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TELEHEALTH EDUCATION IN NURSING CURRICULA ENHANCES NURSING
PRACTICE

by

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Abstract

The recent COVID-19 pandemic has drastically increased the use of telehealth in nursing practice. Many practicing nurses used telehealth with little to no formal training. Did the pre-licensure registered nurse (RN) programs prepare the nurses to provide the best possible client-centered care when using telehealth? When pre-licensure RN programs are looking at meeting the American Association of College of Nursing (AACN) *Essentials*, adding telehealth education to the curriculum is an expected element of developing a strong academic program. The *Essentials* outline the necessary curriculum content and expected competencies of graduates from baccalaureate, master's, and Doctor of Nursing Practice programs, as well as the clinical support needed for the full spectrum of academic nursing. Health care agencies anticipate that nurses will use telehealth as an additional client interfacing tool when entering the workforce. A variety of research data bases resulted that telehealth training is necessary to improve the confidence and comfort level of graduate students in their curricula. Additionally, this research can translate well for pre-licensure RN programs. A review of articles pertaining to undergraduate programs revealed evidence to match the need of telehealth education. Nursing students improved their confidence, comfort, and adaptability with the use of technology after a telehealth experience (Lister et al., 2018). Academic institutions can control and bridge the knowledge gap by incorporating telehealth education in all nursing programs, which would ultimately enhance nursing practice delivery methods that improve client-centered access to optimal care.

Keywords: nurse education, telehealth, nursing program, nursing students, and nurse practice

Telehealth Education in Nursing Curricula Enhances Nursing Practice

Telehealth has been in use for many years in advanced practice nursing. Only recently it has gained use in general nursing practice. Practicing nurses have had to learn by fire on how to use telehealth, due to the recent explosion of telehealth visits during the pandemic. No matter how the nurse is caring, educating, or advocating for a client, the nurse needs to keep the client at the center of the in-person encounter or through telehealth. The client should feel comfortable and confident with the nurse encounter to ensure high-quality care is maintained. This topic was chosen to investigate if the implementation of telehealth education in pre-license registered nurse (RN) programs would improve the use of telehealth in nursing practice.

Pre-licensure nursing programs can foster a well-rounded student nurse by including telehealth as part of their educational experience. Robinson-Reilly et al. (2020) suggest the need for telehealth simulations in nurse practitioner (NP) programs. By adding telehealth to the NP programs, the NP students will gain a competitive advantage in their profession. Telehealth clinical experiences have been effective in increasing the value and depth of knowledge for the NP student, as well as improving confidence with the technology platforms (Robinson-Reilly et al., 2020). By adding telehealth education to pre-licensure RN programs, this initiative will translate to improved client-centered care in nursing practices. Therefore, the clinical question to be researched is: In pre-licensure RN programs, would the implementation of telehealth education compared to no telehealth education, improve the use of telehealth in nursing practice?

Purpose

Telehealth was approved for reimbursement in 2014 by the United States Centers for Medicaid and Medicare Services (CMS) to improve and promote distance utilization (CMS, 2020). By 2019, 50 states had some Medicaid policies in place for some use of telehealth

services (Congressional Research Service, 2018). Telehealth is here to stay, so nursing education will have to embrace the opportunity of implementing education in the pre-licensure RN programs. Adding telehealth education to nursing programs would help bridge the gap between nursing education and nursing practice. Badowski et al. (2019) examine the lack of telehealth in the nursing curriculum. Telehealth home visits and simulated clinical situations were some of the few areas that included telehealth experience in the nursing curriculum (Badowski et al., 2019).

Ali et al. (2015) found that the nursing students at all levels of the nursing curriculum would benefit from the addition of telehealth education without a need for a program revision. Lister et al. (2018) investigated the use of telehealth with 73 pre-licensure students during a simulation experience. Part of the study focused on the confidence with the use of telehealth in the simulated experience by utilizing a pre-and post-survey for the experience. The students improved their confidence, comfort, and adaptability with the use of technology after a telehealth experience (Lister et al., 2018).

Joseph and Huber (2015) researched the benefit of using RNs to the fullest potential of the scope of practice and found it adds a better return for health care facilities. Adding telehealth education to the pre-licensure RN program would allow the health care facility to maximize the use of the RN with client-centered telehealth visits. The RN would improve “autonomy, authority, accountability in managing and coordinating care across disciplines and settings” (Joseph & Huber, 2015, p. 55). The telehealth education would provide the pre-licensure RN exposure, experience, and confidence with using telehealth before practice to benefit the client-centered care.

Significance

Telehealth has existed for many years, but typically in the advanced practice, physician, or specialty areas (Robinson-Reilly et al., 2020). In recent months, the need for telehealth has

grown exponentially to bridge the gap of health care visits with many clients. The pandemic has required many practicing nurses and new RNs to provide high-quality care via telehealth. Many nurses have not had any formal education or very little training on continuous care with a client through a telehealth visit.

Advanced practice NP programs along with several professional programs have included telehealth in their curricula for several years (Rutledge et al., 2020). Now it is time that the pre-licensure RN programs include education to prepare nurses for the current demand of telehealth in health care. Communication is crucial in nursing, but more critical when the communication is through the means of telehealth. The nurse needs confidence in their professional role using telehealth equipment and continuing to care for their clients.

Theoretical Framework

The opportunity for nursing students to train for a component of their nursing practice role is critical to providing the best client-centered experience. Nursing education has struggled to bridge the gap between academics and practice. Kolb's Experiential Learning Theory provides the opportunity for students to use client-based scenario (concrete experience), develop a plan of action (reflection), carry out the plan (experimentation), and debrief the experience (final reflection) while working towards narrowing the academic-practice gap in nursing (Fewsterk-Thuente & Batteson, 2018). Telehealth information and skills training would be incorporated into the nursing pre-licensure RN curricula allowing students to effectively prepare for nursing practice when following Kolb's theory (Fewsterk-Thuente & Batteson, 2018).

The instructor would incorporate Kolb's theory when facilitating the learning activity for telehealth education. Adding telehealth to a nursing simulation would provide students the opportunity to practice the use of telehealth in a safe and non-threatening environment. If

collaboration from another discipline is available, such as physical or occupational therapy, and/or medical students in any specialty practice, telehealth would provide excellent training of interprofessional communication and practice standards while collaborating with other members of the client's health care management team. The nursing student would be given the opportunity to practice client-centered care while working with another key component to the client's health care team (Fewsterk-Thuente & Batteson, 2018).

Additionally, the combination of Kolb's Experiential Learning Theory with Jean Watson's Theory of Caring should provide a solid caring foundation for students to carry on in their future nursing practice (Wei & Watson, 2019). No matter how much nursing practice changes day-to-day, the nurse needs to keep the human caring component as a focus. Dr. Watson promoted the nurse-client relationship as the center of nursing education and the practicing nurse (Wei & Watson, 2019).

Review of Literature

A search was completed via the University of North Dakota's School of Medicine & Health Sciences (SOMHS) Library Resources website using CINAHL Complete and PubMed database. The variety of databases focused on nursing and allied health professions. CINAHL Complete resulted in 169 using *nurse education*, *telehealth*, and *nursing practice* with seven articles used in this literature review. PubMed resulted in 89 articles using *nursing students* and *telehealth*, and eight articles were used in the literature review. The keywords *nurse education*, *nursing students*, and *telehealth* provided the bulk of the research articles. *Telehealth* pulled in telemedicine related studies from other disciplines. Telemedicine provided the graduate level curricula from nurse practitioner and medical programs. Results were limited to the English

language for a variety of research studies from 2015 to current but were not limited on geographics.

The literature review results were slim with pre-licensure RN programs that included telehealth education in the curriculum. Robinson-Reilly et al. (2020) advanced practice nursing programs were showing improved practice with the benefit of telehealth education throughout their curriculum. Research revealed a high need for telehealth education despite only a few studies showing evidence of the implementation of telehealth in pre-licensure RN programs. An undergraduate comparison demonstrated that undergraduate medical students reported higher confidence and more comfort with the use of telemedicine when their curriculum included telemedicine education prior to their graduate program (Waseh & Dicker, 2019).

Bull et al. (2016) surveyed 308 undergraduate nursing students trying to understand the barriers of different populations of students on adopting the use of telehealth. The survey data showed trusting telehealth as the biggest concern for the nursing students. If telehealth challenges are identified, adding beneficial education during the curriculum will help narrow the gap between education and nursing practice.

Supporting Jean Watson's Theory of Caring, Fronczek et al. (2017) recognize the need for implementing telehealth education in the caring component of the client experience throughout the pre-licensure RN program. The simulated learning experiences include integrating telehealth with therapeutic communication and effective listening skills. There were positive outcomes with improved comfort level with technology and gained knowledge of the telehealth at the end of the undergraduate education (Fronczek et al., 2017).

Badowski et al. (2019), Cant and Cooper (2017), Guenther et al. (2020), Gustin et al. (2020), and Lister et al. (2018) showed consistency regarding the importance of adding

telehealth education within curricula, but additional research would need to be conducted for further investigation of how new RNs are benefitting from adding telehealth experience to their education. Ali et al. (2015) identified more details on what was missing with telehealth pre-licensure RN education which included a variety of terms with technology and telecommunication that need clarity. The reimbursement policies and regulations differ from traditional in-person visits compare to telehealth visits (CMS, 2020). “HIPAA, interstate licensing, legal and ethical issues” need to be considered when practicing with the use of telehealth (Ali et al., 2015, p. 266).

Chike-Harris (2021), Gustin et al. (2020), and Rutledge et al. (2020) identified the benefit of telehealth with interprofessional experiences including graduate and undergraduate health care professional programs. The interprofessional experiences are a common benefit of adding telehealth into the curriculum during interprofessional encounters. Powers et al. (2020) discovered nursing students communicated more effectively and improved clinical reasoning with the use of interprofessional telehealth in their final semester of the baccalaureate program.

Ali et al. (2015) found lack of faculty telehealth training, little room in the curriculum, and lack of technology funding were barriers to implement telehealth into the nursing curricula at the undergraduate and graduate levels. The lack of knowledge or willingness to learn how to use telehealth systems created a strain on the nursing faculty (Ali et al., 2015). Nursing programs would need to secure funding for proper training, adequate equipment, and support staff to integrate telehealth into the pre-licensure RN program. Improving nursing student confidence, etiquette, and technology experience will be the focus of adding telehealth education to the pre-licensure RN programs. Expanding or adding these areas into the pre-licensure RN program will

ultimately improve client outcomes and satisfaction. There were no findings that contradicted the need for telehealth education.

Discussion

The results of this research provided encouraging evidence on adding telehealth education into nursing curricula. Additional research is needed in pre-licensure RN programs, to provide evidence of improved nursing practice. Significant research showed evidence of adding telehealth education to nurse practitioner and medical graduate programs as beneficial. Curricula with telehealth substantially improved confidence and practice in using telehealth delivery to clients in their respected professions.

Ali et al.'s (2015) research showed strong agreement for implementing telehealth throughout any level of nursing programs. Online and simulation teaching strategies were some of the areas identified for incorporating telehealth into nursing programs. Research supports the need for telehealth in pre-licensure RN programs, but identified barriers slowed implementation of telehealth in undergraduate nursing programs. Some of the top barriers include faculty lack of training, no room in curriculum, lack of telehealth knowledge, technology equipment costs, complexity of some equipment, and lack of telehealth nurses (Ali et al., 2015).

Academic administration should promote adding telehealth education in nursing programs to enhance the communication and confidence of pre-licensure RN nursing students. Training and resources are required for nursing faculty to be successful in implementing education materials. The addition of a faculty champion in each RN program would be extremely beneficial to the success of valued telehealth education. The end goal is to improve nursing practice, and this starts at the nursing education level.

Implications for Nursing

American Association of College of Nursing (AACN) 2008 *Essential IV: Information Management and Application of Patient Care Technology* refers to nursing practice when working with interstate practice with licensure and telehealth (AACN, 2008). The growth of telehealth in nursing has encouraged nursing schools to expand the use of telehealth to maintain best practice within their nursing programs (AACN, 2021a). The recent COVID-19 pandemic has forced nurses to utilize telehealth in a wide variety of venues.

In February 2021, the revised AACN *Essentials* have designated domain eight to informatics and health care technologies which include the telehealth component related to patient care in 8.1b, 8.4c, and 8.4f to help bridge the gap between nursing education and nursing practice in the entry-level professional nursing education and advanced-level nursing education. The AACN *Essentials* encourages additional emphasis on telehealth in nursing education to meet the accrediting standards (AACN, 2021b).

Conclusion

Adding telehealth education to pre-licensure RN programs will provide a new nurse with added confidence and knowledge to help keep passionate client-centered care in future nursing practice. Nursing education needs to lead the nursing profession with proper training to narrow the gap between education and nursing practice. This starts from a strong emphasis on adding telehealth to the nursing curriculum in pre-licensure RN programs.

The current barriers of telehealth implementation will need to be addressed to provide less resistance when adding it to the curriculum. The least resistance shows adding telehealth to a current simulated activity provides less time commitment by the faculty (Powers et al., 2020). Additional training of faculty and resource allocation must be included to successfully meet the AACN *Essentials*.

As programs add telehealth to their curriculum, additional research will need to be conducted to support the improvement in client-centered nursing practice with the use of telehealth. The research should include the perspective of the clients and health care agencies to determine if there is improved client-centered care from adding telehealth in the pre-licensure RN programs.

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