specialties. For example, a community/public health CNS may develop a diabetes prevention program based on community needs and implement it through health education sessions, awareness campaigns and screening interventions. This is very similar to the practice of an adult care CNS who provides education about diabetes prevention and care to patients and

their families.

Another confusion impeding advanced community/public health nursing is the definition of the specialty. Ongoing argument and confusion revolve around defining the roles of the specialty. This perplexity diminishes the strength of community/public health nursing as an advanced practice specialty. During the late 1970s and early 1980s, confusion and disagreement existed between the public health nursing stakeholders about many aspects of practice including the title of the specialty. As a result, the first conference on the Essentials of Public Health Nursing Practice and Education was held in 1984 (Ervin, 2007).

In that conference, consensus was reached to differentiate between community health nursing and public health nursing. Any nurse practicing in the community was considered at the generalist level of community health nursing. A community health nurse specialist was referred to the nurse holding at least a master's degree in any nursing specialty. Public health nurse specialist was defined as a nurse holding a master's degree in public health. This definition was vague providing little clarity about the advanced roles of community/public health nursing. Nonetheless, the titles community health and public health nursing continued to be used interchangeably. One of the conference recommendations was the development of a certification exam for the specialty. Accordingly, the first certification exam for the community/public health clinical nurse specialist was offered in October 1990 (Ervin, 2007; Smith & Rose, 2011)

Further clarification of the specialty was achieved with the development of the 1999 Scope and Standards of Public Health Nursing Practice document. This document was developed by the Quad Council which consists of four major nursing stakeholders that are: American Nurses Association (ANA), American Public Health Association (APHA), Association of Community Health Nursing Educators and Association of State

and Territorial Directors of Nursing. The scope and standards of practice document was revised and published in 2007. Another document that enhanced the clarity of the specialty is the Public Health Nursing Competencies developed by the Quad Council in 2003 (Ervin, 2007). The Public Health Nursing Competencies were revised and published in 2011 (Quad Council, 2011). Debate around the title of the specialty persists until today. Nonetheless, the Quad Council used the term Public Health Nursing deliberately in its documents. Although the terms public health nursing and community health nursing are still being used interchangeably, official health department agencies prefer to use the term public health nursing (Ervin, 2007). In this realm, the term "public health nursing" will be used throughout the rest of the project.

Obviously, the public health nursing specialty was unable to organize itself as a sound advanced specialty until lately. Unlike other nursing specialties, public health nursing was late in defining its specialty, roles, scope of practice and competencies. The recent history of advanced public health nursing may explain why nursing stakeholders had excluded public health nursing from the advanced practice models. Nevertheless, this does not neglect the fact that public health nurses have been fulfilling the advanced practice roles throughout their years of practice.

Definition

Public health nursing is defined as "the practice of promoting and protecting the health of populations using knowledge from nursing, social and public health sciences" (ANA, 2012; APHA, 2013). The ultimate goal of the specialty is improving population health through emphasizing health promotion and disease prevention. There are multiple elements unique to the advanced practice of public health nursing. These key elements of practice include population focused care, community needs assessment,

addressing health inequities and disparities, addressing the various determinants of health, with emphasis on primary prevention. Public health nursing interventions are applied at individual, family, aggregate, or community level. Overall, the principal functions of public health nursing are “assessment, policy development and assurance” (ACHNE, 2007; ANA, 2012; APHA, 2013).

Public health nurses work in different practice settings; however, the setting is not a distinguishing characteristic of their practice. The magnificent emphasis on population focused care is the distinguishing aspect of advanced practice public health nursing (ANA 2012; APHA, 2013; Bekemeier, Linderman, Kneipp & Zahner, 2014). Association of Community Health Nursing Educators (ACHNE, 2007) reiterated that the essential distinguishing factor of advanced practice public health nursing is the population focused care and not the setting. This distinction becomes extremely important as more advanced practice nurses from other specialties are practicing in community settings. Advanced public health nurses utilize system-level thinking to conduct community assessments and implement multilevel interventions for the overall benefit of the population. In other words, population focused care forms the cornerstone of advanced public health nursing (ANA, 2012; APHA, 2013).

Advanced public health nurses identify vulnerable populations or populations at risk of developing a certain disease or undesirable condition. In public health nursing population is defined as a group of individuals sharing similar health concerns or characteristics. For instance, a population consists of a group of individuals sharing the same geographic location, the same demographic characteristics (age, gender), or the same health condition (disease, pregnancy, disability). A population may also consist of a group of individuals experiencing a common risk factor or hazardous behavior (smoking, alcohol abuse) or an emerging threat (epidemics, disasters) (ANA, 2012).

Arenas of Practice for Public Health Nursing

The main focus of public health nursing is to improve the health of a population through health promotion and disease prevention strategies. Therefore, public health nurses often practice in many settings in the community and at times in non-traditional health care settings. Practice settings for public health nurses include: faith/parish-based organizations, primary health care centers, schools, correctional facilities, home health agencies, global or international agencies, government or public health departments, long-term care facilities, public or private outpatient clinics, industry or occupational health, military and wellness and outreach centers. Public health nursing competencies and roles are similar throughout the practice arenas. Regardless of the practice setting, public health nurses apply population focused care to improve the health outcomes of populations (ANA, 2012; Smith & Rose, 2011).

Certification

The American Nurses Credentialing Center (ANCC) is responsible for offering certification exams for advanced nursing practice. As noted earlier that the first certification exam for the community/public health nurse was offered in October 1990 (Ervin, 2007; Smith & Rose, 2011). In 2005 ANCC stopped giving the community/public health CNS exam due to the low number of nurses taking it. Community/public health nurse leaders were able to convince ANCC to reoffer the exam, so an updated exam was available in 2007 (Ervin, 2007). In 2009 ANCC changed the name of the exam from clinical nurse specialist in public/community health to advanced public health nursing. The eligibility criteria for the exam were also modified and different criteria were developed for different certifications (Smith & Rose, 2011).

Currently, the community/public health CNS certification examination is

retired and certification is given based on assessment of credentials, expertise and practice (ANCC, 2016). Supposedly, the certification exam was again retired due to the low number of candidates. Certification examinations are essential to the specialty since they enhance its recognition as an advanced practice specialty. It is a drawback for the public/community health nursing specialty to lose it advanced practice certification. Public health nurse leaders are again urged to fight to reinitiate the certification exam. Nevertheless, this situation undoubtedly reflects the underutilization of advanced community/public health nursing roles.

Competencies

Competencies of public health nursing were developed in response to the 1988 Institute of Medicine (IOM) report entitled "The Future of Public Health" (King & Erickson, 2006). IOM report identified a significant gap between public health education and practice and suggested the development of universal competencies (King & Erickson, 2006). Initially, the Council on Linkages (COL) Between Academia and Public Health Practice was formed and published competencies for public health professionals in general in 2001. Later on, public health nurse leaders, who were members of the COL, felt the urgent need for establishing competencies specific to public health nursing. As a result, the Quad Council adopted and modified the COL competencies, then published the first public health nursing competencies in 2004 (King & Erickson, 2006).

The Quad council resembles the "voice for public health nursing" since it is the leading organization responsible for addressing the priorities of public health nursing in all its domains of practice, education, leadership and research (Quad Council, 2011). Quad Council (2011) published a set of core competencies that shape the scope of

public health nursing practice. The competencies are categorized into eight domains that apply to three tiers. In other words, the domains reflect the set of competencies or skills that guide public health nursing practice whereas the tiers reflect the levels of practice.

Tier one refers to the generalist level of practice. The entry level to this level is a bachelor in nursing or a clinical nurse leader, a generalist master's degree (ANA, 2012; Bekemeier*et al.*, 2014). This level includes all day to day functions in any area of the distinct community settings, however it excludes management positions. Responsibilities of the generalist nurse may include health promotion activities at all three levels of prevention, basic data collection and analysis, program planning, outreach activities and field work. Often, the generalist public health nurse practice entails individuals, families and groups rather than populations or communities (Quad Council, 2011).

Tier two refers to the specialist level of practice and includes public health nurses carrying out population based program implementation and management or supervisory responsibilities. At this level responsibilities may include establishing and maintaining community relations, budgeting, developing programs, identifying community resources, developing timelines, conducting wide community needs assessment and presenting recommendations for health policies (Quad Council, 2011).

Tier three refers to the executive/senior management level and includes leadership roles in public health practice. Usually, at this level public health nurses work as leaders or administrators of public health organizations. Therefore, the executive/senior management responsibilities may include setting missions, visions and strategic planning of organizations and developing and implementing oversight programs. Clearly, this is the highest level of public health nursing practice that requires more advanced knowledge and expertise (Quad Council, 2011).

Indeed, the Quad Council (2011) explicitly explained the distinction between the generalist and the specialist levels of public health nursing practice. The generalist level encompasses care directed towards individuals, families and groups whereas the specialist levels encompass the population focused care more predominantly. While the entry level to tier one is a bachelor in nursing or a clinical nurse leader degree, the entry to the specialist levels include a master's degree in nursing (MSN), or a master's in public health (MPH), or a doctorate of nursing practice (DNP), or a doctorate of public health (DrPH) with a main focus on population health (ANA, 2012). Therefore, advanced practice public health nursing entails tiers two and three with tier three being a more advanced, leading and innovative level.

All three tiers of public health nursing practice are informed and guided by eight domains of skills or competencies. These eight domains are analytic and assessment skills, policy development or program planning skills, communication skills, cultural competencies skills, community dimensions of practice, public health sciences skills, financial planning and management skills and leadership and systems thinking skills (Quad Council, 2011).

Levin, Swider, Breakwell, Cowell and Reising (2013) challenged the Quad Council competencies of the advanced role through assessing the relevance and appropriateness of these competencies in preparing graduates for the different public health arenas. A multi-step cross mapping process was used and authentication with public health nursing leaders was ensured prior to selecting four specialty practice arenas that demonstrate the soundness of the competencies. The arenas include: home health nursing, school nursing, occupational nursing and environmental health nursing ,. Results assured the relevance and the appropriateness of the Quad Council competencies in preparing public health nursing graduates for all practice settings.

Hence, a curriculum based on the Quad Council competencies denotes a viable advanced public health nursing curriculum (Levin et al., 2013).

In the *Public Health Nursing: Scope and Standards of Practice*, ANA (2012) also proposed a set of skills or competencies that guide public health nursing practice. The eight guiding competencies were entitled "the principals of public health nursing practice" (ANA, 2012). They include:

- The client is the population as a whole. A public health nurse may provide care at the individual, family and group levels; however, the main target remains the population-focused care.
- The central obligation is to reach benefit for the greatest number of people or for the population as a whole.
- The client is recognized as an equal partner for the public health nurse. Thus, the client will have a great input in program development that is the public health nurse will have to meticulously attend to the needs and priorities of the client.
- Primary prevention is the essential priority in shaping and choosing the required interventions.
- Creating healthy environmental, social and economic conditions in which population thrive constitutes a cornerstone of public health nursing.
- A public health nurse must identify and outreach all those who can benefit from a certain service.
- Development of new evidenced based interventions to improve the overall health of the population while ensuring optimal use of available resources.
- Ensure excellent collaboration with other health care professionals, population members, organizations and stakeholders. Leadership in collaboration and communication lays the ground for involvement in legislative action, government health

and social policy agendas at all levels (ANA, 2012).

The principles of public health nursing help to guide public health nurses to fulfill their roles and functions. ANA (2012) defined three core functions of public health nursing: assessment, assurance and policy development. Assessment entails assessing the needs, resources, values and expectations of the population; it is conducted by both the nursing process and epidemiological methods. As for assurance, it consists of advocacy, coordination and regulation of interdisciplinary and community services (ANA, 2012). Definitely, assurance methods ensure the availability, accessibility, acceptability and quality of services. Policy development is the result of both assessment and assurance and takes into consideration the population's preferences and other at risk subpopulations (ANA, 2012).

Moreover, Keller, Strohschein and Schaffer (2011) created a set of skills entitled "cornerstones framework" that inform public health nursing practice. The cornerstones framework stemmed from the striking need to advocate and speak up for public health nursing as a specialty. The framework was developed over a nine-year period in collaboration with practicing public health nurses and public health nursing directors and consultants. Initially, the evolvement of the framework was based on the identification of public health nursing themes in formative documents and the guiding values and beliefs for both public health and nursing. Analysis, synthesis, as well as consultation with public health nursing leaders constituted the final phase in the development of the framework (Keller et al., 2011).

Therefore, the cornerstones of public health nursing according to Keller et al. (2011) are:

- Focus on the health of entire populations
- Reflection on community priorities and needs

- Establishment of caring relationships with individuals, families, communities and systems
- Grounds in social justice, compassion, sensitivity to diversity and respect for the worth of all people, especially the vulnerable
- Encompass mental, physical, emotional, social, spiritual and environmental aspects of health
- Health promotion strategies driven by epidemiological evidence
- Collaboration with community resources to achieve those strategies, but can and will work alone if necessary
- Deriving authority for independent action by the Nurse Practice Act

Despite the differences between stakeholders in articulating the competencies, the core meaning is the same. Definitely, the essence of public health nursing practice originates from population-based care and views the whole community as a client. Furthermore, addressing the various determinants of health, advocating for social justice and equity and building strong collaborations and partnerships with communities, systems and other healthcare professionals constitute the backbone of public health nursing practice. Obviously, the Quad Council (2011) competencies differentiate well between the generalist and specialist roles of public health nursing. Moreover, the council explicitly defined the roles and competencies of advanced practice public health nursing, thus considered an initial, yet essential step that adds rigor to public health nursing as an advanced practice specialty.

Roles

The roles of Public health nursing revolve around five major advanced roles: clinician, educator, administrator, consultant and researcher (Smith & Rose, 2011). As

noted earlier, the setting is not a distinguishing feature of public health nursing; hence the roles are similar across the different arenas of practice. The ultimate goal of all advanced public health nursing roles is to improve the health of populations while attending to the broad determinants of health.

Clinician

The clinician role encompasses direct care provided to individuals, families, groups and communities. The public health nurse advanced clinician role fits in the mold of the CNS role. It is definitely population-focused, aiming at improving the health of populations while addressing the broad determinants of health. The CNS role involves community needs assessment, program development and implementation and policy reforms. Both roles aim at health promotion and disease prevention (Smith & Rose, 2011).

In order to tangibly demonstrate the difference between individual level and population level care, here are few practice examples. Individual based care may involve case management of client, home visiting of a high risk client, or referral of a high risk client to other services. Population-based care may involve health education sessions to university students about HIV, immunization campaigns in schools, diabetes screening in primary health care centers, or HIV screening in prisons. Obviously, population focused care captures the bigger picture of health (ANA, 2012).

Educator

The advanced public health nurses can increase the wellness of populations through health education. Health education may include health promoting activities, disease process, treatment regimens, life style and health risky behaviors. Like all interventions health education can be provided on an individual, family, group, or community level. Beyond health education, advanced public health nurses provide

formal and informal teaching and coaching to staff and nursing students (Smith & Rose, 2011).

Administrator

Advanced public health nurses play major administrative roles upon acting as agency administrators or health administrators in organizations. In this tenet, advanced public health nurses attend to problem solving and decision making matters. Other administrative duties may include business and management aspects such as budgeting, marketing, developing quality control programs, public relations and managing personnel. Moreover, policy making and policy reforms pertaining to advocacy for health equity and social justice constitute another highly essential administrative role specific to advanced public health nursing (ANA, 2012; Smith & Rose, 2011).

Consultant

Consultation can also be denoted as problem-solving and it constitutes a major aspect of the advanced public health nursing practice. When acting as a consultant, the advanced public health nurse identifies the problem, assesses all available resources, develops a solution and assists in implementing the solution. Advanced public health nurses can act as consultants to other nurses, advanced practice nurses, physicians and other health care professionals. Likewise, they may consult with organizations, schools, or public health departments. Consultation occurs to accomplish the ultimate goal of improving the health outcomes of populations (Smith & Rose, 2011). The consultant role requires effective interpersonal and communication skills and wide collaboration.

Researcher

All advanced public health nurses are at least masters prepared, so they are trained in the research process. Evidenced-based practice implies that all advanced public health nurses utilize and incorporate recent research findings into their practice.

Nevertheless, advanced public health nurses are expected to generate knowledge through conducting or assisting in research studies. The researcher role is deeply embedded in advanced public health nursing practice and is reflected through community needs assessment and program planning. Community needs assessment often entails qualitative research methods such as interviewing, participant observation, focus groups and ethnographic interventions. The advanced public health nursing practice resembles a rich field for identifying and investigating nursing problems based on communities' needs (ANA, 2012; Smith & Rose, 2011).

Robertson & Baldwin (2007) defined role characteristics of the advanced community/public health nurse specialist through a descriptive qualitative study. The purposive sample of the study consisted of ten nurses with a master's degree in community/public health nursing. The study involved recorded interviews and observations of the nurses at their workplaces. Data analysis yielded six major advanced practice roles characteristics that are leadership, management, consultation, building partnerships, large scale program planning, advocacy and policy setting. Again, one can notice that these role characteristics are all included in the roles defined earlier. Moreover, the most consistent element in the characteristics described by the advanced public health nurse specialists was perceiving their practice through a "wide scale lens" (Robertson & Baldwin, 2007).

Summary

The advanced practice public health nursing roles are resembled by the clinician, educator, consultant, administrator and researcher roles. These are comprehensive roles demanding a set of advanced skills. The advanced public health nursing roles are guided by the Quad Council (2011) competencies. Despite the distinct

community health practice settings, the roles remain consistent across them. Furthermore, all roles are directed towards health promotion and disease prevention. Advanced public health nursing roles are distinguished by their wide lens population-focused care. Other key distinguishing features of advanced public health roles are community needs assessment and program planning. Articulation of the advanced public health nursing roles and their guiding competencies constitutes a preliminary step in resolving the confusion surrounding the specialty.

CHAPTER III

CONTENT ANALYSIS

Content Analysis Process

The aim of this project was to create a guiding practice model that articulates the roles and competencies of advanced public health nursing. Accordingly, a number of documents with a public health nursing focus, was collected. The sample consisted of six documents representing the constituencies of public health nursing practice. After a thorough review of the literature I was able to locate websites of public health nursing stakeholders such as ANA, Quad Council, APHA and Canadian Public Health Association. Then, I chose from these websites the documents that were most frequently utilized in the literature because of their high importance. Moreover, these documents were nearly the only documents informing advanced public health nursing.

The documents were analyzed using the inductive content analysis method. Inductive content analysis is often referred to as conventional content analysis and aims at describing the research phenomena under study. The three major parameters of this analysis process include: open coding, creating broader categories and abstraction (Elo & Kyngas, 2007; Hsieh & Shannon, 2005; Zhang & Wildemuth, 2005). Often, the analysis process starts with no perceived categories; instead, the categories emerge from the data (Elo & Kyngas, 2007; Hsieh & Shannon, 2005; Zhang & Wildemuth, 2005).

The phenomenon under study constitutes the roles and competencies of advanced public health nursing, which are deficiently explored in the existing literature. Ervin (2007) stated that “the role of the clinical specialist in public/community health nursing has not yet been well developed in the eyes of the larger health care

community". Similarly, Robertson and Baldwin (2007) explained that the role of advanced public health nurse specialists is not well acknowledged and underutilized. Accordingly, the main emphasis of the analysis process was assessing the roles, goals and competencies of public health nursing. For the sake of analyzing the selected documents, Neuman's (2006) manifest and latent coding was used. Through manifest coding, the content of each document was made visible and explicit, whereas latent coding provided the means to surface themes and messages hidden in those documents (Neuman, 2006).

Initially, all documents were read thoroughly and open codes were generated. The coding mechanism was based on the ANA (2012) Scope and Standards of Practice. The open codes were then grouped into broader categories named generic categories. The purpose of formulating broader categories was to collapse the huge amount of data and to better describe the phenomenon under study (Elo & Kyngas, 2007; Hsieh & Shannon, 2005; Zhang & Wildemuth, 2005). Abstraction, allowed the grouping of the generic categories into main categories and the description of the relationships among categories, thus providing a general description of the phenomenon under study (Elo & Kyngas, 2007; Hsieh & Shannon, 2005; Zhang & Wildemuth, 2005).

Data derived from the analyzed documents underwent a three-phase analysis exercise: forming subcategories, developing generic categories and finally generating the main categories. The subcategories represent the initial open codes, whereas the generic categories represent the broader clusters of the similar subcategories. Similar generic categories were grouped to form the main categories. The main categories portray the major themes extracted from the documents that describe the roles of advanced public health nursing.

Findings

A total of 49 subcategories were extracted from the documents in this search. Table 1 below illustrates the subcategories and the frequency of their occurrence in the documents.

Table 1

Subcategories and their frequencies

Subcategories	Frequency of occurrence
1. Addressing multiple broad determinants of health	27
2. Use knowledge from social, public health and nursing sciences	6
3. Aims at health promotion and disease prevention of populations	22
4. Based on population focused care	20
5. Apply all 3 levels of prevention with a major focus on primary prevention	9
6. Utilizes system level thinking	7
7. levels of practice or interventions (individual/family, group/aggregate, community/population)	9
8. Distinguished by focus on advocacy and policy development	28
9. Ensures social justice and health equity	13
10. Assess needs, resources and inequities of populations	8
11. Different arenas of practice	9
12. Leading inter-professional teams	10
13. Collaborates with clients	23
14. Collaboration in inter-professional teams	25
15. Collaborates with agencies, organizations and health systems (governments)	23
16. Aims at improving overall population health	10
17. Engage in health systems and policy reforms	14
18. Aims at reducing health disparities	4
19. Address emerging societal needs	4
20. Ensure equitable access to high quality care and healthy environments	9
21. Involves surveillance, outreach, screening, case finding, referral and follow up, case management, disease and health threat investigation, control and treatment of communicable disease, …	11

Table 1

"Continued"

Subcategories	Frequency of occurrence
22. Engage in Health teaching and Counseling	5
23. Social marketing is a fundamental characteristic (use of all media sources)	4
24. Acts as consultants to clients, organizations, health systems and other health care professionals	5
25. Conducts comprehensive community health needs assessment	12
26. Links people to available community resources	5
27. Facilitators of direct care	2
28. Meet health needs of populations	5
29. Autonomous practice	3
30. Incorporate evidence, informatics and research findings into practice	13
31. Demonstrates effective communication skills (verbal, nonverbal, written, face to face, electronic,)	10
32. Facilitate behavioral changes pertaining to health improvement	4
33. Applies epidemiological principles	5
34. Participates in emergency/disaster planning, preparedness and implementation	5
35. Identify and address health risks	6
36. Evaluate outcomes of interventions (quality indicators)	8
37. Provide culturally acceptable care (Acknowledge diversity)	7
38. Engage in health programs planning, implementation and evaluation	9
39. Builds a wide network of relationships & partnerships	12
40. Dissemination of community assessment, epidemiological and research findings (conferences, journals,)	7
41. Acts as preceptors and mentors to students and new practitioners	5
42. Provide problem solving of ethical dilemmas	2
43. Conflict resolution	6
44. Critique research	1
45. Participate in the research process	8
46. Benchmarking practice and organizational outcomes	1
47. Develop programmatic budgeting (cost analysis, cost benefit, cost effectiveness,)	5
48. Acts as a spokesperson of public health issues	1
49. Identify new areas for research	4

A total of 10 generic categories were generated. Table 2 below represents the generic categories and their frequencies.

Table 2

Generic Categories and their frequencies

	Generic category	**Frequency**
1.	Population focused practice	36
2.	Health promotion and Disease prevention of populations	32
3.	Leadership skills	13
4.	Advanced public health nursing interventions	16
5.	Develop and evaluate quality indicators	9
6.	Conflict resolution and problem solving	8
7.	Facilitate direct care and behavioral changes	11
8.	Distinguishing features: Advocacy, policy development and reform, social justice and health equity	68
9.	Collaborative practice	83
10.	Community health needs assessment (needs, resources, risks, inequities, …)	35

However, some subcategories were left as is due to their meaning fullness as separate concepts. Overall, 17 subcategories were left the same. Table 3 represents the preserved subcategories and their frequencies.

The purpose of generating categories is to provide a description of the phenomenon under study and to generate knowledge. In inductive content analysis the researcher formulates categories through interpretation, as to choose the categories to be combined together (Elo & Kyngas, 2007). Figure 1 below illustrates an example of the clustering of subcategories.

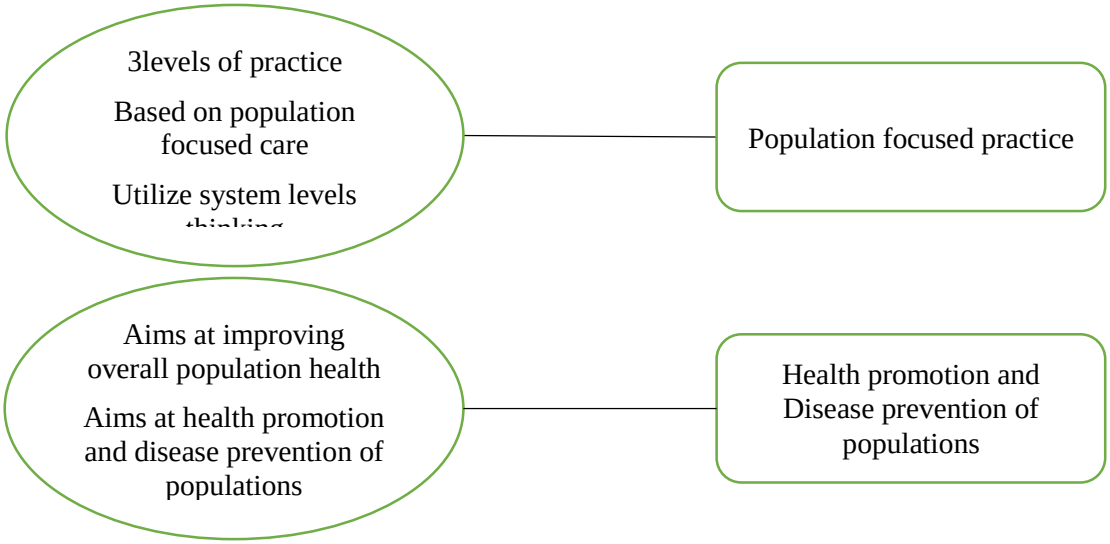
Table 3

Preserved Subcategories and their frequencies

Preserved Subcategories	**Frequency**
1. Addressing multiple broad determinants of health	27
2. Acts as consultants to clients, organizations, health systems and other health care professionals	5
3. Effective communication skills	10
4. Participate in emergency /disaster planning, preparedness and implementation	5
5. Provide culturally acceptable care	7
6. Incorporate evidence, informatics and research findings into practice	13
7. Engage in health programs planning, implementation and evaluation	9
8. Dissemination of community assessment, epidemiological and research findings	7
9. Acts as preceptors and mentors to students and new practitioners	5
10. Provide health teaching and counseling	5
11. Social marketing	4
12. Critique research	1
13. Identify new areas for research	4
14. Participate in the research process	8
15. Financial planning and budgeting	5
16. Apply 3 levels of prevention with a main focus on primary prevention	9
17. Different arenas of practice	9

Figure 1

Generic categories



Discussion

Through interpretation and abstraction, six themes emerged from the analysis process. Each theme describes the roles and distinguishing features of advanced public health nursing. Five of the themes represent the roles of advanced public health nursing, to include: clinician, educator, researcher, consultant and administrator. For each role, the cornerstones of public health nursing practice were identified. The cornerstones consist of distinguishing competencies and aims of advanced public health nursing. They inform and denote the roles of public health nursing as advanced. These cornerstones shape the core of advanced public health nursing practice that is population focused care.

All advanced public health nursing roles must be population focused aiming at health promotion and disease prevention of populations while attending to the broad determinants of health. Improving the health of populations is achieved through collaborative practice, community health needs assessment, policy making and advocacy for social justice and health equity. Table 4 below highlights the themes and the subcategories forming each. As noticed, effective communication skills is a competency common to all public health nursing roles; accordingly, it is incorporated in

all the identified roles.

Table 4

Main categories

Themes
❖ Cornerstones of public health nursing: • Population focused practice • Health promotion and Disease prevention • Collaborative practice • Address the multiple broad determinants of health • Advocacy, policy development &reform, social justice, health equity • Community health needs assessment
❖ Clinician Role: • Facilitates direct care and behavioral change • Advanced public health nursing interventions (surveillance, screening, control and prevention of communicable disease,) • Health program planning, implementation and evaluation • Provide culturally acceptable care • Participate in emergency/disaster planning /preparedness and implementation • Apply 3 levels of prevention with a main focus on primary prevention • Social marketing • Effective communication skills
❖ Educator Role: • Acts as preceptors and mentors to students and new practitioners • Provide health teaching and counseling • Effective communication skills
❖ Researcher Role: • Incorporate evidence, informatics and research findings into practice • Critique research • Identify new areas for research • Dissemination of community assessment, epidemiological and research findings (journals, conferences, …) • Participate in the research process

- Effective communication skills

❖ Consultant Role:
- Acts as consultants to clients, organizations, health systems and other health care professionals
- Effective communication skills

❖ Administrator Role:
- Conflict resolution and problem solving
- Financial planning and budgeting
- Develop and evaluate quality indicators
- Leadership skills
- Effective communication skills

Reflecting on the literature review, one can notice that the extracted roles are congruent with the roles illustrated in literature. After thorough analysis of the milestone documents, no new roles emerged. Smith and Rose (2011) identified the same roles, while Robertson and Baldwin (2007) identified advanced practice role characteristics of the public health nurse specialist. These advanced practice role characteristics combine between the roles and the cornerstones to include leadership, consultation, management, building partnerships, large scale program planning and advocacy and policy setting. On the other hand, Keller et al. (2011) developed the cornerstones framework of public health nursing based on the literature and the consultation with public health nursing stakeholders. Their cornerstones framework was very similar to the cornerstones generated in this project.

The clinician role involves the direct care provided to individuals, families, groups, or populations. Often, the advanced public health nurse clinician role is based on community needs assessment, whereby the advanced public health nurse identifies community needs and resources based on the community's priorities. Then, the advanced public health nurse tailors health programs based on needs and engage in program implementation and evaluation. The clinician role also involves all three levels of disease prevention with a main focus on primary prevention. Therefore, a huge aspect

of the clinician role entails epidemiologic interventions such as screening, surveillance, prevention of communicable disease and immunizations. Emergency preparedness constitutes another important aspect of the clinician role. Furthermore, the clinician role requires effective social marketing strategies to promote for health programs, awareness camp gains and policy changes (ANA, 2012; Canadian Public Health Association, 2010; Smith & Rose, 2011).

The educator role involves health teaching to individuals, families, groups, or populations. Health teaching focuses on improving health outcomes and quality of life. It may include teaching about disease process, medications, lifestyle modifications, or medical procedures. This role also encompasses professional teaching to students, other nurses and other health care professionals. Advanced public health nurses engage in teaching through giving classes or sessions, acting as preceptors or mentors and preparing educational material (ANA, 2012; Canadian Public Health Association, 2010; Smith & Rose, 2011).

The consultant role is another advanced public health nursing role requiring lots of effective communication skills. An advanced public health nurse acts as a consultant to clients, other nurses, health care professionals, public health organizations, or health systems. As well as, the advanced public health nurse consults with other colleagues or health care professionals. Consultation often revolves around problem solving including assessing the problem, identifying available resources and assisting in developing and implementing a solution (ANA, 2012; Canadian Public Health Association, 2010; Smith & Rose, 2011).

The administrator role also involves conflict resolution and problem solving. Management and coordination of programs constitute a huge element of this role. Usually, the administrator role encompasses budgeting and financial management,

setting timelines, developing and evaluating quality indicators, benchmarking and management of human resources. This role highly demands effective leadership and communication skills (ANA, 2012; Canadian Public Health Association, 2010; Smith & Rose, 2011).

The researcher role is an important advanced public health nursing role since it hugely impacts the future of the specialty. All advanced public health nurses are urged to generate knowledge through participating in the research process. Public health nursing constitutes a rich field for identification of new research problems. Community health needs assessment resembles a unique form of research. The researcher role involves research critique, incorporation of recent research findings into practice and dissemination of research and community needs assessment findings in conferences, reports, or publications (ANA, 2012; Canadian Public Health Association, 2010; Smith & Rose, 2011).

It might be thought that these roles are basic roles and no advanced notions are incorporated. Well, the way roles are implemented denotes them as advanced. In other words, the types of interventions and the focus or goals of the role shape it as advanced. All advanced public health nursing roles are informed by the cornerstones of public health nursing that constitute the distinguishing features of the specialty. The cornerstones allow the roles to be implemented from a wider lens aiming at the best health outcomes for the biggest number of the population.

In order to understand things more tangibly, the following is an example illustrating the difference between a basic and an advanced role. For instance, the clinician role may appear very basic. When the public health nurse engages in providing individual level direct care or in screening activities, then this is a basic role. Nevertheless, when the public health nurse targets a population, identifies needs and

assets through community needs assessment, tailors health programs according to needs and coordinates the social marketing of the health programs, then this is considered as an advanced clinician role.

Conclusion

The roles of advanced public health nursing include: clinician, educator, consultant, administrator and researcher. Obviously, the advanced public health nursing roles can't be articulated without the cornerstones. These cornerstones do not only form the core of the specialty but rather they shape the scope of advanced public health nursing practice. Therefore, advanced public health nursing roles are deeply rooted in the cornerstones of the specialty. Public health nursing roles are considered advanced only when looking at the bigger picture and aiming at large scale interventions. Community health needs assessment and program planning, implementation and evaluation constitute essential features of advanced public health nursing. Furthermore, collaborative practice, advocacy, policy development, social justice and health equity distinguish advanced public health nursing practice.

CHAPTER IV

A GUIDING PRACTICE MODEL FOR PUBLIC HEALTH NURSING

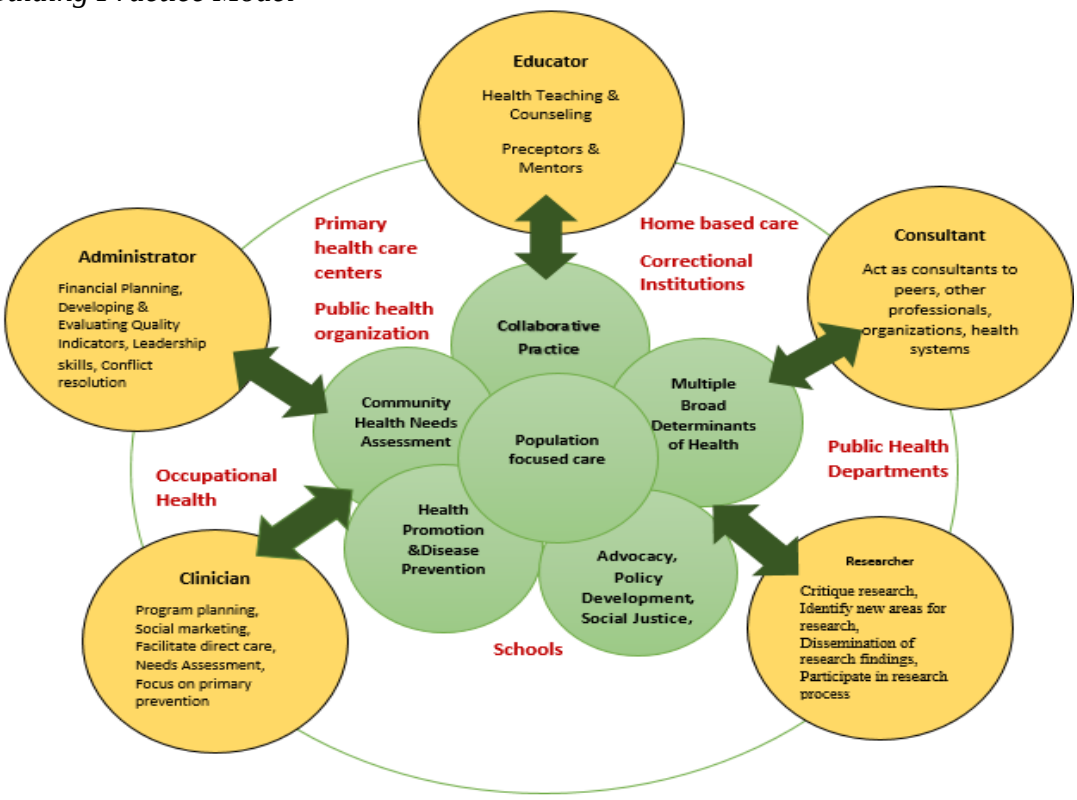
This project is a qualitative descriptive study aiming at articulating the roles of advanced public health nursing. It involved a review of the literature and a qualitative inductive content analysis of the milestone documents of public health nursing. Major concepts were extracted from the content analysis of the documents. These major concepts revolved around the roles of advanced public health nursing. Then, a guiding model of practice was built using these major concepts. The model of practice represents the roles of advanced public health nursing and the different competencies and interventions related to them. The ultimate goal of the model is to improve the health and wellness of populations through appropriate implementation of the advanced public health nursing roles.

The model is composed of the cornerstones of public health nursing, five advanced public health nursing roles and the distinct arenas of practice. The model is represented in Figure 2 below. The cornerstones form the core of advanced public health nursing practice and are represented in the center of the model in six circles arranged in a flower shape. The flower shape was chosen to symbolize the ultimate goal of public health nursing that is improving health and wellness of populations. The cornerstones include population-based care; collaborative practice; multiple broad determinants of health; community health needs assessment; health promotion and disease prevention; and advocacy, policy development, social justice and health equity. Public health nursing is considered advanced if it only applies the cornerstones. In other words, the cornerstones are the distinguishing features of advanced public health

nursing roles.

Figure 2

A Guiding Practice Model



The advanced public health nursing roles are represented each in a small circle located on the outer big circle of the model surrounding the cornerstones. A thick double headed arrow attaches each role to the cornerstones; that is to denote that advanced roles are distinguished by their deep rootedness in the cornerstones. Advanced public health nursing roles don't exist alone; rather they must be connected to the cornerstones to be portrayed as advanced. The thick double headed arrow also resembles the mutual relationship between the cornerstones of public health nursing and the advanced roles, whereby each informs the other reciprocally.

Moreover, the different arenas of public health nursing are represented in the model. They include: school, occupational health, public health departments, correctional institutions, home based care, public health organizations and primary health care centers. The arenas of practice are floating inside the big main circle around the cornerstones and between the roles. This is to represent that the distinct settings are not distinguishing features of advanced public health nursing and advanced public health nursing roles remain the same irrespective of the various settings.

Discussion

The advanced roles of public health nursing include the researcher, clinician, educator, administrator and consultant. These advanced roles exist only in conjunction with the cornerstones. A mutual relationship exists between the cornerstones and the advanced public health nursing roles, where each one informs the other reciprocally. Moreover, the advanced roles remain the same across all various public health nursing practice settings. The distinct community settings are no longer distinguishing features of advanced public health nursing practice.

The following example will demonstrate the applicability of the model. An adult care clinical nurse specialist may work in a primary health care center and provide direct care and health teaching to diabetic patients. The nurse engages in assessment, provides education and consults with individuals or families. However, the nurse is not considered an advanced public health nurse specialist because practice is not population focused. Instead, when an advanced practice nurse in the same primary health care center defines diabetic clients as the population of interest, conducts community needs assessment and tailors health programs accordingly, then the nurse is considered an advanced public health nurse. Community health needs assessment and program

planning, implementation and evaluation constitute an essential aspect of advanced public health nursing practice.

Advanced public health nurses must incorporate the bigger picture in their practice. Their practice must be population focused aiming at the biggest benefit to the biggest number of population. Furthermore, they must address the multiple broad determinants of health including environment, income, social status and level of education. Advanced public health nurses improve the health of populations through health promotion and disease prevention. Although they apply all levels of prevention, they focus on primary prevention in their practice. Primary prevention entails optimizing health promoting behaviors or conditions and reducing risks in healthy populations. As an example, immunizations of children, HIV prevention campaigns among university students and breast cancer awareness campaigns are all considered primary prevention interventions.

Another extremely important aspect of advanced public health nursing is policy making. Often, advanced public health nurses engage in health system policy making and reform to improve health outcomes and decrease inequities. Health system policy making ensures social justice and health equity on the population level. Historically, public health nursing had been rooted in social justice and equity issues (Edgecombe, 2001). Therefore, advocating for social justice and equity constitutes a critical component of advanced public health nursing.

The cornerstones of advanced public health nursing, including policy making, advocacy and community needs assessment, highly demand a wide network of partnerships and collaborations. Advanced public health nurses collaborate with clients, populations, other health professionals, organizations and health departments. Collaboration occurs in nearly every intervention of advanced public health nursing

practice. This was reflected in the literature review by the highest frequency for collaborative practice.

In conclusion, advanced public health nursing is a collaborative practice aiming at improving the overall health of populations. Population health improvement occurs through health promotion and disease prevention with a major focus on primary prevention. Advanced public health nurses meet the needs of populations in their practice through community needs assessment and program planning, implementation and evaluation. Health is a complex concept influenced by multiple determinants such as income, educational level and environment. Advanced public health nursing is deeply rooted in advocacy for social justice and health equity.

Implications for Practice

Advanced practice nurses practice in different specialties with public health nursing presenting unique challenges. The biggest challenge entails the recognition of public health nursing as an advanced practice specialty. Most nursing stakeholders exclude public health nursing from their advanced practice definitions (Ervin, 2007; Hamric et al., 2009). Public health nurses have a huge professional obligation to fight for the recognition of their specialty as advanced.

There is no doubt that the Quad Council (2011) tiers of practice and the ANA (2007) scope and standards of practice had differentiated between the generalist and the specialist public health nursing practice. More clarification around the advanced public health nursing roles and the scope of practice is recommended. Publicizing of these roles is sought to gain more recognition in the eyes of the larger health care profession and the public. Moreover, public health nursing is urged to respond to the market needs and to accompany the major movements in the nursing profession. Public health nurses

must strengthen their voice and advocate for their specialty's recognition and utilization.

The developed guiding model of practice helps advanced public health nurses to articulate their roles and competencies. More importantly, the model helps advanced public health nurses define the distinguishing features of their practice. The ability to define their advanced public health roles allows nurses to gain more recognition for their practice in the eyes of the health care professions and the public. Further, it allows them to market and publicize their roles. Thus, this project serves as a form of empowerment for advanced public health nurses. Obviously, the project meets the great need of clarification and organization as an advanced practice specialty.

As noted earlier, there are very few studies in literature about the roles of advanced public health nursing. Therefore, this project adds to the existing body of knowledge. It also raises awareness within the nursing profession about public health nursing as an advanced practice specialty. After clarifying the roles and distinguishing features of advanced public health nursing, this project may attract more nurses into the specialty. Particularly, nowadays there is a huge demand for advanced public health nurses posed by the increased prevalence of chronic disease and the huge health disparities encountered worldwide.

Implications of the Model on Public Health Nursing Practice in Lebanon

In Lebanon, advanced public health nursing roles are almost absent. Lebanese nursing stakeholders, educators and public health nurses in collaboration with the Lebanese Order of Nurses must lay the foundation of advanced public health nursing in Lebanon. The Lebanese nursing stakeholders must define advanced public health nursing roles, competencies and scope and standards of practice. Moreover, a Lebanese public health nursing association must be founded. The Lebanese Ministry of Public

Health must increase the funding of public health programs and create more opportunities for advanced public health nursing. Lebanese schools of nursing are urged to increase the number of students enrolling in their public health nursing graduate programs.

The Lebanese society is facing tremendous health needs, disparities and social justice issues especially with the current refugee crisis. Nevertheless, the nurses' role is marginalized. Nurses in Lebanon are immersed in hospital-based care; accordingly, they are urged to expand their practice beyond the walls of the hospitals to the larger community. More nurses seek to engage in public health nursing practice; they are encouraged to take a stance from what's happening around them and advocate for social justice and equity through policy making and legislation.

There is no doubt that Lebanon's scarce resources and difficult socio-political and economic circumstances can impede the initiation of public health nursing. Nevertheless, nurses must be innovative and assume leadership to improve the health of their community. When Lilian Wald started Henry Street House, little resources were available amid difficult socio-economic conditions. She fought for legislations and policy reforms to ensure equity, social justice and improved health for all. Similarly, nurses in Lebanon can be innovative and creative in terms of availing opportunities for advancing the prospects of public health practice, to flourish and become visible. It is recommended that public health nursing practice in Lebanon be shifted to an advanced level for better population health outcomes.

This project serves as an initial voice that speaks up for the urgent need of structuring public health nursing as a specialty in Lebanon. It is intended to clarify and develop the advanced public health nursing roles in the eyes of the Lebanese nursing workforce and stakeholders. Hopefully, the clarification of roles presented by the model

can attract more nurses into the public health nursing specialty. The developed model of practice will be helpful for the Lebanese Order of Nurses if it intends in the future to create the scope and standards of practice for the advanced practice public health nursing . The Lebanese Order of Nurses can adopt and elaborate this model when defining the advanced roles and competencies of the public health nurse, especially that this model was based on the constituencies of the specialty.

Conclusion

This project highlights how far behind we are in terms of our public health nursing practice. Public health practice must expand beyond physical assessment, health teachings and direct care in primary health care centers; instead, it must incorporate the cornerstones of advanced public health nursing. Public health nursing practice in Lebanon must be more population focused involving system level thinking, policy making, wide community needs assessment and well-tailored health improvement programs. Additionally, public health nurses must practice with the bigger picture in their minds that is attending to the distinct social and environmental determinants of health. Indeed, advanced public health nursing practice cannot exist without wide effective collaborations and partnerships with stakeholders, community members and other health professionals.

REFERENCES

American Nurses Credentialing Center Website; available from http://nursecredentialing.org/PublicCommunityHealthCNS; Internet; accessed 20 December 2015.

American Nurses Association. (2012). *Public health nursing: Scope and Standards of* practice (2nd Ed). American Nurses Association.

American Public Health Association. (2013). "The definition and practice of public health nursing: A statement of the public health nursing section".

Bekemeier, B., Linderman, T.W., Kneipp, S. & Zahner, S. J. (2014). "Updating the definition and role of public health nursing to advance and guide the specialty". *Public Health Nursing, 32(1),* 50-57.

Burgener, C.S. & Moore, J.S. (2002). "The role of advanced practice nurses in community settings". *Nursing Economics, 20(3),* 102-108.

Canadian Public Health Association. (2010). Public health-community health nursing practice in Canada: roles and activities; available from www.cpha.ca; Internet; accessed 2, 2016.

Canales, K.M. & Drevdahl, J.D. (2014). Community/public health nursing: Is there a future for the specialty? *Nursing Outlook, 62,* 448-458.

Community Health Nurses of Canada. (2011). Canadian community health nursing professional practice model and standards of practice; available from https://www.chnc.ca; Internet; accessed 20 December 2015.

Ervin, N.E. (2007). Clinical specialist in community health nursing: Advanced practice fit or misfit? *Public Health Nursing, 24(5),* 458-464.

Fee, E. & Bu, L. (2010). The origins of public health nursing: The Henry Street Visiting Nursing Service. *American Journal of Public Health, 100(7),* 1206-1207.

Gillam, S. (2008). "Is the declaration of Alma Atta still relevant to primary health care?" *BMJ, 336,* 536-538.

Hamric, A.B., Spross, J.A. & Hanson, C.M. (2009). *Advanced practice nursing: An integrative approach*. St. Louis, Missouri: Elsevier.

Hardill, K. (2007). "From the grey nuns to the streets: A critical history of outreach nursing in Canada". *Public Health Nursing, 24(1),* 91-97.

Keller, L.O., Strohschein, S. & Schaffer, M.A. (2011). "Cornerstones of public health nursing". *Public Health Nursing, 28(3),* 249-260.

King, M.G. & Erickson, G.P. (2006). "Development of public health nursing competencies: An oral history". *Public Health Nursing, 23(2),* 196-201.

Kirk, M., Tomme-Bonde, L. & Schreiber, R. (2014). "Public health reform and health promotion in Canada". *Global Health Promotion, 21(2),* 15-22.

Levin, P., Cary, A., Kulbock, P., Leffers, J., Molle, M. & Polivka, B. (2007). "Graduate education for advanced public health nursing: At the crossroads". Association of Community Health Nursing Educators.

Levin, P.F., Swider, S.M., Breakwell, S., Cowell, J.M. and Reising, V. (2013). "Embracing a competency based specialty curriculum for community based nursing roles". *Public Health Nursing, 30(6),* 557-565.

MacDougall, H. (2007). "Reinventing public health: A new perspective on the health of Canadians and its international impact". *Journal of Epidemiol Community Health, 61,* 955-959.

McKay, M. (2009). "Public health nursing in early 20th century Canada". *Canadian Journal of Public Health, 100(4),* 249-250.

MOPH. (2016). Annual Primary Health Care Magazine 2015 Ministry of Public Health; available from http://www.moph.gov.lb/Prevention/PHC/Pages/Publications Reports.aspx; Internet; accessed 20 January 2016.

Nies, M.A. & McEwen, M. (2011). *Community/public health nursing: Promoting the health of populations* (6th ed.). St. Louis: Elsevier.

Quad Council. (2011). *Quad Council competencies for public health nurses*.

Rippke, M., Briske, L., Keller, L.O., Strohschein, S. & Simonetti, J. (2001). "Public health interventions: Application for public health nursing practice". Minnesota Department of Health Section of Public Health Nursing.

Robertson, F.J. & Baldwin, B.K. (2007). "Advanced practice role characteristics of the community/public health nurse specialist". *Clinical Nurse Specialist, 21(5),* 250-254.

Ruel, S.R. (2014). "Lillian Wald: A pioneer of home health care in the United States". *Home Health Care Nurse, 32(10),* 597-600.

Savage, C. & Kub, J. (2009). "Public health and nursing: A natural partnership". *International Journal of Environmental Research and Public Health, 6,* 2843-2848.

Smith, K. & Rose, M.A. (2011). *The advanced practice nurse in the community;* available from Thomas Jefferson University Website: http://jdc.jefferson.edu/nursfp/60; Internet; accessed 20 December 2015.

WHO. (2001). "Public health nursing: Past and future: A review of the literature". World Health Organization; available from http://www.who.dk; Internet; accessed 14 January 2016.