Assessing the Usefulness of a Public Health Nursing Preceptor Toolkit

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Thesis

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Abstract

This study was designed to assess the value of developing a toolkit to support public health nurses in precepting baccalaureate nursing students. A convenience sample of nurses working in the public health field in Colorado was chosen to participate in an online survey instrument. Additionally, the instrument was designed to determine if there was any significant difference in the needs of nurses practicing in a rural setting compared to those practicing in an urban area. Thirty three public health nurses completed the survey instrument. Chi square analysis and independent t-tests were used to evaluate differences in rural and urban nurses and no statistically significant difference was found. A Likert scale rating of barriers and supports was done by respondents to further inform what tools would be most useful if a toolkit were to be developed. A toolkit of supports was identified as being useful to public health nurses and further work needs to be done to develop and to explore how to add value and sustainability to the public health clinical experience for precepting public health nurses, educators and student nurses.
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Thank you to Dr. Richard Carpenter for your participation in the preparation of the survey tool and the analysis of the statistics related to this project. You patiently guided me through a valuable learning process that will allow me to be much more accurate in reading and conducting research.

This thesis is dedicated to my husband, Tom, my children, Kindra and Steve, Joni and Ryan, and Ali; and grandchildren, Jack, Sophie, Samuel, (and new baby girl!) who listened to many hours of ideas, thoughts and statistics and supported the effort with great enthusiasm. I cannot imagine what my life would be like without those who help me believe that what I do is valuable and important and that I can accomplish anything; they are the ones who make everything I do worthwhile.
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CHAPTER 1

Introduction

Background and Significance of the Problem

The American Association of Colleges of Nurses clearly states that a population and public health course is one of the essentials necessary for a baccalaureate nursing program. They further note that schools of nursing must also provide clinical experience for BSN students in which students can practice and apply skills learned in the classroom setting. (American Association of Colleges of Nursing [AACN], 2008).

Utilizing local public health departments to provide community health clinical experience is a long-standing practice among many university baccalaureate of science in nursing (BSN) programs. Within that clinical setting, utilizing public health nurses (PHNs) as preceptors for students is a common strategy in an effort to provide the student with a more realistic and meaningful experience (Forneris & Peden-McAlpine, 2009, p. 1716). Using skilled PHNs to provide experiences for student nurses takes time and providing a quality educational opportunity should take preparation as well. While there have been many definitions and attempts of describing the preceptor preparation documented in literature, a limited number are specific to the public and community health experience. Larsen and Zahner (2011) raise the concern that there is a lack of thought given to using the public health nurse in a preceptor role. They state that “in order to enhance the preceptor satisfaction and increase quality learning experiences for nursing students, preceptor preparation is essential” (p. 349). This need to take time for preparation as well as the time it takes to actually work with students can limit the number of student placements available. This author has been a part of frequent
discussions regarding this topic at meetings of PHNs in Colorado. These groups have identified and expressed concern for the limited ability to facilitate the requests for student placement within their agencies and most have described having to turn students away at times. It is widely recognized that the preceptor model is valuable particularly in the field of nursing. Patricia Benner’s “Novice to Expert” theory illustrates how using skilled public health nurses to provide clinical experiences potentiates the training of emerging nurses. Her theory describes how each person brings his or her own history and personal knowledge to the clinical situation and that “nursing needs expert clinicians to model this dynamic transaction between personal knowledge and the clinical situation”. (Benner, 1984, p. 25) For these reasons the ways in which this clinical arrangement is utilized should be evaluated to ensure that the practice remains efficient and sustainable. Looking at how preceptors are chosen, supported, prepared, and valued can add greatly to the field of nursing in general.

Along with traditional BSN students in a university setting, another avenue of educational emphasis has opened up in the last several years which has increased the demand for clinical placements in a community or public health setting: that of encouraging associate or diploma-prepared registered nurses to complete a bachelor’s degree in nursing. The Institute of Medicine has set a goal of increasing the number of bachelor’s-prepared nurses to 80% by 2020. (Institute of Medicine [IOM], 2011). One strategy to accomplish this goal includes increasing the opportunities for and ease with which current associate degree and diploma nurses can pursue a bachelor’s degree. While this effort has led to an increase in the number of students seeking a bachelor’s degree by using an online or distance program, it has also further increased the demand for clinical
placement. This has also increased the demand on rural public health nurses as RNs living in a rural setting, and thus farther from universities, are more likely to utilize an online program. (Moore & Hart, 2004) These students must find their own clinical placement and the institute offering the degree most often relies on a local public health nurse to precept the student and provide guidance without the benefit of an on-site instructor. In order to reach the American Nurses Association goal of increasing nurses with a bachelor’s degree, maximizing the capacity and expertise for the local PHN’s skills in precepting students is crucial in light of the increasing demand and decreasing number of PHNs nationwide.

Besides the need to prepare and support PHNs in precepting students, considering capacity is important as well. According to the U.S. Department of Health and Human Services report on the registered nurse population among all nurses working in the United States as an RN, only 0.6% work in local public health departments (U.S. Department of Health and Human Services Health Resources and Services Administration, 2008). Given the shortage of public health nurses available and the decreasing utilization of nurses by local public health agencies (LPHA), the problem of finding placements for students is becoming a real issue. According to discussions held in Colorado PHN associations, of which this researcher is a participant, many health departments are limiting the type and number of students they will allow and some are refusing to place students who are working on a degree using an online program. This trend is most counterproductive to the IOM recommendation to increase the number of RNs that are bachelor’s-prepared by 2020. Diem and Moyer (2010) suggested that public health clinical experiences are sometimes more difficult to plan for because, “The time scale for working with groups
and communities is longer than with individuals; there are a growing number of students seeking community clinical experience and the number of placements with public health practitioners is limited” (p. 285).

It is clear that public health nurses play an important role in the field of nursing and public health. What can or should be done to insure that this aspect of BSN clinical experience is not only maintained but enhanced? How can public health nurses be supported as roles change and funding is shifted? In order to support and sustain the effort to educate student nurses about community and public health, these questions require further reflection.

**Statement of the Problem**

The current demand on time and availability of public health nurses acting as preceptors for nursing students is in need of support to maintain sustainability. Very few supports are in place to ensure quality experiences, evaluation of student comprehension, and sufficient clinical placements of community and public health rotations for baccalaureate nursing students. In addition to lack of support, capacity is rapidly becoming an issue as well. Many local health departments are unable to accommodate the need for the number of students requesting clinical experience. Are there or do there need to be plans in place to support current preceptors’ capacity and capabilities and to prepare potential new preceptors? A subsequent question would be whether there would need to be any differences in tools for a nurse practicing public health in a rural setting (farther from university settings) versus one practicing in an urban setting. Assessing the value of a public health nurse’s toolkit for working with students may be able to illuminate one approach to enhance the experience for both the student nurse and the precepting nurse.
Statement of Purpose

This study will identify needs of preceptors of BSN students in order to make the public health clinical more structured and effective. Assessing the value of developing and making available a toolkit of information to assist PHNs as they provide clinical experiences to BSN students could benefit the student learning experience as well as assist in alleviating the time and effort demand on preceptors. Improvements to the student learning experience as well as alleviating the time and effort demand on preceptors would be important to the three critical parts of the public health clinical - the student, the preceptor, and the supporting university - and thereby improve the quality of the experience.
CHAPTER II

Review of Literature

Relevant Literature

The literature review revealed there is evidence to support the theory that some problems exist in the current system of utilizing experienced, practicing public health nurses to provide a real-time experience in the field of public and community health for BSN students. Changes in the field of public health as well as in educational delivery methods have compounded the difficulties. While literature is plentiful in evaluating nurses as preceptors, there is a somewhat more limited amount of information about preceptors in the public or community setting, but enough work has been done to assist in clearly defining the problem. There have also been articles published on possible methods of training practicing public health nurses to improve the experience for students and the satisfaction for the precepting nurse. Those approaches were met with questionable success. Wade and Hayes (2010) identified that, “Challenges associated with preceptored community experiences are real and continue to increase as resources diminish” (p. 462).

Over the years there has been much literature published regarding the model of using an experienced nurse to precept a novice or student nurse to provide real-life experiences and to pass practical wisdom to the next generation of nurses. Yonge, Myrick, and Ferguson (2011) define preceptorship as the “one to one pairing of a student nurse with a Registered Nurse for a time limited clinical experience” (p. 76). This model allows the experienced public health nurse to impart concepts of working with communities, population health, educational strategies, and more to student nurses in a
meaningful way. According to Larsen and Zahner (2011), nursing programs are increasingly relying on the preceptor model in both inpatient and community settings to enhance student learning. Public health is an ever-evolving field because populations of people, culture, politics, economics and health priorities are ever changing. A different set of skills utilized in precepting students in a public health setting employs strategies to improve population health and providing little direct service is among the primary goals.

In an acute or even long-term care setting, the student nurse is trained to provide direct care based on each individual’s needs and to focus on particular diseases and therapeutic approaches to improve the individual’s health and function. Kelly, (2011), describes that the nurses practicing in public health have a wide understanding of the determinants of health and must develop a “process of collaboration, integration and partnership with the community” (p. 10). This is why it is imperative that the preceptor (and the educational faculty) have some background in public and community health when guiding students through this process. Skills in population health, health education, assessment, epidemiology and community planning are necessary to teach nursing students to think critically about issues affecting the health of an entire community or nation and even on a global level. This learning occurs best when the student is able to experience day-to-day work in the public health setting.

In addition to the need for developing supports for a valuable student and preceptor experience, literature was reviewed to evaluate what has been done or needs to be done to prepare and then evaluate the precepting nurse to insure the clinical experience is rewarding for all parties. Much of the time, preceptors may have little or no experience in teaching, mentoring or evaluating students. Wade and Hayes (2010), also point out that
“faculty who place students in preceptored community experiences, are challenged to find ways to plan the experiences and evaluate their students performances” (p. 463). When a seasoned public health nurse works with a student or students to enhance the future nurse’s knowledge of having the community as a patient, it can be very rich experience. Unfortunately, it could also be lacking in depth or value and difficult to evaluate the student performance. For this reason, it would be to the advantage of the faculty in the nursing program to work closely with the local public and community health nurses to plan and evaluate the practicing nurse’s intervention with students. Perhaps offering to meet with the public health nurses on a regular basis in a non-judgmental fashion to see if the precepting nurse has any questions about the students, ask if the faculty could be more supportive in lecture, etc. could be a valuable strategy. Raines, (2012) finds in her research that “nurse preceptors yearn to be actively involved in the clinical education of undergraduate nursing students” (p.78). However they do need and desire recognition and support. Even though precepting is an appropriate model and an effective strategy to provide the community experience for students, the Association of Community Health Nursing Educators (ACHNE) (2010), has stated that “educators and practitioners need a framework from which to plan, implement, and evaluate community based curriculum and practice.” (p. 371). It must be clear to both the precepting nurse as well as the nursing instructor what the expectations and evaluation process will be from the onset. Ulrich, (2011) aptly points out that too often “the assumption is made that because a nurse knows how to nurse, she also knows how to precept or teach.” (p.225). Preceptor roles are complex and, the author explains that a special set of competencies is required to be a preceptor. Evidence has also been found
to show that if the precepting nurse does not receive adequate preparation, he/she may “experience work overload and role dissatisfaction” (Larsen & Zahner, 2011, p. 354). Often, there is a considerable amount of time spent in planning to provide a clinical experience for student nurses. Seeking ways to increase the preceptors’ preparedness or at least have tools to standardize processes, could easily reduce the time needed by the precepting nurse and as a result, increase both satisfaction and capacity for the public health nurses. This body of literature indicates that considering the preparation of the preceptors has value for the student, faculty and the clinical nurse.

Another consideration in maintaining the opportunities for this type of learning is the capacity of public health and particularly the nurses working in that setting to have time and enough staff to precept the growing number of students. There are challenges in continuing this model at the current level as the practice of public health evolves and the demand for bachelor’s-prepared nurses increases. Though the Association of American Colleges of Nursing (AACN) reported in their 2012 factsheet a 5.1% enrollment increase in entry-level baccalaureate programs in nursing in 2011, this increase is not sufficient to meet the projected demand for nursing services for the United States. While enrollment in nursing programs is not even increasing at a pace that will meet projected need for bachelor’s-prepared nurses, even the modest increase noted by ACCN calls for an increase in the demand for community health nursing clinical placements which are a part of most BSN programs. The national nursing shortage has long been felt by local public health as illustrated in a workforce analysis report which stated a “severe shortage of nurses in public health remains a key concern”. (Association of State & Territorial Health Officials, 2008, p. 3). Most alarming is the fact that registered nurses showed the
largest decrease in total staff employed in local health departments (LHDs), with a decrease of more than 2,000 positions nationwide between 2005 and 2008, representing almost 10% of all RN positions at LHDs. (National Association of City and County Health Officials, [NACCHO] 2008, p. 2). Reasons for this decrease are changes in funding and structure of most local and state health departments. Nurses are generally paid a higher salary and many tasks have transitioned to utilizing other disciplines with the support of a public health nurse rather than having the nurse do all of the work within a program. For example, communicable disease investigation and follow up was traditionally done by nursing staff. To decrease the expense, many local public health agencies have begun using other, less expensive disciplines that are trained in epidemiology and then overseen by one nurse. Of the public health nurses available to act in the role of a preceptor, it has been clearly identified that there is not enough time to add more to already stretched schedules. Kelly, (2011), looked closely at the experience of precepting in public health nursing from the practicing nurse’s view. The author reports that those nurses interviewed highlighted that there exist many “realities and difficulties of effectively facilitating learning and managing a full time caseload.” (p.12).

Another study, done in Canada (Meagher-Stewart et al. 2011), attempted to develop guidelines to strengthen the community health clinical experience for BSN students. The authors clearly found time on the part of the precepting staff was a major contributing factor in attempting to ensure a quality learning environment, describing an overall increased demand for and reduced supply of community health placement settings and a lack of protected time for nurses who are willing to precept students.
Finally, literature addressing what types of interventions have been tried to support precepting nurses and to expand the quality of the student nurse’s experience in a public health setting was reviewed. While not abundant, there are published articles regarding a few approaches that have been tried with only limited success. Larsen and Zahner (2011), describe a research project in which over 100 very experienced public health nurses were given an opportunity to complete a web delivered training series. Their findings showed that only 23% of the initially enrolled nurses had time to complete the series and study follow-up (respondents reported they were “overwhelmed at work” p. 354.). The researchers also found that while preceptor knowledge immediately improved, it had dropped significantly three months after the program. In addition, literature review by this researcher found that several states have developed handbooks for precepting in a public health setting and no evaluative studies could be found as to the usefulness of these handbooks. Many had helpful materials; however they were often over 30 to 50 pages in length which could prove to be a problem for nurses without time to spare. A collaborative approach such as one tried by the State of Minnesota appeared to be the most successful. This article described a group of 55 learning institutes and 13 local health departments that formed a collaborative to look at cooperating instead of competing for student placement. The authors noted that, “Given the competitive environment for clinical sites, public health agencies often had to make difficult decisions regarding the allocation of their resources for clinical sites.” (Keller, Schaffer, Schoon, Brueshoff, & Jost, 2011, p. 263). This model developed successful strategies for collaborative planning of clinical placement of students and appears to have met with
success in many ways including increased satisfaction for precepting nurses, students, and faculty.

**Nursing Theoretical Framework and Educational Theory Application**

Both nursing theory and learning theory support the preceptor model in providing clinical experience for nursing students. Distlehorst, Dunnington, & Folse (2000), describe the social learning theory model in which students are not just receptors of knowledge and teachers are not just dispensing information. According to this theory of learning, effective learning happens when the student and teacher truly interact. They state that, “It is not just a matter of reinforcing the repetition of an appropriate response….instead effective teaching involves providing an appropriate role model for the student to follow.” To further illustrate the usefulness of learning theory in training nurses, consider Mann’s assertion, (2004) that “In situated learning, learning is characterized by learners' ongoing participation in the community of their practice, in this case, the profession of medicine. Individuals learn from each other through conversations (learning ‘to’ talk and learning ‘from’ talk) and through participation in the work and practices of the community.” (p. 523).

One nursing theory in particular supports the use of precepting in modeling the role of a public health nurse. In Erickson’s (1984) theory of “Modeling and Role-modeling”, she proposes that nurses use modeling to build a perspective (or “model”) of the client’s world; in the case of precepting students, students could be viewed as the precepting nurse’s “clients”. To provide the best and most needed experience for that student, the experienced nurse would do well to consider how the student might view this experience. Particularly in a public health setting, a mentor must consider that for almost
four years, the student nurse has focused on individuals and particular illnesses with very scripted interventions. In this setting students are called upon to change their way of thinking to include a whole population and community and how an “issue” such as inactivity or poor nutrition can lead to many forms of illness for a large group of individuals. These illnesses then in turn have an impact on economics of the community by way of increased insurance costs and lost wages. There is also an impact then on poverty levels which affect disparities in health. This is a much different line of critical thinking for the student in the public health clinical rotation. Erickson’s theory then describes how nurses use role modeling to plan interventions that will assist the client (student) to achieve the desired goal of improvement. Hertz, (1997), eloquently captures the use of Erickson’s role-modeling in her own theory by saying, “Role-Modeling requires that we aim to build trust, promote a positive orientation and a sense of control, affirm strengths and set specific mutual goals.” (p.1). A toolkit to assist nurses seeking to effectively precept could utilize many aspects of Erickson’s theory.

**Key Words**

Terms used in writing and the implementation of this study are defined below.

*Preceptor:* An experienced nurse who develops a one-to-one time-limited relationship with a student or inexperienced nurse to provide guidance and supervision in an effort to promote clinical competency and skill development. (Yonge, Myricjk & Ferguson, 2011, p. 76).

*Public health nursing:* (Frequently used interchangeably with community health nursing in literature and among organizations). Public health nurses integrate community involvement and knowledge about the entire population with personal, clinical
understandings of the health and illness experiences of individuals and families within the population. (American Public Health Association, n.d.).

**Toolkit:** Materials and resources public health professionals and other external stakeholders can use to inform and improve their work in the promotion and advancement of public health objectives. (NACCHO, n.d.).

*Baccalaureate of science in nursing (BSN) programs:* Bachelor of Science in Nursing is a four-year degree offered at colleges and universities that prepares graduates to engage in the full scope of professional nursing practice across all healthcare settings. (American Nurses Association, n.d.).

**Online nursing program:** A program for which all the required coursework for program completion is able to be completed via distance education courses that incorporate Internet-based learning technologies. Distance education courses are courses that deliver instruction to students who are separated from the instructor and support regular and substantive interaction between the students and the instructor synchronously or asynchronously. Courses must be from an accredited university based nursing program. (Institute of Education Sciences, n.d.)

**Modeling and role modeling:** (Based on a nursing theory developed by Helen C. Erickson, Evelyn M. Tomlin, and Mary Ann P. Swain.)

Modeling is the process by which the nurse seeks to know and understand the client’s personal model of his or her world and learns to appreciate its value and significance. It recognizes that each person has a unique perspective (model) of his or her world. The nurse uses this process to develop an image and understanding of the client’s world from the client’s perspective.
Role modeling is the process by which the nurse facilitates and nurtures the individual in attaining, maintaining, and promoting health, accepting the client unconditionally and allowing for planning of unique interventions. According to this concept, the client is the expert in his or her own care and knows best how he or she needs to be helped. (Nursingtheory.org, n.d.).

**Novice:** (As used by Patricia Benner, theorist) Beginner with no experience; taught general rules to help perform tasks. (Current nursing.com, n.d.).

**Expert:** (As used by Patricia Benner, theorist) No longer relies on principles, rules, or guidelines to connect situations and determine actions, much more background of experience, has intuitive grasp of clinical situations. (Current nursing.com, n.d.).

**Summary**

Literature confirms the need to explore and test possible interventions and strategies to strengthen public health agencies and institutes of higher learning in offering clinical placement for BSN students. Larsen and Zahner (2011) summed up the need by stating, “It is imperative to provide nurses with knowledge and skills for precepting so that satisfaction with the role and willingness to perform it is sustained or improved.” (p. 355). While there have been a few attempts documented in supporting this clinical experience, there is clearly room to continue to discover ways to improve the process.
CHAPTER III

Methods

Description of Research Design

In order to assess the usefulness of a toolkit of supports for precepting students in a public health clinical setting, a descriptive research project was developed. A descriptive study design is described as being useful to “gain more information about characteristics within a particular field of study” (Burns & Grove, 2009, p. 237).

Before this project began, the practicing Public Health Nurses (PHNs) in Colorado were sent a one-question email to determine whether or not enough PHNs precepted students to make this survey and research worthwhile. At least twenty eight respondents said they did precept baccalaureate nursing students at least once a year. Based on general discussion and experiences this researcher has noted in meeting with Colorado PHNs, an online survey was drafted for use in this descriptive research project to be implemented using a convenience sample of PHNs. It was determined that both correlation and inferential data analysis would be helpful. The questions for an online survey were formed and reviewed by a doctorally prepared statistician to be sure data collected could be analyzed not only to determine the usefulness of a toolkit, but also if there are significant differences in perceived needs or in practice setting (urban or rural public health). Expert review also came from two nurse leaders from local public health agencies who reviewed the survey and made comments.
Protection of Human Subjects

Before recruiting participants for this project, approval was obtained from the Colorado State University – Pueblo Institutional Board (see Appendix A Institutional Review Board Written Approval). It was determined that according to the policies of the University; this project was considered “Exempt.” Respondents were informed in an email containing the link to the survey that participation was voluntary and they could withdraw from answering any questions at any time without any negative consequences if they did choose not respond to the survey or to stop at any point during the survey (see Appendix B Electronic Introduction and Consent). It was further stated that by following the link, they were implying consent to participate in this research.

Identification of the Population and Sample

A target population of PHNs who have chosen to participate in the Colorado public health nurses associations was determined to be the accessible population. The online link to answer the survey was sent via email to forty one PHNs working in local and state public health agencies in Colorado using a previously developed distribution list of various associations’ members. Those receiving the survey were encouraged to forward the survey invitation to anyone within their agency interested in working with students to encourage the sample to be as representative as possible. The email introduction containing the link to the survey noted that information pertaining to respondents would be completely anonymous and that survey results would be tracked by a number assigned to each survey as the participant began to answer the questions. The final sample size was thirty three participants.
Instruments

An online survey instrument (Appendix C) was entered into the internet tool, Survey Monkey©. This method was chosen for ease and clarity. The intent of the instrument was to not only assess the usefulness of developing a toolkit, but also to determine if there is a difference in the need for a toolkit based on whether PHNs practice in an urban or rural setting. This researcher posed this question because urban settings are often located more closely to larger and more formal institutes of learning. The survey was made up of ten questions, and a variety of types of questions were used. There were five yes/no/not sure closed-ended questions of which two had room for further details in open-ended prompts; one question asked the respondent to choose which “type” of training they had received to prepare them as preceptors; one asked the type of work setting the PHN practiced in (rural or urban); and a final open-ended question allowed respondents to comment on any information they identified that was not addressed in the survey. Two questions utilized a Likert scale where respondents were asked to indicate their level of agreement with a series of statements about barriers to accommodating student placement requests and proposed elements in a toolkit.

Data Analysis

The statistical tests used to analyze results were Chi square and independent t-tests. Chi square was used to analyze the relationship between practice setting and types of precepting offered, types of preceptor preparation, training, and the value of a toolkit. Independent t-tests were used to examine differences between rural and urban settings in the group means of questions asked in the Likert rating questions.
CHAPTER IV

Results

Research Results

Four questions were asked on the subject of an agency’s ability to provide a clinical rotation to bachelors of science (BSN) nursing students, and also the ways in which they were trained and supported in doing so. Table 1 presents results from the first three yes-no closed ended questions. Overall the results indicate that while a large majority of respondents offer a clinical rotation for a BSN student, only a minority use specific objectives and activities in those rotations. In addition, the majority of respondents have not received or been offered formal training to precept students in a public health clinical rotation. The data collected by the survey showed that in all categories, there is not a statistically significant difference in the ways in which students are precepted by nurses working in a rural setting versus an urban setting. Table 1 also disaggregates percentages by setting—rural or urban. Results indicate there are percentage differences based on setting. For all three questions, a greater percentage of those in urban settings responded “yes.” However, chi-square analyses indicate the differences between groups are not statistically significant for any of the questions ($\chi^2=1.13, \ p=.538$; $\chi^2=0.498, \ p=.381$; $\chi^2=2.42, \ p=.157$; respectively).

Table 1

Percentages for First Three Closed-Ended Questions

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer clinical rotations for BSN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Yes</td>
<td>80</td>
<td>85</td>
<td>82</td>
</tr>
<tr>
<td>Use specific objectives and activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>69</td>
<td>76</td>
</tr>
</tbody>
</table>
Question 4 asked respondents to identify the type of training they have received.

Table 2 indicates that most have received informal training, such as something that would be offered in their own agencies, followed by a degree and then formal certification.

When disaggregated by setting, this pattern held true for those in rural settings, but for participants in urban settings the percentages of those with formal certification and degrees was equal. Chi-square analyses indicate these differences were not statistically significant ($\chi^2=1.56, p=.459$).

Table 2

<table>
<thead>
<tr>
<th>Type of Training Received by Respondents</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal (in own agency)</td>
<td>60</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>Formal certification</td>
<td>7</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>Degreed</td>
<td>33</td>
<td>25</td>
<td>30</td>
</tr>
</tbody>
</table>

Respondents were next asked, “Does your agency receive compensation for precepting or providing clinical rotation for student nurses? And if so, could you share any details about the compensation?” Results indicated only three of the 32 respondents indicated compensation of some form is provided. For two of those, clinical scholars are compensated. One person did not provide details, but the other noted:

- Two institutes of higher learning compensate us as clinical scholars at approximately $3000 per rotation for 4 students. The amount increases if more students are placed. We do a maximum of 6 students per rotation.
Student rotations are one from each university in the fall and one from each university in the spring. We do other student placements such as RN to BSN Leadership and APNs free.

The third response appears to describe compensation to the agency:

- We maintain affiliation agreements with three local schools of nursing. We are contractually obligated to take a set amount of students and rotations per contractual period. In turn, we receive a minimal payment for services provided to the three schools. This income augments, but does not cover the actual costs of the program. We also accept 1:1 preceptorships from other accredited schools of nursing on a PRN (as needed) basis.

Two of the “no” responses thought the idea of compensation is a good idea, and another described why:

- No. However, this is a good idea. The demand for adequate clinical rotations is far greater than what is available. The time and effort to organize the clinical rotation and to provide supervision to the student can be daunting. We always give more to the experience than we get in return.

Next, participants were asked to indicate the degree to which certain barriers existed in being able to accommodate student placements and working with students.

Table 3 includes the means for each of the barriers, both overall and disaggregated by setting. These questions used a Likert scale ranging from 0 to 5, where 0 = “not impactful at all” and 5 = “Prohibitive.” Therefore, the greater the mean, the more of a barrier that item is. Items are listed in the order they appeared in the survey.
Looking at overall numbers, the item that is the least of a barrier appears to be “lack of support from agencies,” where the item that presents the greater barrier is “not having enough time overall.” This is followed closely by “limited staff.” These same trends were generally true based on setting, but for those in urban environments “too many requests for placements” was among the top three most prohibitive. Despite differences in means by setting, none were statistically significant as indicated by independent samples t-tests.

This group of questions included an “other” option. Only one person responded to the open-ended prompt with,

- We are so busy...hard to justify without compensation.

Given these barriers, respondents were asked, “If you were offered a toolkit of resources, would this increase your agency’s capacity to offer a public health clinical rotation?” Of those who answered something other than “not sure,” the majority agreed—
no matter the setting—that a toolkit would increase their capacity (see Table 4).

Differences based on setting were not statistically significant, as per chi-square results ($\chi^2=.329, p=.508$).

Table 4

<table>
<thead>
<tr>
<th>Toolkit Increase Capacity for Rotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

Respondents were then asked to rate a list of items based on how helpful they would be in a toolkit for increasing capacity for clinical rotations. This used a Likert scale ranging from 0 to 5, where 0 = “not helpful at all” and 5 = “completely necessary.” Using overall scores in Table 5, all items were rated at least “moderately helpful” (3 on the scale) and more than half were rated “very helpful” (4 on the scale). The most helpful items were “suggested clinical activities” and “PHN competencies at a glance.” The item rated least helpful was one-day training on the use of a toolkit. Comparing results by setting indicates a few notable differences, such as results for “core functions of PH at a glance,” but most means were similar between groups. Consequently, none of the differences between settings were statistically significant using independent samples t-tests.
Table 5

*Helpfulness of Items in a Toolkit*

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template of orientation materials</td>
<td>4.45  1.39</td>
<td>4.67  1.15</td>
<td>4.53  1.29</td>
<td>-0.45</td>
<td>0.65</td>
</tr>
<tr>
<td>Suggested clinical activities</td>
<td>4.70  0.98</td>
<td>4.50  0.90</td>
<td>4.63  0.94</td>
<td>0.58</td>
<td>0.57</td>
</tr>
<tr>
<td>Evaluation tools</td>
<td>4.55  1.15</td>
<td>4.27  1.19</td>
<td>4.45  1.15</td>
<td>0.64</td>
<td>0.53</td>
</tr>
<tr>
<td>PHN competencies</td>
<td>4.85  0.88</td>
<td>4.25  1.14</td>
<td>4.63  1.01</td>
<td>1.68</td>
<td>0.10</td>
</tr>
<tr>
<td>Core functions of PH</td>
<td>4.80  1.15</td>
<td>3.92  1.31</td>
<td>4.47  1.27</td>
<td>2.00</td>
<td>0.06</td>
</tr>
<tr>
<td>MOU templates</td>
<td>3.80  1.67</td>
<td>3.50  1.83</td>
<td>3.69  1.71</td>
<td>0.47</td>
<td>0.64</td>
</tr>
<tr>
<td>Strategies for negotiation</td>
<td>4.15  1.57</td>
<td>4.67  1.07</td>
<td>4.34  1.41</td>
<td>-1.0</td>
<td>0.32</td>
</tr>
<tr>
<td>Strategies for different learners</td>
<td>3.75  1.25</td>
<td>3.58  1.24</td>
<td>3.69  1.23</td>
<td>0.35</td>
<td>0.72</td>
</tr>
<tr>
<td>Clinical teaching guidelines</td>
<td>4.00  1.53</td>
<td>4.00  1.08</td>
<td>4.00  1.34</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Online course in precepting</td>
<td>3.75  1.62</td>
<td>3.85  1.41</td>
<td>3.79  1.52</td>
<td>-0.18</td>
<td>0.86</td>
</tr>
<tr>
<td>Webinar</td>
<td>3.80  1.20</td>
<td>4.15  1.28</td>
<td>3.94  1.22</td>
<td>-0.81</td>
<td>0.43</td>
</tr>
<tr>
<td>One day training on toolkit</td>
<td>3.00  1.59</td>
<td>3.62  1.33</td>
<td>3.24  1.50</td>
<td>-1.2</td>
<td>0.26</td>
</tr>
<tr>
<td>Defined roles and responsibilities</td>
<td>3.90  1.29</td>
<td>3.85  1.99</td>
<td>3.88  1.58</td>
<td>0.09</td>
<td>0.93</td>
</tr>
</tbody>
</table>

These series of items also included an “other” option. Two responses stated:

- General letter from statewide PHN associations to the schools of nursing about the logistics of PH rotation i.e. contracts with governments, staffing in rural areas....

- Our agency has such a well-developed program of clinical scholars it influences my responses, but I think this would be very helpful to other agencies without that infrastructure.

The survey ended by asking, “Do you have any other comments or ideas on improving your ability or capacity for precepting nursing students?” This yielded several types of responses. Four people provided input on ideas to improve ability or capacity.
Upgrading the curriculum (in the university setting) to truly reflect public health. The idea that public health is following a family does not emphasize community.

All of the above would be helpful but would not mitigate the main barrier; that being...not enough time!

Our greatest challenge is capacity.....the class sizes have become larger as we have grown smaller?

“Provide information to The Association of State PH leadership and other leaders at state level.”

One person noted that students themselves were a limitation:

Many of the students assigned to our organization in the past have not been interested in/excited about public health. It has been difficult to engage such students. We have so much to offer.

Two others described limitations of their programs. One was a function of size,

We are a small HD so have limited opportunities for students,

While the other described a decision to limit opportunities by stating:

We have decided to limit student rotations to universities in the Metro area where we can develop relationships with the school, have input into curriculum, attend school orientations and meet the students ahead of time, etc. We no longer accept BSN students doing online courses or attending out of state universities due to the demand just in the metro area that we cannot meet.

One person commented on a limitation created by the curricula,
Many curriculums require too intensive an experience. In community health we have a process for clinic experience and then just ride along for home visitation program visits.

Another shared that s/he had,

- never been approached about precepting students.

And a final respondent answered question nine by stating:

- To clarify my answers to questions #3 & #4, I took a clinical scholar class. I did not complete the entire course. It was almost entirely geared to hospital clinicals. Not very helpful for public health. Also the suggested prepared orientation material regarding the history of Public Health should be covered in the lecture portion of their coursework.

**Limitations**

This study had a somewhat small convenience sample and queried only Colorado public health nurses. Nurses in other states may have a different culture regarding education and precepting. This work does not begin to develop tools so the true value of implementing recommendations would have to be thoroughly studied. Much work remains to be done to actually develop a toolkit, to test its actual usefulness and refine the contents to be helpful in addressing the biggest concern identified, that of limited time. Limited research has been done to increase capacity for precepting students within a public health setting and the tools asked about in this survey may or may not be useful in decreasing time commitment.
Chapter V

Conclusions and Recommendations

Conclusions

Results of this study indicate that the development of a toolkit could be useful for experienced nurses precepting students in a public health clinical setting. There does not seem to be a need to make any special considerations for the supports in the toolkit based on whether nurses are practicing in a rural or urban setting. Based on feedback from the respondents, several areas of helpful tools were identified: working with universities to provide compensation for the preceptor or their agency, ways for agencies and universities to work together to ensure curricula reflects what is currently happening in public health nursing, and tools for engaging students and other leaders in public health. Availability of easy-to-use guides about the history of public health, core functions, and types of projects would be most helpful and could be easily compiled by a workgroup of practicing PHNs. With the field of nursing stretched by availability of bachelor’s-prepared nurses and a demand for more of the same, the information gathered by this study supports the need for continued work to support preceptors and begins to identify areas in which tools could be developed.

Recommendations:

Further work needs to be done to develop and implement the “tools” identified in this study as being useful. Since the demand for clinical placements in a public health setting will most likely increase as the demand for more bachelor’s-prepared nurses rises, it is imperative more work be done to support the PHN as well as the educator in providing this rich and meaningful experience for student nurses. This study did validate
that time is an issue for PHNs so the toolkit approach would allow quick access to needed supports and could be added to or updated with relative ease as more information becomes available. Future studies would be important to work on the development of strategies to encourage nurses to be preceptors by identifying more meaningful incentives, standardizing the approach, and providing recognition for the role. Research could also be conducted to explore how academic and clinical organizations could be more closely aligned in this effort.

**Summary**

Baccalaureate nursing students must have knowledge regarding public and community health. The rich concepts of population health and preventive medicine are invaluable in any practice setting as they allow nurses to provide holistic care to patients wherever they care for them. To support the future of providing this clinical experience effectively, research and development of guidance must be ongoing. No one approach will be adequate and as with everything in the world of nursing, change is always going to be a driving force.
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