# Incorporating Concepts of Population Health within the Nursing Curriculum

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### **Abstract**

The goal of Population Health is to improve health and wellness in patient populations. Disparities can negatively impact individual/family or community subsets that have experienced access, resource or socioeconomic obstacles to health and wellness. As such, it is important to understand the determinants that impact health outcomes at the population level. Family centric nursing in both the educational and practice arena can broaden its impact through incorporating concepts from population health to enhance the well-being of persons across the lifespan in local community and broader global settings.

The Department of Nursing at one state college has made an effort to incorporate Population Health and its tenets into the curriculum. Grant funding has supported strategies utilized in the transition. The strategies include, but are not limited to; educating faculty, students, and affiliated clinical settings and their providers about issues involved in determining population health; utilizing existing research evidence or best practice interventions in the planning and delivery of care; increasing inter professional collaboration; mobilizing existing community resources to achieve better health outcomes; and the use of informatics and technology.

Lessons learned in developing knowledge, establishing learning objects, and offering clinical experiences that promote competencies in population-based health care will be shared. Highlights will include a discussion of learning experiences of nursing students involved in an academic-practice partnership within an underserved urban area and a global health medical mission with a NGO to address population health disparities in a resource poor environment.

## Introduction

The goal of the Population Health is to improve health and wellness in patient populations. Disparities can negatively impact individual/family or community subsets that have experienced access, resource or socioeconomic obstacles to health and wellness. As such, it is important to understand the determinants that impact health outcomes at the population level. Family centric nursing in both the educational and practice arena can broaden its impact through incorporating concepts from population health to enhance the well-being of persons across the lifespan in local community and broader global settings.

## **Background**

The phenomenon of population health has been discussed in the literature since the early 2000's. The trend which originated in Canada and United Kingdom has taken on the conceptual framework connotation for thinking about "Why some populations are healthier than others" as well as policy development. As early as 2003, Kindig and Stoddard, defined the term as "Health outcomes of a group of individuals, including the distribution of

such outcomes within the group" (p.380). They felt that population health included health outcomes, patterns of health determinants, and policies and interventions [1].

#### **Curriculum Revision**

So how does population health fit into healthcare delivery and reform? This is a question that needs to be answered across all healthcare disciplines including nursing. Thus, the Department of Nursing at one state college made a conscious effort to incorporate Population Health and its tenets into the curriculum to create change. The incorporation of this phenomenon into the curriculum started with conducting a gap analysis. Each course within the undergraduate and graduate program was assessed to see how many hours are devoted to a population health topic or experience and how it addressed the competencies of care coordination, translation of data, and context e.g. social determinants, disparities, behavioral change, community resources, culture and financial considerations. Course faculty was asked to complete a grid outlying course objectives, lecture content, clinical objectives, clinical assignments, written assignments, Case studies and

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evaluation methods in relation to each competency. The IHI Population Health Composite Model adapted by Stiefel and Nolan, was used to guide the revision [2]. The model identifies upstream and individual factors that can affect disease and injury, states of health such health and function verses morbidity and quality of life or well-being. Health equity related to prevention and health promotion and medical care override the model. A research agenda and resource allocation flow from that framework.

In order to create sustained change, the initiative had three major components. They were (a) Faculty Development, (b) Content and Learning Objective Development/Implementation, and (c) Laboratory (Simulation) and Clinical Experience Development and Implementation.

# **Components**

The strategies implemented in the curriculum revision were numerous and supported by grant funding awarded to the Project Director. The director identified key faculty to form a group for development whom received education from consultants who were experts in population health and were brought to the school to educate faculty. The core group also attended national conferences and colloquiums, and participated in free webinars, and collected and perused journal articles on the topic in order to increase their knowledge base. The grant team then used a "train the trainer" model to educate the entire faculty.

As far as content and learning objectives, the overall nursing program objective was changed to include population based healthcare. Core nursing content was modified to include a population based approach and two new courses were developed and offered to nursing students; Healthcare Informatics and Global Issues in Nursing. The IHI modules were also integrated into courses as learning assignments. Upon graduation, students will have engaged in all modules and be in receipt of a certificate of completion.

Since nursing is a practice based profession and students needed to have the ability to implement what they learned in the classroom related to population health to real life scenarios, simulations were created. Students were engaged in "population based health assessment days" as part of their clinical experience in both the fall and spring semesters. An example of this was an all-day poverty simulation which was multi-disciplinary in nature. Existing community resources were also mobilized to include population health concepts in order to achieve better health outcomes.

# **Lessons Learned**

Many lessons were learned in the process of integrating population health into the nursing curriculum. One reality is that curriculum change is a process that occurs over time and needs the buy-in of all faculty and school administration. The development of knowledge, establishing learning objects, and revision of clinical experiences that promote competencies in population-based health care take time and money. External funding in the form of grant support well assists the process. Faculty can develop academic-

practice partnerships within underserved urban and rural areas and forge a relationship with a non-governmental organization (NGO) to provide an immersion global health experience for students that will allow them to care for populations with in a resource poor environment with many health disparities. Finally, exposure to the tents of population health such as capacity building and sustainability will promote cultural competency among faculty and students.

## **Conclusion**

The nurse's role in population health is critical. As a practice discipline we are key drivers of change because of our knowledge of the determinants of health. The professions historical holistic viewpoint allows us to look beyond individual patient needs to the resources in the community and ask ourselves "what factors threaten the health of the populations "I" work with?

Use big data and community assessment we can then meet the needs of the populations served and achieve better outcomes. In order to educate our future professional's meet this goal, we need to start with curriculum change

# Acknowledgments

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# References

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