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INFLUENCE OF NURSE EDUCATORS ON THE INCLUSION OF INTERPROFESSIONAL EDUCATION IN NURSING CURRICULA

An Evidence-based Practice Capstone Project

Submitted to the Faculty of the

Graduate Program in Nursing

In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Nursing

Holly Freas-Webster

Messiah College

May 2019



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Messiah College School of Graduate Studies Graduate Program in Nursing

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Influence of Nurse Educators in the inclusion of Interprofessional Title of Capstone Project:

Education in Nursing Curriculum

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Abstract

Background: The Institute of Medicine (2010) and the Quality and Safety Education for Nurses

() action recognized the impact that collaboration among health care workers has on safe patient

care. Ineffective communication and teamwork are a cause of medical errors. To remedy this

cause, including interprofessional education in program curriculum will better prepare nurses and

strengthen their skills as they enter the workforce.

Methods: Selected data bases were searched for interprofessional education that identified the

methodologies nursing faculty were implementing and what obstacles were identified to

successful curriculum inclusion of interprofessional education (IPE).

Results: A variety of methods are being used by nursing faculty for student nurses to experience

interprofessional collaboration. However, the literature indicates disparity among nurse

educators support and confidence with the subject of IPE and impact on the success of the

curriculum.

Implications: Further research is needed to discern the obstacles to success of IPE. A major

factor for consideration is the IPE ability of nurse educators to implement IPE in a curriculum

and that is the focus of this paper.

Keywords: Interprofessional education, nursing, faculty, curriculum

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DEDICATION

This work is dedicated with love to Roger W. Webster PhD and Elizabeth F. Freas RN.



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Dr. Louann B. Zinsmeister has nudged, pulled, and pushed me through this process. I am forever grateful for her prayers and hard work. I will pay it forward.



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CHAPTER I

INTRODUCTION

Decades have passed without substantial improvement in the area of interprofessional collaboration. Nurses educate nurses and doctors to educate doctors. Students are taught skills and medical facts but, not in a collaborative atmosphere. Humbles, McNeal, and Paul-Richiez (2017) wrote that interprofessional education has been isolated from practice. Humbles et al. (2017) used the National League for Nursing interprofessional education (IPE) model, and one of their findings was misconceptions, misunderstanding of IPE, preexisting stereotypes and resistance to change.

Studying IPE is not a new activity. Research tools to measure interactions and attitudes of health care workers have been developed. Jefferson Medical College developed a tool to measure attitudes researched physician-nurse collaboration in 1999. Hojat, Fields, Veloski, Griffiths, Cohen, and Plumb (1999) wanted to measure how the success of interprofessional collaboration depended on the attitudes of nurses and doctors. Hojat et al. (1999) created a tool that addressed areas of responsibility, authority, autonomy, and caring versus curing. The tool has been refined and is now called the Jefferson Scale of Attitudes Toward Interprofessional Collaboration (JeffSATIC)(Hojat, Ward, Spandorfer, Arenson, Van Winkle, & Williams, 2015). The literature provides tools for measuring and general support for cooperation and teamwork among health care professionals, but health care leaders are still studying ways to integrate interprofessional education (IPE) and calling for action from educators.

The World Health Organization (WHO, 2010) proposed a framework for action addressing the need for interprofessional education and collaborative health care to strengthen healthcare systems and improved health outcomes. The WHO cited the fragmentation of health care and



the shortage of workers as the motivation for health and education systems to develop strategies of cooperation (2010). The Quality and Safety Education for Nurses (QSEN) (Barnsteiner, Disch, Johnson, McGuinn, Chappell, & Swartwout, 2012) continue on this theme. QSEN has outlined and promoted competencies that correspond to the Institute of Medicines (IOM) recommendations and the WHO framework. The competency for teamwork and collaboration has been assessed by QSEN faculty institute participants as the least integrated into nursing programs (Barnsteiner et al., 2012).

In 2010 the Institute of Medicine published The Future of Nursing: Leading Change, Advancing Health. In this report, Berwick (2010) wrote that professional education could direct and provide standardization in IPE curricula development. Cronenwett added to the IOM report that leaders from nursing and medicine agree that students should learn teamwork and collaboration, and the teachers need to be capable of teaching IPE (2010).

To state the obvious again, nurses teach nursing (Iwasiw & Goldenberg, 2015). Because interprofessional education is a shared learning experience between at least two disciplines, IPE requires a significant shift in the culture of teaching. Educating nursing students in isolation from other disciplines and then expecting communication with other health disciplines to be clear and productive is not realistic (Iwasiw & Goldenberg, 2015). Poor communication is a cause of medical errors so moving away from the traditional silo of education will improve safety. The National League for Nursing (2015)(NLN) wrote that faculty are searching for a template, a recipe to add IPE into the curriculum but, the NLN states that IPE complements safety and quality outcomes rather than adding course content.

Interestingly, the NLN (2016) published a toolkit for nursing educators, which provides some history, mission, and activities for including IPE content to a curriculum. The exemplars,



didactic, simulation, clinical observation, and clinical experience did not address distance education, which is a trend for learners in the age of technology. The NLN (2016) writes that mentors are needed to help change the culture in health care education for IPE to be successful. A mentor, according to Merriam-Webster is a guide or tutor. Finding a mentor with skills in IPE might be challenging but beneficial considering the current nurse educator shortage. The shortage could cause nursing and medical faculty to look at each other for guidance and begin role modeling interprofessional collaboration.

Statement of Problem

Interprofessional education is the path to interprofessional collaboration. The path is the transition for a student nurse to be guided by educators and then released into the world of patient care. Health care is fragmented, shortened hospital stays, growth in pharmacology treatments, and electronic and digital technology all impact patient care. The burden is for health care professionals to remain focused on the patient. Nurses remain the providers who have direct contact with the patient and family members. Achieving optimum communication between health professionals and the nurse is imperative for safe patient care. Despite many recommendations by health care leaders IPE is still not fully integrated into education.

Implementation of IPE is not one size fits all. Determining how to incorporate IPE into a nursing curriculum is a challenge for educators. The NLN's toolkit (2016) provides a template with self-study, but the distractors are plentiful. There are many settings and paths of entry to professional nursing. Gathering interested parties and stakeholders is a challenge. Professional development for the educators will need financing and administrators may look for a single event or simulation activity as a fast way to announce the IPE is part of the nursing program.

However, educators must consider all the variables in their unique setting to devise an IPE

(NLN, 2016). The presence of other health profession schools can be a significant consideration with plan development. For IPE to be successful, it must be a thread throughout the program.

Endorsement of IPE by administrative colleagues in the schools' upper levels and local care facilities is needed. Financial resources and formal agreements between schools and care facilities need support for long term success. IPE has implications for health care and not just for nursing education. IPE precedes IPC, and this is a mandate for the entire health care system (IOM, 2010).

The theme of interest of this author are the attitudes of the nurse educators involved the IPE. Much of the literature about IPE focuses on using simulation or class activities for IPE and less on the experience of the nurse educator. Often the nurse educator is the driving force cited for producing new generations of nurses and nurse educators need to be prepared to drive IPE with expertise and confidence. Hart (2015) discussed in her qualitative study that during the development of competencies for IPE there may be an assumption that ideas about power, voice, and status that cause resistance among educators. This topic is important to investigate.

Background and Need

IOM (2010) has charged the nursing profession to work to enhance the quality, safety, and the accessibility of health care. The IOM (2010) challenges health care professional to make interprofessional collaboration the norm. Many nursing leaders have called to include IPE in the nursing curriculum (NLN, 2015). The NLN's Hallmarks of Excellence in Nursing Education (Adams & Valiga, 2009) state that the curriculum should prepare nurses to serve as a member of a multidisciplinary team. The challenge of including IPE in nursing curriculum makes a topic to be investigated.

Purpose Statement

The purpose of this study was to critically appraise and synthesize evidence related to the perceptions and resistance of by nurse educators to include IPE in curriculum development. The need for this study is to identify common characteristics among nursing faculty that hold back implementation of IPE. Evidence obtained by using database searches, web searches, textbooks, and professional and governmental published information to look for information about interprofessional education, nursing faculty, and curriculum. The expected outcome is the determination of the characteristics that inhibit nurse educators in promoting interprofessional education.

Evidence-based Practice Question

What are the characteristics of nurse educators who are adopting interprofessional education in nursing curricula to prepare undergraduate nurses?

Significance to Nurse Education

Nurses are the majority of health care professionals, and nurses are the people who measure vital signs, review lab results, tabulate input and output, check for medication effects and side effects, take orders, suggest orders and more. Nurses take this information and decide where to report it or not report it. IPE and IPC could empower nursing so studying what enhances IPE and what interferes with IPE will promote nursing and safe patient care.

Definition of Terms

Interprofessional collaboration. Interprofessional collaboration in a health care setting occurs when different health care disciplines and the patient and patient's family work together to manage the health care and achieve a good outcome successfully.

Interprofessional education. Interprofessional education occurs when multiple health care professions engage in a learning activity where the disciplines function as a team for a mutual goal to provide safe patient care. Respect and consideration for the knowledge and skill each team member brings are evident during the activity.

Nurse-physician collaboration. Nurse-physician collaboration is a multi-discipline team approach to develop plans of care and provide optimal safe patient care.

Simulation. Simulation is a teaching method that allows nurses to practice skills with the risk of harm to a patient or themselves.

Nurse. Nurses are knowledge-based health professionals who work to promote health, prevent illness, alleviate suffering, identify processes and systems to influence the health in the community and the environment. Nurses work beside other health professionals to accomplish the goals.

Patient safety. Patient safety is managing risk to avoid preventable harm.

QSEN. Quality and Safety Education for Nurses is the Robert Wood Johnson Foundation program that commenced in 2005.

Chapter Summary

Chapter one introduced the problem statement, background, and evidence-based question.

The significance of this problem to nursing education was described. This chapter also included a glossary of terms.

CHAPTER II

METHODS

The NLN's Hallmarks of Excellence in Nursing Education (Adams & Valiga, 2009) include interprofessional education as a necessary component of nursing curriculum. The IOM (2010) vision for nursing calls for interprofessional collaboration to be the norm in health care. The literature is abundant with educators describing how IPE is being included in their setting. The limitations often call for a need to amend, correct, or repeat the researchers findings. The limitations also include comments on the characteristics of the nurse educators. What are the characteristics of nurse educators who are adopting interprofessional education in nursing curricula to prepare undergraduate nurses?

The Johns Hopkins Nursing Evidence-Based Practice model will be used to for the purpose of this project. The selected evidence will be synthesized according to this model for determination of which studies can help answer the evidence-based question.

Data Collection of the Evidence

Data collection of the evidence included a designated timespan, database searches, search terms and criteria to include or exclude studies.

Timespan. The timespan included 2014-2019. Some classic and notable articles were used.

Databases used. The databases used to collect the sample studies used in this evidence synthesis project were CINAHL complete, Medline complete, Health Source: Nursing/Academic and ERIC.

Search terms. The search terms used were interprofessional education, nurse, nurse faculty and curriculum.



Inclusion criteria. Studies to be included must have been published during the years 2014 through 2019. Included information about the search terms.

Exclusion criteria. Studies excluded were written prior to 2014, were not peer reviewed and not available in full text.

Identification of studies. Interprofessional education was the initial term searched with nursing, nursing faculty and finally curriculum being added. The time frame, language, peer reviewed, and academic publication was then used to identify pertinent articles for screening. Figure 1 data collection procedure visualizes this process.

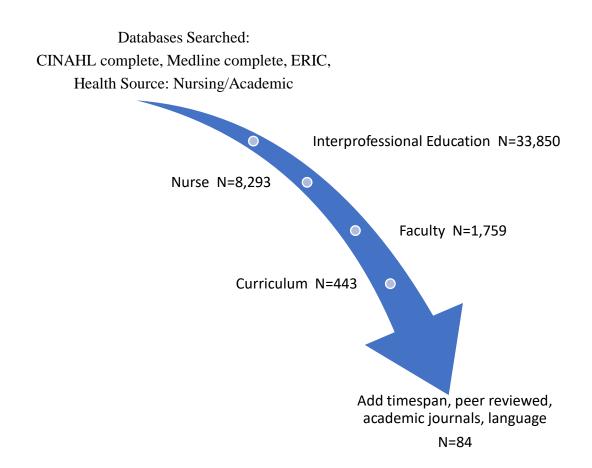


Figure 1 data collection procedure



Evidence-based Practice Model

The Johns Hopkins Nursing Evidence Based Practice Model (JHNEBP) was used in this evidence synthesizing project. The JHNEBP model is a tool that is divided into three phases (Dearholt & Dang, 2018). The identification of a practice problem and the development of a practice question is the first phase. The second phase includes searching for evidence, critical appraisal of the evidence, individual evidence summary, synthesis of overall strength and quality of the evidence, and development of recommendations. The third phase of the JHNEBP model includes translation. This evidence synthesis project will only use the first two phases of the JHNEBP model. The practice question was developed using the JHNEBP practice question development tool to develop a practice question that included a population/problem, intervention, comparison and an outcome. The next step in the in the appraisal process was to collect evidence that used preselected terminology.

Critical Appraisal of Evidence

The evidence, which is the articles identified by the database search were appraised using the JHNEBP tools (Dearholt & Dang, 2018). The evidence is put through a decision tree to determine the level and the quality.

Research evidence is divided into three levels. Level I evidence is obtained from experimental studies, randomized controlled studies, or systematic reviews which may include a meta-analysis. Level II evidence is obtained from a quasi-experimental study or a systematic review of experimental designed studies. Level III evidence is obtained from qualitative research, quantitative non-experimental studies, and systematic review of experimental and non-experimental studies.



Non-research evidence is divided into Level IV and Level V. Level IV evidence is grounded on opinions of respected authorities, clinical practice guidelines and consensus panels. Level V evidence is based on literature reviews, quality improvement, program evaluation, case reports and expert opinions.

The quality of evidence is established by an A, B, C scale. A is given to evidence that is high quality with consistent and generalizable results and decisive conclusions. B is given to evidence that is good, reasonable consistent and fairly decisive conclusions. C quality evidence is low quality, scarce evidence and inconsistent conclusions.

Each piece of evidence is reviewed for inclusion. After initial review many articles were elimination after determining the topic was not appropriate to answer the evidence-based question. Each piece of evidence that was chosen was synthesized and organized according to the level and quality. This information was used to translate the information and make recommendations.

Chapter Summary

This chapter described the collection of evidence in text and using a figure to show visually how the database search was processed. The Johns Hopkins Nursing Evidence Based Practice (2018) model was used and explained. The determination of the level of evidence and the quality of evidence was also included in the chapter.

CHAPTER III

LITERATURE REVIEW AND ANALYSIS

Interprofessional collaboration is a desired outcome for all health care providers.

Interprofessional education is where health care workers experience and learn to assimilate the knowledge and behaviors that will be manifest in their duties while caring for patients. IOM (2010), the IPEC, and the NLN have published and promoted the importance of communication and teamwork for planning and providing patient care in order to enhance safety. Many variables effect the integration of IPE into a nursing curriculum. The readiness of nurse educators is important to consider. This evidence synthesis project will critically appraise related evidence to determine what characteristics nurse educators project that influence the incorporation of IPE in nursing curriculum.

The literature review will address two areas related to the topic of interprofessional education. The first section will review developing and implementing interprofessional education in the nursing curriculum. The second section will review the influence nurse educators exert on the process of interprofessional education.

Interprofessional Education and the Curriculum

Berger, Goetz, Leowardi-Bauer, Schultz, and Szecsenyi (2017) documented a high-quality level V program evaluation of planned change to implement IPE seminars for allied health and medical students at a university in Germany. At the Heidelberg University educational reforms resulted in establishing new undergraduate degrees at the bachelor's level (Berger et al., 2017). Interprofessional Health Care includes a nursing program. A team of faculty that included medical and nursing, supported by a high-level government agency initiated plans for interprofessional education. The leaders studied change management theorists to enhance the



probability of succeeding. Kotter's 8-Step Change Model provided a structured framework to secure IPE in the curricula of the medical school and the Interprofessional Health Care school (Berger et al., 2017). The leaders followed the steps by using their coalition to brainstorm and dialogue until a clear vision transpired, and this vision was communicated widely and through various channels. The widespread communication allowed the coalition to learn what attitudinal and logistical obstacles would be faced and then begin to make accommodations. Short term goals were set to solve problems about the location and scheduling. Four seminars were scheduled. The allied health students were required to attend three of the seminars with the last one being an elective. The medical students were required to attend the first seminar. The seminars topics included team communication, respectful sharing of knowledge and opinions, active listening, giving and receiving feedback, collaborating towards a shared goal, and small business management (Berger et al., 2017).

The final two steps in the Kotter 8-Step Model are not complete. The incremental plan is still in progress, but Berger et al. (2017) writes that the slow pace has allowed for faculty who were initially unaccepting to be in dialogue and less resistant to change. Another outcome from the step approach was the hiring of designated staff by Heidelberg University Medical faculty to coordinate an IPE program for undergraduates (Berger et al., 2017).

The last two steps of the Kotter 8-Step Model are 7. Never letting up and 8. Incorporating changes into the culture. Berger et al. (2017) indicated progress in a complex setting, the grand centuries old medical school and the newly formed multi-discipline school. The study is a good representation of using a sound methodology for change and persistence.

In New England, medical, nursing and physician assistant schools have been working together for the past decade to develop an interprofessional curriculum (Reeves, Denault,



Huntington, Ogrinc, Southard, & Vebell, 2017). This level V program evaluation is a highquality study. Reeves et al. (2017) describe a three-year curriculum, and the study aims to use simulation to inspire and empower students who struggle with novice status and self-doubt (Reeves et al. 2017). The first year sessions targeted role appreciation and teamwork skills. The second-year added more communication skills with an imminent medical error. The third session occurs a few months before the completion of the program and the concentrations of the session were values and ethics. The second-year IPE simulation was based on a safety concern and contact with an arrogant authority figure. The curriculum's objectives were to present a variety of communication techniques. The techniques presented were CUS (I am concerned, I am uncomfortable; this is a safety concern), and SBAR (Situation, Background, Assessment, Recommendation) models. The students were assigned readings before the class, and at the session, a faculty member gave a short lecture at the beginning of the IPE session. Next, the students view a video of a patient safety issue that requires intervention. An authority figure enters the scene and the interaction between the authority figure and the other health care workers is not successful, but the interaction continues using the successful communication skills. The students who were preassigned to groups to have a mixture of each discipline, break into smaller groups and participate in simulation encounters. Every student had a turn while the faculty viewed the encounter behind a one-way mirror. The observing faculty facilitated a quick debriefing with the small groups, and then all the groups combined to reflect on the activity, review the objectives and share their responses during the simulation and how they plan to react in the future (Reeves et al., 2017).

All the student participants were sent an email survey immediately following the session (Reeves et al., 2017). The survey used Likert scales and free text. The results of the Likert scale



findings were included in the publication and showed a very positive score. A second survey was sent one to two years to appraise whether they had observed or used any of the communication skills learned during the IPE session (Reeves et al., 2017). The post-session survey had a 67% completion rate with n=293 (Reeves et al., 2017). The students ranked the IPE session highly, and this indicated that IPE was relevant and increased their confidence with communication skills in urgent health situations. Surprisingly, the text comments indicated that the students did not expect to encounter barriers in communication (Reeves et al., 2017). The survey sent one to two years after the IPE had yes and no questions and room for text responses. The completion rate was 33% with 35% nursing, 9.5% physician assistant, and 47% medical representation (Reeves et al., 2017). The students responded that they recalled the IPE simulation and 91.5% were able to identify the learning objectives. More than half of the respondents reported using one of the communication skills presented at the IPE simulation (Reeves et al., 2017).

The results from the survey sent one to two years after the IPE sessions are very positive. The ability to recollect a specific educational experience and report using the lessons learned is consequential. Psychomotor skills, like measuring blood pressures are usually easily taught and easily learned but IPE is an attitude and each individual will incorporate IPE in their own way. Reeves et al. (2015) have demonstrated success with their plan to include IPE in the nursing curriculum.

Educators, Cranford and Bates (2015) published their experience with the implementation of IPE in the curriculum of an educational institution that had four health disciplines. The study was a non-research level V good quality evidence. Cranford and Bates (2015) cited the core competencies of the American Association of Nursing (AACN) and supported their vision to



include IPE with a view that education is an excellent intervention to foster teamwork, respect, and other values associated with IPC (Cranford & Bates, 2015). Along with the core competencies, Cranford and Bates (2015) acknowledged that the nursing faculty must accept IPE as a necessary part of the nursing curriculum. The first stage of the plan to modify the curriculum to include IPE was to educate the educators (Cranford & Bates, 2015).

The plan to change the curriculum identified theories, frameworks, and models to assist the faculty to learn about IPE and the optimal way to introduce IPE into the program. Cranford and Bates (2015) highlighted one attribute of a profession, social identity that although a decisive factor could be a hindrance to the implementation of IPE. Another feature of the socialization of health professionals is the belief that authority is bestowed permanently to some health workers to a higher degree (Cranford and Bates, 2015). For IPE to be successful the concept of authority in team efforts and patient care needs to be accommodating and amenable to all the team members (Cranford & Bates, 2015). A small group of nursing faculty attended an Interprofessional Education Collaborative conference and presented the information to the entire faculty. The faculty presentation and interviews revealed a lack of respect for other professions and evidence that teaching practice was being accomplished in a "silo" (Cranford & Bates, 2015).

The original faculty invited other interested members to participate after a business plan has been proposed and accepted by the dean (Cranford & Bates, 2015). The team mapped out the curriculum and planned to integrate IPE into every course. Cranford and Bates (2015) used medical terminology to describe the chosen methodology. They decided to have a continuous infusion of IPE rather than a bolus fearing the patient, the faculty and students may accept a gradual change better than a rapid large dose (Cranford & Bates, 2015).



The IPE team entered into planning with the other health discipline school faculties, identified champions, created case studies, planned simulations, but tried to be flexible and keep the desired outcome for changing student behavior insight. A tool designed by the faculty was provided to the students before the IPE activities (Cranford & Bates, 2015). The survey asked the students to self-evaluate skills in communicating their roles and responsibilities with other disciplines, during disputes and with patients and families. The data provided by this survey were compared to comments and information after the learning experiences. This survey will be used to improve the IPE in the curriculum. This study identified how poor communication within faculty influences revising curriculum to include IPE (Cranford & Bates, 2015).

Nurse Educators Influence

Bigbee, Rainwater, and Butani (2016) conducted a faculty development needs assessment at the University of California Davis Interprofessional Teaching Scholars Program (ITSP) in 2013. This study was a level III qualitative study conducted in a higher education setting with a sample size of 156 faculty from the schools of nursing and medicine (Bigbee et al., 2016). The researchers defined faculty development as the personal and professional enhancement required for specific goals, vision, and mission (Bigbee et al., 2016). Bigbee et al. (2016) needs assessment survey had a different emphasis. Previous needs assessments were not interprofessional and followed the traditional professional culture. Bigbee et al. (2016) developed an interprofessional design to assess for development programs that would focus on changing attitudes about roles and appreciation for other professions.

The survey used recent literature, curricula from other teaching scholar programs and the main concerns of UC Davis Schools of Health as a basis. Bigbee et al. (2016) sent an anonymous email survey to faculty and administrators in the school of nursing (n=22) and the



school of medicine (n=832). The survey had three sections, and the first section was composed of six demographic questions to identify the academic characteristics of the participant. The participants were then asked to respond to 20 topics about teaching/learning, scholarship, and leadership using a 5-point Likert type scale (Bigbee et al., 2016). The final section of questions addressed learning platform preferences and scheduling. The survey had a strong internal consistency with a Cronbach's alpha = .89 (Bigbee et al., 2016).

The quantitative data were analyzed using IBM software (Bigbee et al., 2016). Noting the difference between the size of the nursing faculty and the medical faculty a Mann-Whitney U test of P<.05 is statistically significant. The total number of respondents was 156. Of the nursing faculty who responded the rate was 91% and the medical faculty was 16%. Administrators counted 34 of the total 156. The study included a table of the topics with overall rankings, nursing rankings, and medical rankings. The topical ratings were not significantly different between the administrators and the faculty (Bigbee et al., 2016). The comparison of the rankings between nursing and medicine did show differences. The School of Nursing respondents ranked innovative classroom teaching approaches, providing useful feedback and using educational technology the highest.

In comparison, the School of Medicine ranked clinical teaching strategy and providing useful feedback the highest. The thematic analysis uncovered support for IPE but a perceived lack of preparation. One participant described it this way, "we are expected to teach, but most of us have limited experience teaching and need to develop teaching methods that are good alternatives to lectures" (Bigbee et al., 2016).

An interesting piece of information collected during the survey was the relatively low ranking of the importance of IPE (Bigbee et al., 2016). Interprofessional education was ranked 13th.



Bigbee et al. (2016) considered one possibility for the ranking to be a persistent unfamiliarity with the concept.

The results of the needs assessment survey supported the IPE program and the importance of including education-related content, for example, leadership, mentoring and education scholarship (Bigbee et al., 2016). The study recommended an ongoing evaluation.

Loversidge and Demb (2015) from the Ohio State University, conducted a Level III phenomenological study of two faculty groups, nursing and medicine. The study received a good quality ranking. Much of the research on the topic of IPE focuses on the learners' experiences, but Loversidge and Demb (2015) investigated the experiences of nursing and medical faculty from three Midwestern universities. Two of the schools were public and one was private. All the schools were associated with academic medical centers and were similar size. A purposive sampling method was used to find faculty with five years of experience teaching included teaching responsibility and direct contact with students from the other school (Loversidge & Demb, 2015). The number of participants was 32, with the mean age of the nursing faculty was 51.3 years and the medical faculty was 54.5 years. All the nursing faculty were female and four of the 15 medical school faculty were female. The mean years for teaching were 22 for nursing and 23.6 years for medicine. The research project was approved by the Ohio State University Office of Responsible Research Practice. Participation was voluntary, gave consent and understood the definition of interprofessional education.

Each participant was interviewed for 45-90 minutes while being audio-recorded. The co-investigator took notes during the interview and tracked non-verbal behavior, environmental conditions and reflections (Loversidge & Demb, 2015). The participants were informed about the investigator's opinions on IPE. After each interview the co-investigator debriefed with the



primary investigator and a research colleague. Copious pages of transcribed records were produced. Two methods of triangulation were reported by Loversidge and Demb. The participants were sent copies of the transcribed interviews to verify and clarify (Loversidge & Demb, 2015). The investigators corroborated information from the interviews by analyzing curriculum plans, meeting minutes, strategic plans and other pertinent records.

Loversidge and Demb (2015) performed a thematic analysis to cluster common experiences. Data reduction, using NVivo 9 three times identified 44 codes, which were grouped into six themes. These themes were then organized into two groups, environmental and culture themes and student centered themes. Loversidge and Demb (2015) discussed each theme in the article. Faculty although finding value in simulation believed authentic patient care experiences to be the most powerful. Faculty acknowledged risk but indicated that students had the experience of meaningful contribution to teamwork (Loversidge & Demb, 2015). The faculty also reported that these experiences provided spontaneous teachable moments to interact with other health disciplines. Loversidge and Demb (2015) reported on the positive and negative influences on students in the clinical environment. Some faculty found their environment provided collaborative experiences where safety and quality care were more important than status and hierarchy. The majority of faculty were concerned that students were exposed to negative hierarchical and poor examples of communication. Faculty engagement was identified as essential for implementing IPE in curriculum (Loversidge & Demb, 2015). Successful faculty were distinguished grants, research, committee activity, and teaching partnerships. Faculty that ranked IPE low demonstrated fewer occasions for exposure. Some faculty members considered the use of adjunct faculty to be a barrier to IPE because adjunct faculty do not participate at the same level in departmental activities (Loversidge & Demb, 2015). One faculty participant



commented that "we just haven't put the time and money in the effort to sitting together to coordinate that" (Loversidge & Demb, 2015).

In their phenomenological study, Loversidge and Demb (2015) provided details from the participants that can be used when planning the implementation of IPE in health care curriculum.

Chapter Summary

A literature review was completed, and five studies were presented according to two themes. These studies were critically appraised using the Johns Hopkins Nursing Evidence-Based Practice method (2018).



CHAPTER IV

RESULTS AND SYNTHESIS

The IOM (2010) has mandated interprofessional education to be included in all health care disciplines and many educators are diligently working to make IPE a permanent curriculum feature. Decades have passed since the first suggestion that patient care would be better and safer if the health care professionals worked as a team. The complexity of the culture of professional education and the inherent beliefs and values of the professionals need to be investigated to accurately identify and describe the barriers to long lasting change. The readiness of nurse educators is important to consider.

Results

This evidence synthesizing project used the Johns Hopkins Nursing for Evidence Based Practice (JHNEBP) model to critically appraise and synthesize the results of the included studies. Dearholt and Dang (2018) describe the various levels of evidence used in the JHNEBP model. Appendix B provides a concise description of each level of evidence, the total number of sources from each level of evidence, the overall quality rating of the included sources and a synthesis of findings. This evidence synthesizing project contained six studies. Two studies were Level III and three studies were Level V. Level III evidence is non-experimental, and both of the studies included were qualitative studies. The three Level V studies were organizational experiences.

Synthesis of Results

The critical appraisal process uncovered two themes. The first theme was interprofessional education and the curriculum. The three studies identified under this theme were Level V. The studies were all organizational experiences. Reeves et al. (2017) developed a series of three interprofessional education sessions with different topics for students in a three year longitudinal



study. The students were asked to complete a self-assessment survey to evaluate using a Likert scale. The survey provided perceptions about the quality of the content, relevance, interaction with students and faculty, and confidence with applying the communication skills learned during the sessions. This evidence was a good quality study. Cranford and Bates (2015) organizational experience described the acceptance of IPE in a curriculum initiative by the nursing faculty. The study was a good quality project. The third study by Berger et al. (2017) documented the progress of implementing IPE into a university that had very a traditional medical school and a new school with baccalaureate programs for nursing and other health professionals. The results of the study described using planned change methodology and some unexpected advantages. Berger et al. (2017) a good quality study.

The second theme was the nurse educators influence. Two studies identified were both Level III and were good quality. Bigbee et al. (2016) reported on their needs assessment of the faculty to direct the development of the IPE curriculum. The study analyzed the quantitative and the qualitative data and had strong reliability and good response rates. The study participants were from a variety of health disciplines and the results reported a range of experience, confidence and interest in IPE. The second study, also Level III was authored by Loversidge and Demb (2015). This phenomenological study of three Midwestern universities used semi-structured interviews to uncover the experiences of nursing and medical school faculty. The analysis of the data provided copious details that were thematically organized. This study was a good quality project.

Chapter Summary

The number of studies was presented with the level of evidence and overall quality rating. A synthesis of the themes was named and the evidence at each level was synthesized and described.



CHAPTER V

DISCUSSION AND CONCLUSION

Interprofessional education should not be a component of the curriculum. Interprofessional education will become the curriculum. Leadership organizations, the Institute of Medicine (2010), the World Health Organization (2010), and the National League for Nursing (2016) have been signaling nursing and other health disciplines to abandon the traditional, single professional educational programs for the sake of safe, quality patient care. Nursing educators can successfully master this new way of teaching and learning in an evolving culture of health care if nurse educators prepare and become self-aware.

Discussion of Findings

The evidence synthesis aimed to discern the influence of nurse educators on interprofessional education. Nurse educators at all levels, national nursing organizations, school administrators, researchers and the educators who interact with students on a personal level have tremendous influence on curriculum and interprofessional education. The evidence showed great variation. Some teachers have had professional development in IPE and are confident, while other educators focus on discreet tasks, like simulation to provide an experience with IPE. There are some educators who are not comfortable with the topic of IPE and still others who are comfortable with education occurring in a silo avoiding what evidence-based practice may indicate as a remedy to reduce risk and harm. A very positive finding can be gleaned from the Loversidge and Demb (2015) study. The depth of critical thinking by educators was substantiated by their phenomenological research. Implementing IPE is a thorny problem, but the research is accumulating data that will be useful to build new curriculum.



Implication of Findings

The implication of findings is to think broadly when proposing ideas about IPE. Developing IPE exercises without an overarching vision may not change the culture of teaching. High-fidelity simulation exercises that are scheduled once a year might be memorable for some students but the immediate task for IPE currently should be professional development of the educators.

Limitations for Consideration

One limitation this author found was that the opinions, ideas, and experiences of the nurse educators was often not the focus of a study. The experiences of the educators were not a central focus just a bit of information noted by a researcher. More research that studies groups of disciplines, nurses, doctors, social workers, etc. might provide insights that could benchmark current cultures in health care professions.

Identified Gaps in Findings

Additional research on IPE that is a program evaluation but rather focused on vision and how disciplines are joining together in the effort to promote IPE will add to the self-awareness educators need to consider future changes.

Chapter Summary

In Chapter V the implications, limitations and gaps of the evidence-synthesis findings were discussed. Further research into the value nurses and other health professional place in communicating and respecting one another and comparing this to the value placed on IPE may deepen the understanding of the resistance to IPE.



Project Summary

This evidence-synthesis project has posed advancing interprofessional education but rather than brainstorming and creating singular educational activities appraising the skills and needs of nurse educators should be the initial phase. Gauging the readiness of the educators should be accomplished before executing curricular changes to implement interprofessional education.



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Appendix A

Evidence Summary Matrix

Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
Cranford, Nurse Educator, 2015 #1		Nursing program, N=1, higher education	Positive outcome, first step is to educate the educators	Scheduling issues, no pre post-test, each professional school has to decide where IPE goes in its program; a work in progress	V	B, Good
Berger, Journal of Interprofessional Care, 2017 #2	implementing IPE in a	Health professional education program, N=1, higher education	structured approach had value, very high level administrative support with	Lack of shared theories of leadership is an obstacle; need to train current faculty, noted that traditional medical training has a culture that will need to change	V	A, High
Loversidge, Journal of Interprofessional Care, 2014 #3	environmental factors do	Faculty from medical and nursing programs, N=32, higher education	nursing had similar opinions about IPE; Defined the student centered themes; discussed topics not commonly	Difficulty developing the best learning experiences due to staffing and time constraints; IPE needs continued research	Ш	B, Good
Bigbee, Nurse Educator, 2016 #4	conduct a needs	Faculty and administrators, N=156, higher education	Nursing and medicine/faculty and administrators are similarly aligned	Small sample size; unclear why IPE wasn't rated highly, concern that IPE might still be a "foreign" concept to educators	III	B, Good
Reeves, Nurse Educator, 2017 #5	success of multi-discipline simulation	Nursing, medical and physician assist students; n=437; higher education	disconnected and	Many participants required long hours of the educators; results based on feelings not measurable	V	Good



Appendix B

Synthesis and Recommendation Tool

Level of Evidence	Total # Sources	Overall Quality Rating	Synthesis of Findings Evidence that Answers the EBP Question
 Level I Experimental Study Randomized controlled trial (RCT) Systematic Review of RCTs with or without meta-analysis Level II Quasi-experimental studies 	0		
 Systematic review of a combination of RCTs and quasi- experimental studies, or quasi- experimental studies only, with or without meta-analysis 			
Non-experimental study Systematic review of a combination of RCTs, quasiexperimental, and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review of qualitative studies with or without meta-analysis	2	Good	#3 Loversidge et al. This report studied the nurse/doctor dyad because these professions are usually the central figures in patient care. The second part of the main question – what did they (educators) think about the experience (IPE)? Faculty who are engaged and familiar with IPE have a collective understanding about the complexity of infusing IPE in health care curriculums. Faculty need to practice IPC as educators and make the change the culture needs to fully accept IPE. #4 Bigbee This needs assessment was different. Instead of assessing an individual profession needs the goal was to assess interprofessional faculty development. The findings were helpful for program content and delivery.

Level IV			
Opinion of respected authorities	0		
and/or reports of nationally			
recognized expert committee			
based on scientific evidence			W2.72
Level V	2	TT: 1 /G 1	#2 Berger et al.
Evidence obtained from literature	3	High/Good	Using a planned change method, a group of
reviews, quality improvement,			faculty, from medicine, nursing and
program evaluation, or case reports			sociology implemented IPE with Kotter 8-
Opinion of nationally recognized			step model. They did not finish but were
expert(s) based on experiential			still in progress. Two distinct benefits. The
evidence			first was the gradual introduction allowed
			for the very traditional faculty time to
			consider and adjust. The second benefit was
			the ability to plan-do-check.
			#1 Cranford and Bates
			Based their IPE plan on AACN core
			competencies. Stated early on in the article
			that education is one of the best
			interventions for increasing skills in
			teamwork, and developing mutual respect
			for colleagues. Recommended a gradual
			infusion of IPE rather than an abrupt
			change.
			#5 Reeves et al.
			3 year longitudinal study. Addressed status
			(hierarchical) barriers. Found that students
			do retain the IPE with positive comments 1-
			2 years in a survey.
			2 years in a survey.

Recommendation Based on Evidence Synthesis and Selected Translation Pathway

Incorporating IPE into a health care/nursing curriculum is complex. Nurses, physicians and other health professionals have spent years building up a unique form of socialization, skill sets, teaching practices, role identification and culture. The studies presented have demonstrated that the valuing IPE is present in educators although there is still resistance. Curriculum design is not infusing IPE throughout but using structured group settings and frequently using simulation. The studies that drilled down into the concerns of individual educators revealed detailed strengths and concerns. This knowledge will help to prepare the educators.

From: Dang, D., & Dearholt, S. L. (2018). *Johns Hopkins evidence-based practice: Model and guidelines* (3rd ed.). Indianapolis, IN: Sigma Theta Tau. NURS530_AUG_2018

