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From the Leadership Desk......

Welcome to this month's issue of *Wisdom & Compassion*, where we explore the profound and often unseen work of nursing as it crosses boundaries of culture, geography, and human experience. In this edition, themed *Nurturing Hearts Across Cultures*, we highlight the incredible diversity of patient populations and cultural settings in which the art of nursing flourishes. Through the articles in this issue, we see how nursing is not just a profession but a calling—a vocation rooted in empathy, care, and a deep commitment to human dignity.

The mission of Liberty University and the Nursing School is rooted in the transformative power Christ and of education—nurturing not only the academic and professional capabilities of our students but also their moral and ethical compasses. We strive to equip our students with the knowledge and empathy required to address the multifaceted needs of diverse populations. nursing at its core, is a ministry of presence and service, a way to bring God's love to the world through hands-on care. This nurturing culture begins in the classroom, where faculty members are pivotal in creating an environment that encourages curiosity, respect, and inclusivity. It is within this setting that we model the virtues of compassion and integrity, foundational elements of effective nursing practice and leadership.

Our scholarship and research endeavors are equally committed to this vision of compassionate nursing education. Faculty and students collaborate on projects that address health disparities, culturally competent care, and innovative solutions to global health challenges. We recognize that in a world increasingly interconnected, the ability to provide culturally sensitive care is not a luxury but a necessity. The articles within this issue are a testament to the scholarly contributions that arise from this commitment. They remind us of the critical role that research plays in shaping how we nurture hearts across borders and belief systems, advocating for the most vulnerable populations.

Yet, it is in the real-world application where the heart of nursing truly shines. Our graduates carry the principles they learn at LUSON into hospitals, clinics, and communities both here at home and around the world. Whether they are comforting a family in a local emergency room, delivering care in underserved regions, or partnering with international health organizations, they embody the values of compassion and cultural humility. They are living examples of our mission in action: training Champions for Christ, offering care that transcends differences and reflects the boundless love of God.

Scriptures such as 1 John 4:7, "Let us love one another, for love comes from God," underscore the importance of fostering an environment where empathy and mutual respect are paramount. The impact of this nurturing culture extends beyond the academic sphere, influencing how our graduates engage with the world. By instilling values of empathy and respect, we prepare our students to act as culturally competent and compassionate practitioners in their professional roles. This preparedness is crucial in a globalized world where healthcare providers must navigate and honor diverse cultural contexts.

As you read through the diverse stories in this issue, we hope you will see how the theme of *Nurturing Hearts Across Cultures* is woven into the fabric of our work here at LUSON. It reflects our dedication to serving God by serving others—across every boundary, culture, and context. We are proud to contribute to the global community of nurses who, with each act of care, make the world a more compassionate place. As leaders within the Nursing School, we are entrusted with the responsibility to embody and propagate these principles, ensuring that they resonate through our teaching, research, and interactions with the world. By embracing a Biblical worldview and committing to a nurturing approach, we affirm our dedication to fostering a more compassionate and inclusive global community.

Thank you for joining us in this journey. Together, we can continue to nurture hearts and transform lives.

Jodi B. Duncan, Ph.D., FNP-C, CNE

Chair of DNP/APRN Programs

Editorial

The second issue of *Wisdom & Compassion: The LUSON Journal* is ready to be published. While many nurses engage in scholarship, their findings do not always end up in the literature for others to review, possibly due to lack of time. The American Nurses Association (ANA) Code of Ethics for Nurses indicates that it is every nurse's duty to engage in research and scholarly inquiry.

At this juncture, the editorial board wishes to congratulate everyone who took the time to submit, address the reviewer feedback, and re-submit so that others can learn about their work and from their work. Reviewers also spent several hours to help refine the papers; thanks to all of them as well. The contributors to this edition of the journal are courageous, and we are grateful for their submissions. All the topics are relevant to the current healthcare and sociopolitical environment. As the number of people, esp. teenagers, with diabetes is increasing, the study on diabetic education to teenagers is significant. As we strive to impart health education in an interesting and engaging way to teenagers what better way is there than a theatrical production? As our students love to travel, within the US or abroad, alignment of medical missions with the American Nurses Association's (ANA) code of ethics will be an important read with practical application. Additionally, as we encounter more adopted children and foster children a personal account of a life of gratitude, entry into nursing with a caring attitude, and a reunion with the birth mother described will bring tears to your eyes.

The evidence-based practice project on diversity, equity, inclusion, and trauma-informed care is very relevant in the current society. A Christian way of demonstrating altruism and caring for the sick and vulnerable is important. While this deals with emotional pain, caring for those with pain, and the perceived benefit of a stand-alone pain management course in an undergraduate nursing program in their nursing career are discussed in another paper.

We challenge all our students and alumni to submit your scholarly work to your journal: *Wisdom & Compassion: The LUSON Journal*.

In Christ

The Editorial Board

Rachel Joseph, Alex Boggs, Heather Humphreys, Ashley Bell

Framing Medical Mission Trip:

Decisions with the Code of Ethics for Nurses

Ethical values underpin the nursing profession; for this reason, nurses' decisions and actions should be focused on moral principles (Haddad & Geiger, 2023). The American Nursing Association (ANA, 2015) created nine specific nursing provisions to guide the nursing profession, outlined in the Code of Ethics for Nurses. These provisions are essential to consider when faced with a professional decision or concern, as ethical dilemmas may arise due to the nature of nursing care (Haahr et al., 2019). Add to this that many Christian nurses are also guided in decision-making from a Christian perspective, given that nursing is foundationally linked to the historical roots of Christianity (Biber, 2023). Christian nurses with servant hearts continue to feel the need to volunteer, given that Isaiah 58:10 encourages Christians to "feed the hungry and help those in trouble. Then your light will shine out from the darkness, and the darkness around you will be as bright as noon" (New Living Translation, 2015a). In nursing, local and global volunteer mission choices are abundant. One must be thoughtful and use discernment when choosing an organization to partner with, reviewing their mandate and goals before committing. Those unfamiliar with the ethical implications of partnering with a mission organization can find themselves in unfamiliar territory or, worse, with an organization with unethical practices that may exploit the vulnerable populations they profess to serve. The Provisions in the Code of Ethics for Nurses can provide a framework to help guide decisions for novice mission nurses. This paper aims to explore several common dilemmas unique to medical mission trips by using the Code of Ethics for Nurses in guiding decisions for novice Christian nurse volunteers.

Provision 1.1 – Respect for Human Dignity

Medical mission trips often aim to provide services to vulnerable people, including those in developing nations, with limited or no medical services, supplies, medicines, or trained medical personnel. There is often a high trust in foreign medical personnel fostered by a desperate need for help. However, the literature highlights significant concerns regarding some organizations' lack of oversight, vague mission guidelines, and the potential goal of a mutually beneficial relationship with the vulnerable population (Tracey et al., 2022). Trust and care can be eroded if the underpinning of volunteer medical tourism drives the organization's goals. Sullivan (2019) describes medical tourism as the perspective that medical mission work can also be combined with travel and tourism activities, and potentially, the ability of the medical providers to work outside of their scope of practice to gain skills and experience. Medical tourism often offers more benefits to the volunteers than those receiving care. Therefore, organizations that foster medical tourism do not align with the Code of Ethics Provision 1.1 as, by its very nature, these actions do not respect human dignity. It is, therefore, essential to ask questions of the organization regarding its goals and mission and how it will ensure respect for human dignity while on the ground.

Prevision 1.4 - The Right to Self-Determination & Provision 8.1 - Health is a Universal Right

Christian nurses often seek partnerships with mission organizations driven by Christian values and principles, and traveling with a religious organization can be a wonderful spiritual experience for the volunteers. Consideration for Provisions 1.4 and 8.1 is essential when providing care as, fundamentally, people have a right to self-determination and the universal right to healthcare services regardless of their religion, sexual orientation, race, ethnicity, or geographical location. Therefore, it is essential when traveling with an organization professing to

be of a particular religion to ensure that the offering of medical assistance is not used as a potential method of religious conversion (Rzepka, 2024). Asking vulnerable people to convert or to claim Jesus as their Savior should never be used to determine who receives medical services. To uphold Provisions 1.4 and 8.1, those participating in medical missions must not infringe upon people's religious choices, especially given that these people are often under duress and desperate for care; beware of any organization that requires vulnerable patients to convert before receiving medical care.

Provision 3.1 - Protection of the Rights of Privacy and Confidentiality

Medical personnel in developed nations must adhere to patients' rights to privacy and confidentiality, including considerations for autonomy, informed consent, and the right to retract consent without punishment or fear of penalty. It is well understood in developed nations that photos and videos of patients need explicit written consent to be taken, shared or published (Tariq & Hackert, 2023). However, on many international mission websites, scores of photos and videos of patients and families can be found, including those of minors. Mission organizations sometimes publish photos and videos of 'medical case studies' revealing the medical services vulnerable patients have received to share the organization's work and raise funds. Consideration for Provision 3.1 requires that those participating in medical missions' trips adhere to the same strict guidelines regarding patients' rights to confidentiality as they would stateside. This includes refraining from publishing photos, videos, medical information, and patient identifiers on organizational websites or personal social media accounts. When interviewing an organization, nurses should ask questions and determine if the organization's policy on confidentiality aligns with Provision 3.1 and one's beliefs about the right to confidentiality.

Provision 3.4 - Professional Responsibility in Promoting a Culture of Safety

& Provision 4.1 - Authority, Accountability, and Responsibility

Provisions 3.4 and 4.1 require nurses to promote a safety culture and take responsibility for their actions, regardless of where they work. There needs to be a commitment to work within one's scope of practice, which means only providing services for which one is qualified and trained. Working outside one's scope of practice stateside goes against promoting a safety culture, is unethical and may pose legal challenges for nurses (Feringa et al., 2018). The same is true when working abroad. For instance, if a registered nurse is not qualified by their state board of nursing to perform circumcisions, there would be no exception to providing circumcisions to vulnerable patients abroad. Beware of organizations that do not carefully verify the volunteer's credentials and suggest that volunteers may practice outside of their scope. Novice medical mission nurses are responsible for their actions and being aware of their expected duties before agreeing to partner with an organization.

Provision 4.4 - Assignment and Delegation of Nursing Activities or Tasks

Considering Provision 4.4, caution should be taken with an organization that does not carefully consider the goals of mission trips with the skill sets and abilities of the volunteers participating. For instance, a registered nurse who has no training in labor and delivery should not be leading a women's health initiative and delivery of babies on a medical mission. The novice mission nurse should always be upfront about their abilities, knowledge, and comfort levels. Also, be very leery of organizations that claim to be providing 'medical mission services,' but few or none of the staff on the mission are trained or proficient in nursing or medical care.

Further Considerations

By carefully considering the Provisions laid out in the Code of Ethics for Nurses (ANA, 2015) and with prayerful discernment, novice medical missions nurses can ask appropriate

questions and determine if the organization they are considering aligns with not only their scope of practice and skill set but also one's values and beliefs about providing services to vulnerable populations. Christian nurses have a unique opportunity to answer the call for Christ; they can be assured that with diligence, the Holy Spirit can help lead one to a fitting organization. In all decisions as Christian nurses, let us be biblically led, as Matthew 7:12 is clear that one must "do unto others whatever you would like them to do to you. This is the essence of all that is taught in the law and the prophets" (*New Living Translation*, 2015b).

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Abstract

Background: While the nursing profession has made great strides in pain management over the last 20 years, patients often report being under-assessed and undertreated for pain.

Purpose: The study purpose was to understand the lived experiences of practicing nurses who had completed a baccalaureate-level pain management course during their undergraduate training. The study aims included understanding how pain management skills were implemented in the clinical arena, determining barriers to implementing pain management skills, and identifying opportunities to improve the patient experience regarding pain management.

Design: The researchers implemented a qualitative methodology with a phenomenological design. Data collection consisted of semi-structured interviews.

Methods: The sampling approach included convenience sampling until data saturation was achieved. The final sample included eight registered nurses practicing bedside nursing in the US. Data analysis was completed via a thematic approach.

Results: Two main themes were discovered. The first was enhanced confidence related to skills in communication and collaboration. The second theme was the barrier to proper pain management practice called "the working reality."

Conclusion: The participants' lived experiences suggested that the pain management elective helped prepare them for clinical practice. Other schools of nursing may find a course of this nature to be valuable for the future practice of other nursing students. Furthermore, nursing administrators should consider opportunities to expand nurse graduates' knowledge of pain science to enhance patient care and outcomes. However, more work needs to be done to address the barriers to pain management present in the working reality of nursing practice.

Keywords: Education, Nursing, Baccalaureate, Pain Management, Qualitative Research

Nurse Graduates' Experiences with Pain Science – A Qualitative Study Background

While the nursing profession has made great strides in pain management over the last 20 years, patients often report being under-assessed and undertreated for pain (Pasero, 2014). There are specific populations where there is failure to effectively manage chronic pain situations. There are disparities in assessing and treating chronic pain leading to self-treatment which contribute to dangerous patient outcomes (Johnson-Jennings et al, 2020). A retrospective case study conducted by Orit, et al. (2019) found chronic pain in dialysis patients is underestimated and undertreated which can contribute to higher mortality in this population. These situations, combined with the opioid crisis, has created tension in nursing practice as nurses balance the tightrope of relieving suffering while doing no harm (Payne, 2019).

In response to the initial Joint Commission's standards of 2001 (Baker, 2017), the opportunity was taken to develop a pain management elective course for a School of Nursing located at a faith-based university in the Southeastern United States (U.S.). The course addresses the cognitive and affective domains of learning while utilizing passive and active learning strategies, emphasizing active learning. Content covered includes pain theories, current event-related issues, the pathology of pain and its effect on the body, knowledge and attitudes related to pain, ethical and legal ramifications, recognizing and managing bias, review of pain medications, methods for operating safely and effectively during the current opioid crisis, and an emphasis on nonpharmacological techniques to reduce opioid usage as appropriate. The course is founded on a seminar learning environment to support critical thinking and open discussion to dispel myths and misconceptions that hinder effective pain management.

The purpose of this study was to understand the experiences of nursing graduates as they practiced pain management at the bedside. In doing so, the researchers desired to understand how pain management skills were implemented in the clinical arena, determine barriers to implementing pain management skills, and identify opportunities to improve the patient experience as it pertains to effective pain management. This transcendental phenomenological approach is supported by Husserl's philosophical approach to understand the lived experience (Moustakas, 1994).

Theoretical Framework for the Intervention

The theory guiding the study was Bandura's Self-Efficacy theory. Bandura argued self-efficacy is confidence in one's own abilities to competently perform in a given situation (Bandura, 1997). Perceived levels of self-efficacy impact individuals' thoughts and feelings as well as their motivation to perform. Self-efficacy plays a major role in enabling practitioners to provide healthcare proficiently (Burbach et al., 2019). One of the goals of nursing education involves increasing students' self-efficacy so they are confident in their abilities to provide safe patient care (Shorey & Lopez, 2021). We determined this framework to be appropriate for this study because of the characteristics of the participants. When they were enrolled in the course, they were senior-level baccalaureate students who had completed many theoretical courses, engaged in simulation experiences, and participated in hundreds of hours of clinical experience. With this past experience, the course could function to both disseminate new information as well as guide the students in synthesizing previous theoretical and experiential learning (Miles, 2018). This synthesis of learning should lay the foundation for self-efficacy in the graduates' clinical practice.

Methodology

Design

We implemented a qualitative methodology with a transcendental phenomenological design to address the following research question: What are the lived experiences of registered nurses in the practice setting after taking the pain management elective course during their baccalaureate training? Phenomenology is the qualitative approach used when a more in-depth understanding of a lived experience is being sought (Long et al., 2023). This was the best approach based on the research question and aims of the study - to describe stories as to how pain science was being integrated into the practice setting. Because our desire was to understand the subjective, thoughts, feelings, and experiences of the graduated nurses, the qualitative phenomenological approach was the best fit (Alase, 2017).

Participants

Participation in the study was voluntary. We utilized a convenience sampling approach to arrive at the final sample of eight registered nurses. All of the participants were currently practicing at the bedside in the United States. Participants were recruited using a Registrargenerated Excel spreadsheet, which included graduated nursing students who had completed the university's senior-level pain management elective. Inclusion criteria were participants with clinical practice experience as a registered nurse ranging from 1–10 years. Nurses who were no longer practicing at the bedside were excluded from participating. Participants were recruited initially via their university email. In addition, the investigators received administrative permission to post a recruitment flyer on the School of Nursing's social media platform. All

participants were told we were researching their life experiences related to completing the pain management course and the implementation of pain science in the practice setting.

Data Collection Method

Data collection consisted of semi-structured interviews. Consent was confirmed and documented before the start of each interview. Interviews were in-person or over the phone. For interviews completed over the phone, the participants received the consent form via email, electronically or manually signed it, and then returned it to the investigators before the interview. Interviews were conducted in a location of the participants' choosing to maintain their privacy, with only the researchers and the participants present. Both researchers were present for all interviews, either in person or over the phone.

The investigators verified participants' perspectives throughout all interviews by asking clarifying questions such as the following: "So, what I am hearing is _____. Is that what you mean?" to support credibility (Long et al., 2023). This method supported a concurrent verification of the participants' stories. All interviews were audio-recorded with the participants' consent; researchers also documented field notes during the interviews to support clarity. Interview duration ranged from 30–60 minutes.

We intentionally worked to identify and bracket any potential bias towards the topic since both investigators have experience practicing and teaching pain management. This bracketing was accomplished via collaborative and self-analysis and minimizing any literature review before gathering data that could bias data interpretation. These methods support confirmability and bring credibility to the findings (Alase, 2017). Confidentiality of information

was assured by storing the records, both audio and written, in locked rooms and on passwordprotected computers.

Data Analysis Method

One of the researchers and a paid professional medical transcriptionist transcribed the audio-recorded interviews to Word documents. No identifiers were included in the transcriptions. Instead, all participants were assigned a pseudonym to ensure confidentiality. Pseudonyms were used while using quotes to protect the participant's privacy. The investigators then utilized an iterative thematic analysis process to discover any recurring themes and documented the themes and related quotations using *Microsoft Excel*.

Independently, both researchers read the transcriptions in an iterative process to understand the participants' subjective experiences (Alase, 2017). Individually, patterns across the interviews were identified and organized into broad categories. Then, the two researchers engaged in open discussion to review the initial independent analysis of the data, while referring back to the original transcripts. Further team analysis resulted in the identification of preliminary themes. Then, separately, the investigators reviewed the transcriptions with these set themes to determine the need for any changes by expanding or consolidating themes. Thereafter, the researchers agreed upon a final thematic reduction of two primary themes (Namey et al., 2008). Credibility and confirmability were upheld by the combined use of field notes taken during interviews, the audio taping and transcription of interviews, and the method of data analysis described above (Jarosinski, & Webster, 2016).

Protection of Human Subjects

The investigators received approval from the University institutional review board (IRB# 3018.111617) before starting the study. We completed Collaborative Institutional Training Initiative (CITI) certification for Biomedical and Health Science Researchers prior to IRB approval. During informed consent before the interviews, we ensured the nurses understood their participation was voluntary and they could withdraw at any time without any threat of repercussions. Participants were informed they were free not to answer any question if desired, and the interviews would be recorded for confirmability.

Disclosing Potential Bias

At the time of the data collection, one of the researchers was a graduate student completing a degree in nursing education, and the other researcher was a professor of nursing. Both are female. The first researcher had completed the pain management elective course as a student, and, to fulfill her education requirements, assisted in teaching the course during her graduate studies. The second researcher serves as the lead professor for the pain management elective. Our interest in this topic stemmed from our experience related to taking and teaching the course.

Results

Sample Characteristics

We confirmed data saturation after the eighth interview. Thus, the sample consisted of eight nurses (N = 8). Nursing experience ranged from 1–9 years of clinical experience after graduating from nursing school and taking the pain management course. None of the participants had taken any extra courses or continuing education on pain management after

completing the elective course at the university. No other personal identification data were collected.

Themes

The investigators discovered two primary themes. The first was the enhanced confidence in practicing pain management. The second was "the working reality," which encapsulated the barriers inhibiting pain management.

Enhanced confidence

The main areas of enhanced confidence included their abilities to communicate and collaborate with the interprofessional team, to carry out the nursing process with patients, to utilize appropriate resources available under their license to practice, to engage in health teaching and health promotion, and to monitor for ethical nursing practice. The course gave them the confidence to practice within the scope of practice their licenses allow, enabled them to provide clinical expertise, and model professional behaviors related to pain management.

Ability to Communicate and Collaborate. In communicating and collaborating with the interprofessional team, the nurses described the ability to work with all key stakeholders to ensure proper pain management. Several of the participants noted they felt confident in discussing their recommendations with the provider, and these recommendations were taken seriously. The nurses stated they valued communication and collaboration within their healthcare team to achieve patient pain management.

Ability to Carry Out the Nursing Process. The nurses described experiencing enhanced confidence in their abilities to utilize the ADPIE process (assessment, diagnosis, planning, implementation, evaluation) for pain management. Many participants particularly

emphasized pain management was a care priority and agreed on a "game plan" with patients at the beginning of their shifts to provide and evaluate pain management. That initial communication helped ensure the nurse and the patient were on the same page, which improved the patient's satisfaction and comfort with their care.

Resource Utilization. The resource utilization sub-theme involved the nurse's understanding and implementation of available tools to provide effective pain management without the need for a new provider order. Several participants specifically mentioned the use of nonpharmacological methods to include music therapy, warm compresses, ice packs, and massage. They utilized these methods to ensure they only administered opioid medications when appropriate.

Engagement in Health Teaching and Health Promotion. The majority of the participants discussed their experiences with enhanced confidence engaging in health teaching and health promotion, which involved the nurses' uses of different strategies to educate their patients to partner with them in pain management. Patients could only partner with the healthcare team on the plan of care if they received education on the orders, understood the reasoning behind them, learned about potential side effects, and agreed with the goals related to the interventions. Overall, the nurses wanted to ensure their patients could participate in the plan of care and understand the "why" behind different orders and prescriptions, which improved patient satisfaction with their care.

Ethical Nursing Practice. Most participants discussed the importance of ethical practice in pain management. The competency of ethical practice involved bracketing bias while managing pain to provide patient care. The nurses described fighting an inner war between

prejudice and compassion in practicing pain management. In discussing how the class prepared her for practice, "Flo" said, the patients "might be hurting a lot more than they are showing, and I just need to respect what they're saying that their pain is rather than what they look like."

Most participants noted the importance of accepting patients' reports of pain to best function as patient advocates.

Working reality

The second major theme "the working reality" encompassed a collection of variables that negatively influence the nursing practice environment. All these variables serve as barriers to proper pain management. The sub-themes of "the working reality" included the knowledge and attitude of colleagues, diminished opportunities for nursing judgment, workload, and negative nurse-physician relationships.

Knowledge And Attitude of Colleagues. Many participants noted a gap between colleagues' knowledge and attitudes related to patients' pain. Some noted these differences were not intentional and may stem from a lack of education in pain science. Others stated this difference was related to deep-seated bias against patients seeking pain relief. As "Maggie" noted, other nurses were distorting pain management to become an "us [nurses] versus them [patients]" situation instead of treating the patient's pain at face value. This mentality by fellow staff created a barrier to developing trusting nurse-patient relationships and effective pain management.

Diminished Opportunities for Nursing Judgment. Regarding the theme of diminished opportunities for nursing judgment, hospital administrators drew up new policies related to the presentation of prescribers' orders for medication administration in response to the Joint

Commission's standards. These policy changes have created barriers to nurses' abilities to make clinical judgments related to pain management. While in the past, administering a specific pain medication would fall under the nurse's judgment, hospital policies have changed this so nurse can only base medication administration on the patient's pain number rather than on their specific needs (Pasero, 2014). As "Claire" described, the hospital administration would audit her if she gave her patient acetaminophen for fever when the provider only wrote the order for pain. So, she had to learn how to function within this new policy. Some nurses noted if the provider only prescribed acetaminophen for fever, they would not call a provider about a separate order for pain. They stated providers would view that call as a waste of time as well as a disruption. These stricter guidelines made the nurses feel they consistently had to bother providers for specific medication orders.

Workload. Many participants stated workload was a barrier to pain management. Depending on their patient assignment, the nurses felt they could not administer and reassess patient's pain within the policy-allotted guidelines at their practice site. As "Claire" stated, "When you have six or seven patients – you're getting emails; you're giving blood; you're discharging... there's no way. Like, it's not going to happen." Other nurses stated the need to triage the workload within a patient group meant certain patients' pain would get left untreated for extended periods of time. This reality was especially true when the nursing units were not fully staffed.

Negative Nurse-Physician Relationships. The final sub-theme of "the working reality" was negative nurse-physician relationships. Some nurses noted certain physicians refused to order PRN pain medications altogether. Other nurses described fear in talking to providers

about pain management related to previous negative interactions. Some stated they believed negative relationships stemmed from the opioid crisis. They thought the doctors were becoming stricter in their prescribing to prevent potential drug abuse, which led to some patients' pain being neglected.

In general, the theme of "the working reality" encompassed the idea that while the nurses felt they knew how to provide effective pain management, they could not always overcome barriers to make that possible.

Discussion

Overall, the nurses felt they could serve as clinical leaders and educate others on how to enhance the practice of pain management. The first theme of enhanced confidence demonstrated that the nurses felt they could practice pain management at the top of their licenses, which is directly related to Self-Efficacy theory (Bandura, 1997). The graduates' synthesized learning from the elective course supported their self-efficacy in providing effective pain management to their patients. Areas of enhanced confidence included their abilities to communicate and collaborate with the interprofessional team to carry out the nursing process with patients, utilize appropriate resources available under their license to practice, engage in health teaching and health promotion, and monitor for ethical nursing practice. This result was consistent with findings from a scoping review, which determined pain management education programs enhanced nurses' abilities to engage in critical thinking, promote patient wellness, and serve in leadership roles (Chatchumni et al., 2020). These results were also consistent with findings reported by other researchers suggesting communication and collaboration were key in

providing effective pain management (Jordan et al., 2021; Saban et al., 2021) and education efforts can promote pain management practices among nurses (Chatchumni et al., 2020).

Even though we are decades removed from the initial standards from the Joint

Commission related to pain management, the realities of everyday practice emerge as

opportunities to strengthen the practice environment. The main barriers to pain management

noted by the study participants included knowledge and attitude of colleagues, workload,

diminished opportunities for nursing judgment, and negative nurse-provider relationships.

While it is easy for professionals to minimize these issues, we must acknowledge and address
them so a work environment that supports effective pain management may thrive.

These findings were consistent with previous reports related to nursing practice - that nurse education, limited nurse-to-patient ratios, and a collaborative work environment can positively influence patient outcomes (Aiken et al., 2011). The themes of workload and negative nurse-physician relationships are well-documented issues known to negatively influence the practice environment and patient outcomes (Aiken et al., 2011; Tan, Zhou, & Kelly, 2017; Vacek et al., 2021). There needs to be more of an intentional initiative to look at the Joint Commission's recommendations, especially nonpharmacological interventions, so providers may more easily integrate them into individualized patient care. In this opportune time, nursing education could serve as a means to strengthen pain management skills, ensure patient safety, and provide quality care.

Recommendations for Future Research

From this study, it is evident more research is needed on this subject. First, researchers should complete robust quantitative studies to confirm the results. Second, researchers should

study collaboration between nurses and other healthcare professionals, such as physical and occupational therapists, in the practice of pain management. Third, there should be further studies on the impact of the opioid crisis on providing pain management. Finally, researchers should address the impact of COVID-19 on nursing practice with pain management.

Implications

The results of this study suggest hospital-based nurse educators should be aware that pain science and need guidance for more targeted integration into practice. Overall, the participants noted many of their graduate nurse peers did not have the same understanding of the pathology, physiology, and patient experience surrounding pain. Reviewing pain management topics could prove beneficial in an orientation or onboarding process to close this gap in the working reality. A continuing education course could support the development of self-efficacy so other nurses may utilize all the resources available to them while also experiencing enhanced communication with the rest of the healthcare team.

Conclusion

Overall, this study highlights the importance of teaching pain management to baccalaureate nursing students. Restating the two themes identified in this study: enhanced confidence [in using pain science] and the working reality [ability to use pain science in the practice setting] profiles the opportunity to explore the use of pain science further. Even though it has been over two decades since the Joint Commission established a standard that all patients are to be assessed and reassessed, the need for pain to be evaluated and the need to implement pain science still exists and impacts all patient populations from birth to death. The participants' experiences indicated the pain management course benefitted their daily clinical practice by

enhancing confidence in their abilities to provide effective pain management. The graduates were thankful for the course and emphasized its practical application in their clinical work. The theme of "the working reality" presented areas requiring improvement in the practice setting. While the participants found the course to enhance their practice, their skills and abilities could not always overcome these barriers to provide patients with individualized pain management.

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Abstract

Education for preventing type 2 diabetes in adolescents should be a high priority among school officials and healthcare providers. The purpose of this research study was to educate adolescents on type 2 diabetes and to increase awareness about this disease. The Health Promotion Model developed by Nola Pender was used as the theoretical framework for this study. A quasiexperimental before-after design was used. The seventh and eighth-grade students enrolled in physical education classes at a local school were recruited. Of the 57 students recruited, 47 completed the study. A diabetes education program geared towards kindergarten through eighth grade was used. The program was developed by a Girl Scout troop as a community outreach program. The students received a pretest, watched an informational session, experienced a live performance by a high school theatre group on type 2 diabetes, and completed a posttest. The main goal of this study was to address the research question, "Can theatre be used to raise awareness about Type 2 Diabetes among seventh and eighth grade students?" This awareness was demonstrated by an increase in the student's post-test scores. The average pre-test score among the 47 participants was 78%. After the informational session and play, the average posttest scores were 84%. This was a 6% increase from baseline. Peer education and engaging activities can play a role in enhancing knowledge and awareness among adolescents.

Keywords: Type 2 Diabetes, awareness, education, adolescents, theatre

Background

Type 2 diabetes continues to be a health challenge in the United States. According to the Centers for Disease Control and Prevention (CDC, 2023b), over 29.7 million people have been diagnosed with diabetes, while 8.7 million have undiagnosed diabetes. The estimated total cost for this disease in 2023 was 412.9 billion dollars, according to the American Diabetes Association (ADA, 2023). Diabetes and its complications are seen in people of all age groups; therefore, healthcare professionals must be prepared to care for and educate individuals across the lifespan. The CDC (2023b) noted that 5,293 children and adolescents between the ages of 10 and 19 years developed type 2 diabetes, and this was reported to be a significant increase. Although rare, the prevalence of type 2 diabetes in adolescents needs more attention. Between 2002 and 2018, the CDC (2023b) reported an increased incidence of type 2 diabetes in children between the ages of 10 and 19. They are at risk if they are obese, insulin-resistant, and have a family history of this disease. The increased incidence of type 2 diabetes in adolescents requires education with a focus on prevention. Adolescents must be instructed on this disease and their risk of developing diabetes (CDC, 2021). Early education may prevent or reduce the incidence of type 2 diabetes (Mangione et al., 2022). The CDC (2023a) reported that if type 2 diabetes in young people continues at its current rate of incidence between 2017 and 2060, the number of cases will increase by 70%. This study aimed to examine the effect of an educational intervention on adolescents' knowledge of type 2 diabetes.

Literature Review

A review of the literature has shown an increased incidence of type 2 diabetes in the adolescent population. Bendor et al. (2020) identified several risk factors for type 2 diabetes in children, including comorbidities such as hypertension and dyslipidemia. Early detection of

this disease (Mangione et al., 2022; Xie et al., 2022) and diet education was a successful intervention with high-risk adolescents (Bonsembiante et al., 2021). It is essential to instruct students who may be at high risk for developing this disease equally with lower-risk students. Bendor et al. (2020) reported on the increased incidence of severely obese children, described as a body mass index of 120%, and the need to address and treat their multiple cardiac risk factors such as type 2 diabetes. The authors noted that, according to the United States Preventive Services Task Force (USPSTF), the evidence for screening adolescents and children for type 2 diabetes is insufficient. It is still imperative that healthcare professionals and educators seek to prevent type 2 diabetes in this population. This literature review included the following areas: diabetes education and screening in schools and the use of peer support.

The Problem of Type 2 Diabetes and the Need for Screening in Schools

There is debate if school children need to be screened for Type II diabetes. The USPSTF (Jonas et al., 2022) reported insufficient evidence on the effect of screening for and early detection and treatment of type 2 diabetes on health outcomes. However, the American Diabetic Association (ADA; 2020) recommends risk-based screening. SEARCH for Diabetes in Youth (Dabelea et al., 2021), referred to as SEARCH, is a registry started in 2000 as a multicenter study in the United States to address the need to understand diabetes in children. This continuous registry has followed children under the age of 20 who have developed diabetes. It tracked the "prevalence, annual incidence, and trends by age, race/ethnicity, sex, and diabetes type" (Dabelea et al., 2021, p. 99). Several factors lead to the development of this disease, such as the increased incidence of obesity in youth and the presence of ethnic and racial disparities. The authors noted that a particular risk for these youth was living

further away from a supermarket but being centrally located to fast food restaurants. Offering programs within schools and community centers could bring type 2 diabetes education and prevention directly to the youth and help to stave off the increasing number of adolescents who are at risk for type 2 diabetes. The CDC also advocates for teaching students self-care management in schools (CDC, n.d.)

The increase in obesity and associated diabetes is a concern. The increasing prevalence of childhood obesity and its association with diabetes with long-term impact on public health outcomes has been reported (Oranika et al., 2023). This is not a U.S. phenomenon but a global one. Pang et al. (2021) noted obesity in the adolescent population in Hong Kong and a tenfold increase in type 2 diabetes cases between 1997 and 2007. To combat this growing health concern, in 2005, the Hong Kong Student Health Service (SHS) created a urine glucose screening protocol in schools for students between the ages of 10 and 18 years who had a body mass index (BMI) of over 97%. This type of assessment was implemented in Japan, Korea, and Taiwan, and it was deemed practical and proved to be a significant first-line assessment for type 2 diabetes diagnosis. Pang et al. (2021) reported the results of urine glucose screenings from 2005-2006 and 2017-2018. In total, 219,276 eligible students were screened, and the results showed that 381 students tested positive for glucose in their urine, while 18 were positive for urine ketones. Healthcare professionals further evaluated these students, and the results showed that 120 students were diagnosed with type 2 diabetes, 41 were noted to be pre-diabetic, and 126 were determined to be normal. Of the rest of the 381 that tested positive, 43 students and their families refused referral, and 51 had a known diabetes diagnosis. Urine glucose testing proved to be a practical approach for type 2 diabetes screening for students within a school setting. High prevalence of Type 2 Diabetes is a health problem in India (Kumar et al., 2021), Nigeria (Oluwayemi et al., 2021), the United Kingdom (Candler et al., 2018),

Cameroon (Chedjou-Nono et al., 2017), U. S. (Wheelock et al., 2016), United Arab Emirates (Al Amiri et al., 2015), and other countries.

Although the USPSTF did not find sufficient evidence for screening in those without symptoms, it is known that simple tests can detect diabetes early. It is known and researchers validated that prediabetes and type 2 diabetes can be detected by measuring fasting plasma glucose or HbA1c level, or with an oral glucose tolerance test as (Dabela et al., 2014; Jonas et al., 2022). Hu et al. (2022) conducted a systematic review of peer-reviewed articles written between 2001 and 2021, focusing on the need for an adolescent diabetes screening tool and the use of supervised machine learning to predict diabetes in this population. IBM (n.d.) described supervised machine learning as a combination of artificial intelligence (AI) and machine learning that uses data to create an algorithm that will lead to predicted outcomes. The authors reported that contributing features or data that lead to diabetes in youth are physical characteristics, dietary information, and demographics. The physical characteristics would include height, weight, and waist measurements. The dietary information would need to focus on sodium and protein intake. The development and implementation of screening tools that could utilize supervised machine learning would substantially contribute to focusing on adolescents at risk for developing type 2 diabetes. This tool and its software could be used in outpatient pediatric clinics and within school districts to assist in identifying students who are at risk for this disease. Other innovations, such as over-the-counter continuous glucose monitoring devices, may appeal to adolescents (U.S Food and Drug Administration, 2024).

While screening for Type 2 Diabetes is important, education must be provided to prevent and manage the disease well. To educate the younger population to raise awareness and early

recognition, schools must be intentional and use innovative ways to get their attention. Additionally, peers can be instrumental in raising awareness.

Raising Awareness about Type 2 Diabetes with Peer Support: An

Innovative Approach

Peer groups can be effective in educating individuals on type 2 diabetes. Peer groups were used to educate K-8 students through theatre and through an adolescent peer support group to encourage weight loss. Fenn et al. (2007) used a method to teach diabetes awareness that was appropriate for age and culture. The program was called *Don't Monkey Around with Diabetes: A Program for Helping Kids Learn How to Prevent Type 2 Diabetes.* It was developed by a Tucson-based, five-member Girl Scout troop that needed to provide community service to achieve a Silver Award. This award is the highest achievement available to girls aged 11-14 years. The young girls chose the topic of diabetes after recognizing that some of their family members had this disease (Fenn et al., 2007). The girls, with the assistance of their troop leader, discussed the need to increase awareness of diabetes, engage students in their peer group, and be aware of the cultural needs of Mexican American youth. The girls desired to teach diabetes awareness to students who were not currently at risk and have them share information with their families at home. This innovative strategy to use a play was developed by two members of the troop (Fenn et al., 2007).

The Play

The play was 30 minutes in length and included information on diabetes given in five informational sessions. As part of the performance, the student audience was encouraged by the cast to answer questions. The students were given a verbal pre-test before the performance and a verbal post-test after the play. It has been performed for several years in schools,

conferences, and tribal reservations. The troop designed the diabetic tool kits so that they could be used to train groups to educate students in the future. Unfortunately, there was no reliability or validity information available on the pre-test and post-tests used. This was an innovative approach to educating youth on type 2 diabetes to involve students, the community, and their peers.

Other researchers found a similar effect of peer support on diabetes education. For example, Ameneh et al. (2023) completed a clustered randomized trial study of 168 female adolescent students 14 years of age in Tehran, Iran. The experimental group (n = 84) received diabetes education from eight trained peers in sessions for 90 minutes, including lectures and classroom discussions. The control group (n = 86) did not receive diabetes education from peers. Both groups received a pre-test that included collecting demographic information and knowledge of diabetes and risk factors. The intervention group received peer education on diabetes, and both groups completed a post-test two months after these educational sessions. The results showed that the intervention group that received "peer education increased (their) knowledge and improved adolescents' health beliefs and behaviors" (Ameneh et al., 2023, p. 1). Healthcare professionals and educators must embrace peer education to address type 2 diabetes risk factors within the adolescent population.

The American Diabetes Association (n.d.) has published lessons for students about diabetes from kindergarten to grade 6 (K-6) and for grades 7 to 12 (7-12). The lessons created for students in grades 7-12 could be implemented into health or physical education courses for middle and high school students. These lessons include five-day interactive lesson plans for students that include a diabetes scavenger hunt and activities such as "food police" that could guide students to make healthier food choices. These lessons could be implemented through

schools or as a health project that could address the needs of the community. The literature reviews type 2 diabetes in the adolescent population. Each study addresses an important aspect of the assessment, detection, education, or prevention of this disease.

There is a need to ensure that adolescents are assessed for type 2 diabetes in both the clinical and school settings. It is through assessments such as urine glucose testing (Pang et al., 2021) and through the use of an AI-driven screening tool that healthcare providers can properly assess for type 2 diabetes in adolescents. An additional way to educate adolescents about healthy eating is through the use of gamification. Miller et al. (2023) completed a qualitative study on 250 students between the ages of 13 and 16 years. Each student experienced an online game called the Nutrition Transformational Games (NTG), which was designed to teach students about nutrition and food systems. The results from the focus groups of what the students learned developed into three themes: the process of growing food, food waste, and the need to market healthy food options. The experience and use of this online game gave these students knowledge of healthy eating and food production. Although this study was completed in 2009, it aimed to increase awareness of type 2 diabetes in the adolescent population through a theatre activity using Don't monkey around with diabetes: A kit for helping kids prevent type 2 diabetes (Fenn et al., 2003) which has been used extensively in schools. The program has five categories of information on type 2 diabetes such as the definition of diabetes, prevalence, risk factors, signs and symptoms, and prevention. This theatrical program could be updated and presented to adolescents in school districts even today.

Purpose and Research Question

The purpose of this research study was to examine the effectiveness of education through theatre to raise awareness among adolescents about Type 2 Diabetes.

Methodology

Design and the Research Question

A quasi-experimental one-group pretest-posttest design was used to complete this study. "Can theatre be used to raise awareness about Type 2 Diabetes among seventh and eighth grade students?" The study was reviewed and approved by the institutional review board in CA. The IRB required that study participants receive and complete an assent form prior to enrollment in this study. The students completed an assent form, and the parents completed consent forms prior to the start of this study. Data collection began in January 2009. The consent allowed the parents or guardians to decide whether or not they wished to have their children's knowledge assessed through testing. If they opted not to have their child involved, this student was not given a test.

Settings and Population

The students in seventh and eighth grades enrolled in physical education classes at a local school were enrolled in this study. The total student population in the school located in a rural area in northern California was approximately 300 (Public Schools Report, 2007) at the time of this study. This school is located in a rural area in northern California. The total population of the entire county in 2008 was 60,000 people (U.S. Census Bureau, 2008), and the main industries included ranching and farming. The median income in 2005 was \$32,100 per household. There are primarily White non-Hispanic (72.9%) and Hispanic (19.7%) people in the area (Onboard Informatics, 2008). The seventh and eighth-grade students enrolled in physical education classes at a local school were recruited. Of the 57 students recruited, 47 completed the study.

Tools and Procedures

The program called, Don't Monkey Around with Diabetes: A Program for Helping

Kids Learn How to Prevent Type 2 Diabetes (Fenn et al., 2003) was used. In this program, a play was created by Girl Scouts from Troop 509 in Tucson, Arizona. It was their desire to educate young people about this disease. It has been performed in towns along the Arizona-Mexico border and at other venues. The Girl Scouts received a Silver Award for this achievement, and it is the highest award given to girls 11-14 years of age (Girl Scouts, 2009). They decided to make it available to others, and they created the Diabetes Tool Kit. These kits were funded through the Arizona Department of Health Services and the U.S. Mexico Border Health Commission (Fenn et al., 2007). This program was used in this study after obtaining approval.

This program was used to teach seventh and eighth-grade students enrolled in physical education classes. The curriculum involved peer education in the form of an informational session (lecture) and play. The researcher utilized the services of "Friday Night Live" (FNL), a Red Bluff community-based prevention group. This group consisted of a director and high school students who educate their peers on subjects such as smoking cessation and drug awareness. Before this play, an educational session was offered on type 2 diabetes using the PowerPoint presentation included in the toolkit. The performance was facilitated at a rural elementary school.

The verbal pretest, supplied by the Diabetes Tool Kit, was revised to a written format with the assistance of an educator (see Appendix A). This test was written at a fourth-grade reading level, as validated by the Flesch Reading Ease Readability Score (2009) of 73 out of 100. The higher score denotes an easier reading, and the lower score indicates a higher difficulty level. Flesch-Kincaid Readability Score (2009) of 4.7 which correlates to school grades. All the answers for this multiple-choice test were retrieved from the lecture material

given to the students before the play. An educator with over eight years of experience as a teacher and as a school administrator with a background in curriculum development and evaluation assisted in developing the tool.

This same test was administered again to the students within one week of the performance. This posttest was to investigate the increased awareness of type 2 diabetes.

Retesting within one week allowed the inclusion of all the enrolled students and even those who might have been absent and the retention of information.

Educational Program Implementation

This program was designed for students to deliver scripted material to their peers on type 2 diabetes (Fenn et al., 2003). The cast consisted of five high school students who were involved in the informational session and play. In the beginning, the cast encouraged the audience to stand up and participate in a song that required physical movements. This exercise, or "ice breaker," allowed the students to interact with the troop in a positive and entertaining manner. The researcher observed participation throughout the song by the students and their teachers. After the song, the audience settled into their seats, and the informational session began. The areas covered were the definition of type 2 diabetes, prevalence, risk factors, signs and symptoms, and prevention. The cast used a lecture format and visual cues to review the topic of type 2 diabetes. For example, one cast member discussed signs and symptoms of diabetes, such as being thirsty and tired. Another student demonstrated these symptoms by drinking water quickly from a bottle and placing her head on a pillow. These teaching strategies addressed multiple learning modalities.

The play followed the informational session and it involved all members of the troop.

A narrator described the fictional battle between Sir Insulin Monk and Diana Betes. In

addition, the audience was encouraged to participate, by the cast, through signs that read "Boo" for Diana Betes character and "Yeah!" for the Sir Insulin Monk character. The researcher observed participation by the audience when the signs were used. The plot was to rescue Princess Low-n- Sweet from her tower. Other knights failed to help her because "they came armed with fatty foods and no veggies and no exercise at all" (Logue & Toci, 2003, p. 4). Ultimately, Sir Insulin Monk succeeded in rescuing the Princess because he used his tennis racket to battle Diana Betes and threw fresh fruit (props) at her. These actions led to her defeat. The researcher observed that the audience was engaged in the play and cheered loudly when it concluded. This program used a non-traditional approach to health education through the use of theatre. In addition, the performance was an entertaining medium and had a non-threatening approach.

Data Collection Procedures

All students participating in this study received a random identification number supplied by the researcher. The identification numbers and student information were available to the researcher's team. This information was kept in a secure location to protect student confidentiality. If a student was unable to complete all the testing, prior data submitted by that student was removed from the study. The researcher graded each test according to a standardized answer sheet. All possible answers for the test were addressed during the lecture portion of the performance. The graded test scores were collected and placed on an Excel (Microsoft, n.d.) spreadsheet. This data was used by the researcher to document increased awareness of type 2 diabetes. This was demonstrated by an increase in the number of correct answers between the pre-test and post-test.

Data Analysis

The data were entered into Excel (Microsoft, n.d.), and the descriptive statistics and test score mean, and percentages were calculated and compared to identify any increase in score after the theatrical event. Of the 57 students recruited, 47 completed the study, which had a participation rate of 82%. The 47 students involved in this study had given their assent and their parents completed the consent forms. There was no response bias related to this study (Cressell & Cresswell, 2022). All students of the 57 were able to experience this theatrical event regardless of their participation in this study.

There were 52 students enrolled in this study. Each received a randomized number generated by the researcher in order to protect their confidentiality. The pre-tests were distributed to the students during their physical education classes one week prior to the performance. Pencils and paper were provided, and the researcher was available to answer any questions and encourage a quiet atmosphere for test-taking. Of the 52 enrolled students, 4 missed both the pre-test and the performance due to extensive absenteeism. All 4 students had traveled out of state for one week to attend a conference. The researcher was unaware of this event prior to recruitment. One student also moved out of the school district during this time frame. This left a total of 47 students enrolled, 82% of the originally recruited group. All these students watched the performance and completed the post-tests.

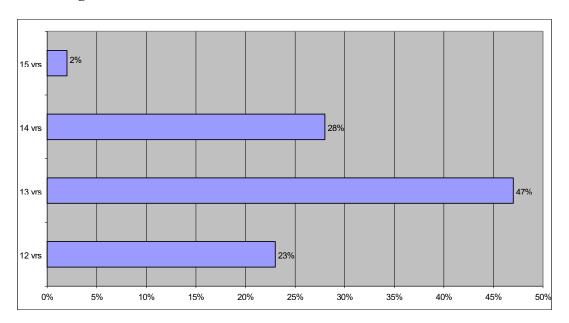
Results

Forty-seven students from seventh and eighth grades participated in the study. There were 24 male students (51%) and 23 females (49%). The ages ranged from 12 to 15 years (See Figure 1). The average pre-test score was 78%, with a post-test score of 84%. This was a 6% difference in the results. The participants and their test results were further organized into

separate categories by age. The 12-year-old group (23% of the participants) received an average pre-test score of 83% and a post-test score of 90%. The 13-year-olds (47% of the participants) scored an average of 76% on the pre-test and 78% on the post-test. The 14-year-olds (28% of the participants) had an average pre-test score of 82% and a post-test of 89%. All experienced an increase in test scores between the two tests: 7%, 2%, and 7%, respectively. There was one 15-year-old enrolled in the study, and this student also had an increase in the test score from 40% in the pre-test to 80% in the post-test.

Figure 1.

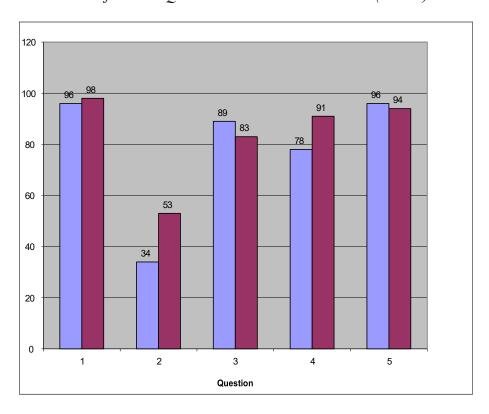
Student Age Distribution



The test scores of the male students were compared to the scores of the female students. The girls scored an average of 82% on the pre-test and 86% on the post-test, indicating a 4% increase from baseline. The boys had an average of 75% on the pre-test and 82% on the post-test, with an 8% increase in scores. Each question used in the testing was further analyzed for trends. Figure 2 below illustrates the mean pre-test and post-test scores for each item.

Figure 2

Mean Scores for Each Question: Pre-test and Post-test (n = 47)



Discussion

Forty-seven students participated in the study that examined the pre and post-test scores after type 2 diabetes education via theatre using the written version of the diabetes tool kit. The post-test scores were found to be higher, indicating the effectiveness of the teaching strategy. The growing problem of type 2 diabetes in the adolescent population is a worrisome health issue. The importance of diabetes education, prevention, and the use of peer education should be addressed with all age categories, specifically in the adolescent population (Ameneh et al., 2023; Dabelea et al., 2021; Pang et al., 2021). The informational session and play offered in the program, *Don't Monkey Around with Diabetes: A Program for Helping Kids Learn How to Prevent Type 2 Diabetes* (Fenn et al., 2003) played an important role in educating the adolescents in the school. This grant-funded program was instrumental in

obtaining a copy of the Train-the-Trainer toolkit to subsequently initiate this program in this rural community.

The audience was engaged in the play and cheered loudly when it concluded. This program used a non-traditional approach to health education through the use of theatre. In addition, the performance was an entertaining medium and had a non-threatening approach. Mohandespour (2023) completed a systematic review of the use of theatre to teach sexual health to adolescents. Seven studies were reviewed that covered numerous topics, such as sexually transmitted diseases. The results showed that through the use of theatre, there was an increased knowledge and improved attitudes among adolescents regarding sexual health. Two studies in the systematic review concluded that theatre-based sexual education was an appropriate education strategy for adolescents.

Implications

As nurses, we need to be innovative in our approach to combat the problem of type 2 diabetes, especially in our adolescent population. Education on the prevention of this disease needs to be taught to our young students in an engaging way. The use of theatre and the performing arts may be the catalyst that is needed to pique the interest of our youth to improve their health and decrease their risks of developing type 2 diabetes. This approach should also be embraced by other healthcare providers, including school nurses and diabetic educators. Through these interdisciplinary partnerships, theatrical education programs can be shared in areas outside of schools, such as community outreach programs. Educating adolescents on type 2 diabetes should be a priority to ensure the health and well-being of the next generations.

Limitations

The limitations of this study were the small number of participants, the test, and the

use of the FNL troop. The small number of participants was unavoidable. A larger group of students or the addition of other schools might have been beneficial to a larger audience. An expert panel reviewed the pre/post-test used in this study for content validity. The test could have received further refinement through a pilot study and input from a student population. There were two limitations regarding the FNL troop. First, there was a learning curve for the troop involved in mastering a performance. was the first time the performance was implemented in front of a live audience. Second, there was time and dedication required to accomplish this performance. The FNL group practiced weekly for three months. Lastly, this study was completed more than a decade ago. New and technological innovations may be available currently. However, a theatrical method is engaging to the audience.

Summary

This study sought to increase awareness of type 2 diabetes in adolescents. The program used to teach this subject was creative, and it appealed to different learning styles. It encompassed auditory and visual elements throughout the play that could reach a greater number of students. The diabetes tool kit allowed a group of talented students and their director to deliver educational material through an entertaining medium. Although the toolkit is available upon request, it requires many hours of preparation from the theatre troop. This study was able to accomplish the main objective of increasing awareness of type 2 diabetes in adolescents. It is the hope that this performance will continue to educate other students throughout the community. This play is relevant today, and this type of peer education through theatre should be used for engaging adolescents particularly.

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Appendix A: Don't Monkey Around with Diabetes

Name:		School:
Gender: (Circle one) Male / Female		Age:
	Please print c	learly
	Circle the best answer for	or each question.
1) There	are over 23 million people in the U	J.S. with diabetes.
a.	True	
b.	False	
2) What i	s diabetes?	
•	Diabetes means that your blood so	ugar is too low
b.	Diabetes is a disease that impairs	the body's ability to use food
c.	Diabetes affects very few people	
d.	Diabetes cannot be affected by di	et and exercise
3) What i	makes you more at risk for getting	diabetes?
a.	Gaining too much weight	
b.	Not being active	
c.	Family history of diabetes	
d.	All of the above	
4) What a	are two signs or symptoms of diabe	etes? (Circle 2)
a.	Going to the bathroom very often	
b.	Having lots of energy	
	Being very thirsty	
d.	Healing quickly from cuts	
5) How d	lo you prevent diabetes?	
· · · · · · · · · · · · · · · · · · ·	Stay active and exercise	

Correct answers noted in red

b. Eat meals that are high in fat

d. Don't eat fruits and vegetables

c. Wear aluminum hats

Abstract

Traumatic life experiences may disproportionately affect individuals with social disparities, marginalization, or injustices. Nursing advocates for diversity, equity and inclusion (DEI) to recognize and affirm all patient voices. Nurses can address DEI by developing competence in the evidence-based skills of trauma-informed care (TIC) and self-reflection.

Highlights

- Traumatic life experiences disproportionally affect individuals with social disparities or injustices.
- 2. The Substance Abuse and Mental Health Services Administration offers an evidence-based approach to trauma-informed care.
- The practice of self-reflection after difficult clinical encounters is a method of achieving the ethical duty to care for oneself and foster personal growth in the realm of diversity, equity, and inclusion.

Keywords: trauma-informed care, diversity, equity and inclusion, ethical duty to care, selfreflection, Johns Model for Structured Reflection

Trauma-informed Care and Support for DEI: Exemplars in Diabetes and Self-Reflection

Nurses often unknowingly encounter individuals who have lived through traumatic life experiences. Adverse childhood experiences (ACE), include a number of traumatic experiences during childhood that have been heavily researched and found to be associated with negative health outcomes, including increased physical and emotional morbidity and mortality. (Felitti, et al., 1998; Kendall-Tackett, 2020; Substance Abuse and Mental Health Services Administration (SAMHSA), n.d.). There are also traumatic experiences beyond ACEs that occur throughout the lifespan. These traumatic life experiences often disproportionately affect individuals with social disparities or injustices (Comas-Diaz et al., 2019).

Understanding trauma-informed care (TIC) is a basis for establishing a trusting therapeutic clinical relationship (SAMHSA, n.d.). The cumulative effects of trauma can result in an individual developing behavioral adaptations, which may manifest as a challenging clinical encounter. Working with survivors of trauma can bring out strong emotional responses in the nurse providing care (Grossman, et al., 2021). The ethical duty to patient care, however, is unwavering (American Nurses Association (ANA), 2015).

This article aims to explore the concepts of TIC, concepts of diversity, equity, and inclusion (DEI), and the ethical duty to TIC. Two case exemplars will illustrate these concepts. The article will conclude with a strategy for self-reflection when difficult clinical encounters occur.

Background: Nursing and Diversity, Equity and Inclusion (DEI)

Nursing, as a profession, is a longtime advocate for equality in health (ANA Enterprise 2023-2025 Strategic Plan; American Academy of Nursing; National League for Nursing, 2024). Promoting social justice and reducing health disparities by diversity, equity, and inclusion (DEI)

is at the forefront of nursing's mission, values, and strategic plans (ANA Enterprise 2023-2025 Strategic Plan; American Academy of Nursing (AAN, n.d.; National League for Nursing, 2024). Understanding the foundational definitions of DEI is important for nurses working to improve health disparities. The AAN defines diversity as affirming how people differ (AAN, n.d.). Equity, according to the AAN, assures the right conditions for all people to thrive and reach full potential. Inclusion, according to the AAN, welcomes all voices with a special emphasis to include historically marginalized populations. Advocating for "all" voices promotes social justice.

Historically, individuals who have experienced social disparities, and racial or historical injustices are at higher risk of traumatic life experiences (Comas-Diaz, et al., 2019). The coronavirus pandemic of 2020 brought increased recognition of trauma, and social and health disparities throughout the world. These factors contribute to the current urgency in understanding and addressing trauma and TIC (Comas-Diaz, et al., 2019). Given the universality of traumatic life experiences—transcending socioeconomic status, gender, age, culture, and clinical specialties—nurses in all specialties will encounter individuals needing TIC. Two strategies by which nurses can address DEI include developing competence in the evidence-based skills of TIC (Brown, et al., 2016; Goldstein, et al., 2024; Lewis, et al., 2021; SAMHSA, n.d.) and self-reflection (Berger & Erzikova, 2022; Burks, 2023).

Trauma and Trauma-informed Care

Trauma can be defined as "an event or series of events that overwhelms an individual's capacity to psychologically self-regulate" (Bargeman et al., p. 793). In addition to ACE, trauma can also be associated with acute and/or chronic illness, negative healthcare experiences, war, devastating natural disasters (hurricanes, tornados, earthquakes), loss of a loved one (death, or

significant loss of function), divorce, gender diversity, racism, and others (Bargeman, et al, 2022; Lewis et al., 2021, SAMHSA, n.d.). Trauma, in this sense, can negatively affect an individual's internal well-being, interpersonal relationships, and functioning in society.

Trauma-informed care acknowledges trauma's effects on an individual. A framework to help nurses recognize individuals presenting with trauma was developed by The Substance Abuse and Mental Health Services Administration (SAMHSA), a recognized authority in TIC (SAMHSA, n.d.). The framework has two parts: three "E's" for concepts of trauma, and four "R's" as key assumptions for a TIC approach to care (SAMHSA, n.d., p 8-10).

SAMHSA's Three "E's"

The concept of three "E's" for trauma includes the Event(s), the Experience(s), and the Effect(s) (SAMHSA, n.d.). The effect, for some individuals, will be an intense trauma response. A trauma response is an emotional response to reliving the traumatic experience. Emotional manifestations might include withdrawal, mistrust, missed appointments, anger, crying, or other intense emotional reactions (Lewis et al., 2021; SAMHSA, n.d.). These are often triggered by environmental sensory factors such as sights, smells, and sounds (SAMHSA, n.d.). A clinical encounter with a healthcare provider is one potential environment for re-triggering or re-traumatization (Grossman, et al., 2021, Lewis, et al., 2021).

Complex variables contribute to an individual's response to trauma (Ashworth et al., 2023; Bargeman et al., 2022; SAMHSA, n.d.). Repeatedly reliving trauma affects healing, and adversely affects physical and emotional health (Lewis et al., 2021; SAMHSA, n.d.). A doseresponse to repeated trauma is well-established (Boyce et al., 2021). The degree and frequency of physical and psychological life disruption is a factor in developing long-standing trauma (Boyce, et al., 2021) When cumulative trauma is experienced during critical periods of early

development, long-term disruptions in brain development can occur, leading to prolonged activation of the stress response (Boyce et al., 2021) Ultimately this results in long-term changes in the neurocognitive, neuroendocrine, immune, metabolic, and genetic regulatory systems (Boyce, et al., 2021) Responses to these changes can include dysfunctional interpersonal functioning, mood changes, and risky or self-destructive behavior (Ashworth et al., 2023; Bargeman et al., 2022; Boyce, et al., 2021).

SAMHSA's Four "R's"

Expanding on the three "E's", SAMHSA developed four "R's" as assumptions, or principles, to guide TIC: Realization, Recognize, Respond, and Resist Re-traumatization (SAMHSA, n.d.).

Realization

Realize traumatic life experiences occur with surprising frequency. Affected individuals can develop coping strategies to survive overwhelming circumstances.

Recognize

Recognize, notice, or "see" signs of trauma, including physical or emotional/trauma responses. Recognizing indicators goes beyond outward signs. "Seeing" an individual includes "recognizing the human experience, informed by aesthetic ways of knowing: grasping, interpreting, and envisaging what is unfolding" (Johns, 2022, p 54).

Respond

Trauma-informed care focuses on the patient-centered process of acknowledging and understanding what might have happened in the past, rather than focusing on what is wrong (Trauma-Informed Care Implementation Resource Center, n.d.) The clinician works to "see" the

patient, understand the impact trauma may have had, and ensure psychological safety. The clinician is both sensitive and responsive to the traumatic experience(s).

Resist Re-traumatization

A TIC approach understands the pervasiveness of trauma and that any clinical encounter could be traumatizing (Bargeman, 2022; Levy-Carrick et al., 2019). Creating clinical environments for individuals to feel safe in physical, social, and emotional realms can potentially reduce the risk of re-traumatization (SAMHSA, n.d.). Welcoming individuals, ensuring support and respect supports person-centered care, shared decision-making, trust, and TIC.

The three "E's," four "R's," and the potential for re-triggering or re-traumatization can be illustrated with chronic diseases, such as type 1 diabetes. Type 1 diabetes is an auto-immune disease process that destroys the insulin-producing beta cells in the pancreas, resulting in a lifelong need for exogenous insulin administration (American Diabetes Association Professional Practice Committee, 2024). Type 1 diabetes has significant psychosocial impacts related to lifestyle modifications, intense daily management, fear of hypoglycemia, fear of complications, fears related to losing access to care, and frequent office follow-up care (Giese, 2018; Roth & Chard, 2021). Individuals living with type 1 diabetes will provide exemplars of trauma-related concepts. Exemplar one illustrates trauma concepts and SAMHSA's three "E's" and four "R's," while later, exemplar two illustrates trauma concepts and self-reflection.

Exemplar One

A 33-year-old new patient living with type 1 diabetes resides four hours away from specialty-level diabetes care. The patient has experienced significant gaps in insurance, medication, and healthcare access. Telehealth now provides improved access to diabetes specialists. The nurse warmly greets the patient by video and begins by collecting pertinent

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medical history. The nurse notes a change in demeanor with stiffened body language, tears, and

downcast eyes. The seemingly routine medical history questions related to type 1 diabetes-

related duration, insulin use, glucose monitoring, diabetes-related complications, lifestyle

management, and coping trigger a trauma response for the young woman. The nurse recognizes

and quickly interprets the impact the intense lived experiences have had. Collecting past medical

history triggers the patient to re-live her experience with gaps in medical care, insulin rationing,

shaming from friends, family, and the health care team around "poor" self-care, as well as

perceived abandonment by the nation's health system. The nurse creates a safe space for the

patient to share their experiences and reassures the patient she will be treated with compassion

and respect. As the visit concludes, the patient says, "Thank you for listening and

understanding." In this case, the patient is not re-traumatized. Improved access to care provides

hope and healing can begin.

American Nurses Association (ANA) Code of Ethics

The ANA Code of Ethics for Nurses is a foundational document outlining the core values

and ideals of the nursing profession (ANA, 2015). It includes 9 provisions with interpretive

statements for all nurses, in all settings. A main tenet is "to provide normative, applied moral

guidance for nurses in terms of what they ought to do, be and seek" (p. xii). The ANA revises

this document every ten years, with the next revision set for release in 2025 (ANA 2025 Code of

Ethics for Nurses Revision Panel, n.d.). Awareness of the human impact of trauma has expanded

since the 2015 revision. This author expects TIC and DEI to be explicitly represented in the

2025 revision.

Duty to Care: Patient

While TIC is not overtly mentioned in the 2015 ANA Code of Ethics, the principles are. Specifically, provisions 1-2 outline the nurse's primary commitment as the patient, conducting nursing practice with compassion, and respecting the inherent dignity and worth of all. Similarly, provision 8 discusses the nurse's obligation to reduce disparities and stresses the protection of vulnerable and socially stigmatized groups. Nursing has a long history of advocating for vulnerable, marginalized populations. Many patients with traumatic life experiences will fall into these categories. Therefore, trauma-informed patient care is ethical, socially just, and not optional for nurses.

Duty to Care: Self

The ANA code (2015) also directs the nurse's responsibility to care for self. Provision 5 discusses personal well-being, along with personal and professional identities. The code explicitly states, "when nurses care for those whose...attributes, lifestyle, or situations...conflict with...personal beliefs, nurses must render compassionate, respectful and competent care" (p. 20). Provision 5 goes on to advocate self-reflection and personal performance evaluation.

Self-Reflection

Self-reflection is a process of listening to, and continually self-assessing one's thoughts, values, assumptions, beliefs, expectations, experiences, and actions (Johns, 2022; Clawson, 2012). In clinical and professional practice, incongruities can occur between one's vision for performance and what transpires. Self-reflection is useful for understanding those incongruities in desired vs actual performance, and developing sensitivity to wider contexts when providing TIC (ANA, 2015; Berger & Erzikova, 2022; Burks, 2023).

Human inclination is to avoid high-stakes or emotionally charged issues (Berger & Erzikova, 2022; Burks, 2023; Camilleri et al., 2023; Johns, 2022). Avoidance inhibits problem-

solving or growth. Introspection that comes with self-reflection allows for transformative learning and self-improvement. Sharing personal or professional growth gleaned through self-reflection is a brave and vulnerable act, making psychological safety in the work or learning environment critical (Camilleri et al., 2023). While there are several published works to guide self-reflection, the Model for Self-Reflection provides clear phases to guide the process (Johns, 2022)

Model for Self-Reflection (MSR)

The Model for Self-Reflection (MSR) was developed and published by British nurse scholar, Dr. Christopher Johns in *Becoming a Reflective Practitioner*, now in its 6th edition. Dr. Johns (2022) suggests that the main goal of self-reflection is gaining insights into new possibilities for understanding oneself or a situation. These insights occur by "asking difficult, often self-exposing questions, and then facing the difficult answers to such questions" (p. 61). As with any personal reflective exercise, finding a quiet place—away from distractions, a block of time, having an open heart, an open mind, and a willingness to grow will yield the best results. The MSR is structured in six sequential phases as depicted in Table 1.

As previously discussed, clinical encounters can be traumatizing, and not every clinical encounter will go as planned. Case exemplar two illustrates TIC and a nurse utilizing the Johns MSR for personal growth and ultimately improved patient care.

	TABLE 1 Model for Structured Reflection (MSR)	
Phase		Focus / Questions
Phase 1: Preparatory		Center the mindClear away distractions

 Describe an experience or issue, outlining brief salient points
 What is significant to reflect on? Why did I respond as I did? Did I respond in tune with my vision? Did my feelings and attitudes influence me? Did past experiences influence me? Did I respond ethically for the best?
 Given a similar situation, how could I respond more effectively, for the best and in tune with my vision? Am I skillful and knowledgeable enough to respond differently? Am I powerful and poised enough to respond differently? Do I have the right attitude?
 What tentative insights do I draw from this experience? How do I now feel about the experience?
• How can I communicate my insights most effectively in written/performance format?

Johns, (2022).

Exemplar Two

A 24-year-old male, new patient, living with type 1 diabetes presents with severe hyperglycemia. He presents with a similarly aged female and a 5-year-old child. The nurse reviews past medical history and history of present illness (HPI). The nurse notes testosterone on the medication list and asks for confirmation and associated background. The patient becomes angry, stating he is not in the office to discuss other medications, only diabetes. The accompanying female abruptly stands up, whispers to the nurse "he's transgender," and leaves the room with the child. The patient elects to terminate the visit and requests reassignment to another care provider. The patient registers a formal complaint against the nurse, accusing the

nurse of being biased and insensitive. The complaint describes experiences with discrimination in multiple other offices due to gender identity and desire for gender-affirming hormone therapy. This case illustrates patient, clinician, and health system-related factors for trauma-informed care. A patient's trauma can be re-triggered with the collection of past medical history and medication reconciliation tasks. For the nurse, the suggestion of bias, insensitivity, and implied lack of compassion provides a necessary pause for self-care via self-reflection. For health systems, this case illustrates the importance of noting gender identity in electronic medical records.

Applying the Model for Structured Reflection in Gender Diversity

Individuals with gender-diverse experiences are a population at risk for trauma. Evidence from the 2022 US Transgender survey reported that of transgender respondents aged 18 and up who had seen a healthcare provider in the previous 12 months, 48% reported at least one negative experience (James, et al., 2024). These experiences included refusal of care, being misgendered, harsh language from the provider, or having a provider be physically rough or abusive during the encounter (James, et al., 2024). The slightest inflections in voice or mannerisms, even if unintentional, can re-trigger trauma or re-traumatize.

Nurses may feel unprepared to provide TIC for a transgender patient as in case exemplar two. The process of self-reflection improves the understanding of factors contributing to retraumatization in the encounter. In this case, the nurse gained insight into divergent personal and patient values concerning gender-affirming hormone therapy. Presenting voice and body language were not neutral, suggesting the presence of an unconscious bias. Given past experiences, and lack of therapeutic communication, the patient quickly sensed this.

Affirmation is demonstrated through language, non-verbal communication, and listening. Johns (2022) defines affirming, person-centered care as "focusing on the needs of the individual receiving care, ensuring that their preferences, needs, and values guide clinical decisions and provide care that is respectful of and responsive to them." (Johns, 2022, p. 56). While a nurse may have a different value set, person-affirming care focuses on the needs of the individual receiving care (Johns, 2022). Asking "What would you like to focus on today?" and "How can I help?" are person-centered, sensitive, and welcoming initial questions as the nurse works to establish a trusting relationship. The clinical encounter in exemplar two did not go as planned. However, through intentional self-reflection, the nurse gained important personal insights to improve future care. In fulfilling Johns' MSR's last phase of representation, nurses should consider sharing stories and communicating insights with colleagues.

Conclusion

Clinical encounters are vulnerable times for individuals with a history of trauma. This work has uniquely connected the concepts of TIC with nursing's ethical duty to provide care to both the individuals and self. This work also serves as a clear call to action: nurses must actively incorporate TIC and DEI principles into clinical practice. Recognizing populations at risk, and accurately interpreting an individual's unfolding trauma story allows a nurse to "see" the person and respond with sensitivity and compassion. This approach promotes psychological safety, ethical DEI care, and helps reduce re-traumatization. Utilizing a self-reflection model promotes personal insight—"seeing" self, thereby promoting personal and professional growth. Sharing insights with colleagues will model transparency, open dialogue, and foster healing.

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Abstract

Caring is a word that is synonymous with nursing. Nurses are equipped to engage in all aspects of patient care and be present. Caring and presence are also imperative in nursing education. While caring is instrumental to patient healing and outcomes, it is equally important in demonstrating care through nursing education. While convenient it is often difficult to express caring in the remote environment. This paper will describe a brief history of nursing, concept of caring, and nursing education.

Keywords: remote nursing education, student engagement, meaningful learning

Adopted

I am adopted. Not only am I adopted through Jesus Christ, but I was also adopted as a two-month-old baby by my parents. Love and care are foundational and began before I was born. I was born to a seventeen-year-old girl who loved me enough to give me to my adopted parents because she knew she could not care for me as she felt I deserved. I was adopted by parents who loved me before they even saw me. They continue to care for me even as a 52-year-old woman and this love and care are extended to my husband, my children, and even my pets. I never doubted that no matter what, they love me and care about me. They always reminded me that I was not adopted because I was not wanted but because that seventeen-year-old girl loved me and cared about my future.

As a small child of four, we adopted my brother. I was more excited than I can put into words. Our parents believed that the most important thing they could teach us was the love of Jesus. This was not done through words but through actions. I gave my heart to Jesus as a teenager and while I cannot say I have always pleased Him (or my parents,) I have never doubted that I was loved unconditionally. This unconditional love and the examples of my parents and family have been so instilled in me that I became a nurse. I will admit that nursing was not what I dreamed of being through my younger years however each prospective career path was one through which I could care for others.

My brother always knew the path he wanted to take. He wanted to be a pilot from the time he was a little boy but did not see it as a possibility. He did get his private pilot's license when he graduated from college, but his dream was to be a commercial airline pilot. While his college education and experience made him very marketable in several areas, it was not until he turned forty years old that his dream became a reality, and he earned his "wings" as a

commercial pilot. When I think about all the professions, I thought I wanted to pursue, the one that makes me shake my head is the short time I thought I would like to become an astronaut and explore space and expand the knowledge we have about the planets. Through my various career aspirations and my brother's headstrong determination to become a pilot, my parents always reminded us that we could do anything we wanted and never discounted our ideas. They carefully listened but also reminded us that God would show us the paths we were to follow. As time went by, all roads seem to lead to nursing for me and here I am all these years later. I know that neither my brother nor I would have been able to follow our dreams without the care, love, and support of our parents. As a side note, my mother loves telling people that her children are "the pilot and the professor."

Defining Caring

Caring is a term synonymous with nursing. Sitzman and Watson (2014) describe that caring occurs "when the one caring connects with and embraces the spirit of the other through authentic, full attention in the here and now, and conveys concern for the inner life and personal meaning of another" (p.17). Hayne, et. al., (2020) describe the attributes of caring including being "physically and mindfully present, being emotionally open and available" (p. 4) as well as respect, cultural awareness, attentive listening, and others. The Lord's Word provides clear instructions about how we are to love and care for one another. In Galatians, 5:22, "love, joy, peace, patience, kindness, goodness, faithfulness" (ESV, 2001) are described as being the "fruit of the spirit," (ESV, 2001) occurring when one is filled with the Holy Spirit.

The definition of caring by Sitzman and Watson (2014) while in the context of nursing can provide a foundation for all human interactions. While there are several theories surrounding caring, Dr. Jean Watson provided one of the most common modern-day nursing theories, the

Theory of Human Caring in 1979 (Watson Caring Science, 2024). This theory stresses that the caring environment includes the mind, body, and spiritual dimensions of life and the impact one moment of care can have on health and healing (Watson Caring Science, 2024). Sitzman and Watson (2014) describe caring as dropping a pebble in a pond (ground for being) and watching the ripples expand out from the place of impact and move outward. The authors assert that one intention to care (drop of a pebble in a pond) produces ripples that expand further than imagined. Through a visual representation, the authors describe the ripple expanding from self through others, peers, leaders, local and world communities, the environment, virtual and web-based platforms, and beyond (Sitzman & Watson, 2014). Watson further described the *10 Caritas Processes* as foundational to the Theory of Human Caring, built upon values based on ethics, epistemology (knowledge,) and ontology (truth) (Wei & Watson, 2019). The *10 Caritas Processes* embrace human relationships and include love, authenticity, spiritual practices, trust, caring relationships, forgiveness, empathy, value, empathy, a caring-healing environment, and embracing miracles.

Caring in Nursing Education

While Watson's theory can be applied to the nurse-patient relationship, it is also applicable to the instructor-student relationship and extend into the remote educational environment. At all levels of nursing education, including traditional pre-licensure programs, there has been a significant rise in the popularity of remote nursing education. As early as the mid-1990's remote and web-based instruction included enhanced communication through email, mailing lists, and the ability to access resources remotely. Additionally, education provided through a Learning Management System (LMS) became more prevalent (DeBoor & Keating, 2022). The Institute of Medicine (IOM) published, "The Future of Nursing: Leading Change,

Advancing Health" calling for healthcare reform initiatives that improve health outcomes. As a result, the IOM called for 80% of the nursing workforce to be at least baccalaureate prepared by 2020 to ensure nurses are prepared to meet increased demands for care and leadership roles (IOM, 2011). With this came a surge in the number of remote nursing education programs.

The definition of distance education has continued to expand as new technology is introduced and popularity in remote education continues to rise primarily due to flexibility, especially for students who are employed. Informatics, technological advances, and distance education modalities have provided innovative methods through which nursing education could be delivered such as simulation, further increasing the popularity of remote nursing education (DeBoor & Keating, 2022). The prevalence of remote nursing programs across levels have continued to increase. In 2020, Authment and Dormire reported that there were 459 remote programs that offered undergraduate to doctoral degrees. In July 2023, the American Association of Colleges of Nursing (AACN,) reported that there were 747 programs through which Registered Nurses (RN) who have an associate degree in nursing (ADN) or diploma can bridge to a Baccalaureate of Science in Nursing (BSN) with approximately 650 programs being offered partially, if not all, remotely. Additionally, AACN (2023) reported that there are 189 programs in the United States that transition RNs with an ADN or diploma to a master's degree level.

Authment and Dormire (2020) compared traditional classrooms to remote classrooms. For example, in a traditional classroom, nursing instructors can respond to non-verbal cues of students such as facial expressions and/or voice tone and engage in direct dialogue. In remote learning environments, instructors have difficulty to connect with students. The ability to provide real-time feedback in the classroom is also much different in the remote education where

feedback is often provided through email, LMS, recorded lectures, and others. There are other examples but simply, the instructor presence is different in the remote learning environment.

The differences in the delivery of coursework among other factors pose challenges for nurse educators and there is a growing concern about student engagement and meaningful learning experiences. Nurse educators express concern that remote education may leave students feeling disconnected which can possibly result in students being more inclined to "check the box" rather than experiencing meaningful learning (Lanz, et. al., 2024). In Spring, 2020, COVID-19 pandemic further exacerbated the already present challenges of remote learning. Nursing faculty were required to rapidly transition from face-to-face to fully remote courses. When the pandemic began, many connections with others (personally) were lost therefore human presence became even more important. Isolation was felt by all including remote students. It was challenging in pre-pandemic time to keep students engaged in remote learning, but it became more challenging and stressful with the pandemic.

The pandemic affected the learning environment and experience. Christopher, et al., (2020) noted that students and educators alike experienced heightened stress and anxiety as the pandemic began and progressed. While both groups may have felt somewhat comfortable working within the remote environment (pre-pandemic,) they were thrust into unchartered territories. All had to adjust to a new normal with an increase in isolation felt by even remote students. Nurse educators had to become even more creative to ensure that students remained engaged.

Caring in education involves several aspects including faculty beliefs and self-compassion. Hill, et al., (2021) discuss the importance of caring being the core of nursing curriculum to promote relationships that are based on humanistic values such as dignity,

autonomy, respect, and others and have a "caring consciousness" (46). The caring consciousness is essential because when practiced, it later becomes an intentional commitment. Hayne, et al., (2020) stress the importance of faculty beliefs, values, attitudes, and authenticity in the development of a caring curriculum and Fenizia, et. al., (2018) asserted that compassion should always be conveyed with actions, rather than words. Wei and Watson (2019) assert that before compassion can be felt for others, it first should be felt towards oneself. This was also affirmed in Abraham Maslow's Hierarchy of Needs in 1943. Maslow described motives as being influenced by psychology, sense of safety, affection, self-esteem, and self-actualization (Kenrick, et al., 2011). He believed that human needs are hierarchical and without all five levels being met, humans are not able to thrive. According to Maslow, love and belonging as well as self-esteem cannot be met until physiological and safety needs are met (West, 2022). In other words, for nurse educators to be able to convey caring to students, they too must have a sense of care but only if physiological and safety needs are first met. This was especially difficult during the pandemic as it threatened both physiological and safety needs.

Caring behaviors are demonstrated in the care delivery as competencies, although it is not objective always. Curricular design must be deliberate in delivery to include the three domains of psychomotor, cognitive, and affective skills. As such, nurse educators must be able to take this curriculum and translate it into caring behaviors. In face-to-face, or even hybrid models of delivery, the instructor has face-to-face time with students during which caring can be demonstrated. How can this be demonstrated through courses that are fully remote? Watson describes the instructor-student relationship starts only when there is a connection with the spirit of another. Further, the degree to which the nurse can embrace and connect with others (relationship) is determined by the nurse's ability to foster an environment in which the

foundations are love and care. Smith and Crowe (2017) examined the importance of the relationship between educator-student in the remote learning environment and found that the relationship between nurse educators and students was key, the educator presence influencing engagement in learning.

A caring environment can foster cognitive and behavioral engagement including the student's dedication and willingness to participate in activities that promote success. A student is said to be emotionally engaged (EE) when they can interact with others while completing a task which can lead to an increased commitment to the learning process (Kuchinski-Donnelly & Krouse, 2020). Emotional engagement of the student promotes willingness of the student to follow instructions, remaining focused on tasks, and more. Through this interaction with others, meaningful relationships may develop thus the promotion of meaningful learning experiences (Dewan, et. al., 2019). The Community of Inquiry (COI) framework has proven beneficial in creating environments that promote learning (Smith & Crowe, 2017). This framework focuses on the instructor's social, cognitive, and teaching presence with the learning environment being at the center. Additionally, if one component of the model is missing, disruption to the learning environment can result. Many may argue that in remote nursing education it is impossible for the instructor to "be present" although it is essential in demonstrating caring. Donnelly-Kuchinski & Krouse (2020) asserted that students who feel they have faculty support increase competence and confidence thus leading to an increased commitment to the learning process. Overall, the caring presence of a faculty member can support learning and ensure student success.

The Rest of the Story

A question I often ask my colleagues is can we teach students to care? I have received a variety of answers but anecdotally most answers are "yes." I disagree with this response to a point because I strongly believe that having a servant's heart and the desire to care for others is something that comes from within. However, caring behaviors can be modeled. As nurse educators, we have the awesome task of helping students learn the skills needed to use the talents God gave them, especially a caring heart, and care for the physical, spiritual, and psychological needs of their patients. I also believe that the best way to demonstrate caring is through action. In John 13:34, the Lord gives us a simple commandment: "that you love one another, as I have loved you, you are to love one another" (English Standard Bible (ESV,) 2001). These instructions do not come with stipulations. My decision to become a nurse many years ago was the result of being shown God's love even before I was born. This love and care inspired me to show others the love of Christ through nursing and later, nursing education. Nursing faculty are uniquely placed to also show the love of Christ to others by simply being present. While many may feel that this is not possible when separated by a computer or geographical location, it is possible. Although different, faculty can be present even in the remote environment thus increasing student engagement.

I am an example of the benefits of love and care. My biological mother gave me life and my parents taught me how to spread my wings and fly. I have no doubt that were I not shown love and care I would not be a nurse today. I hope that my students know that even when separated by a computer I care for them as individuals but more so, as brothers and sisters in Christ. I also pray that this encourages them to be engaged in their learning experiences.

In January 2018, I connected with my birth mother. I did this with the support of my parents, my husband, my children, and my brother. One of the first questions she asked me was if

my parents had told me that she did not give me up because she did not want me but because she loved me enough to give me a life, she knew she could not provide. Of course, I could tell her that not only my parents shared this but that they always reminded me of her love. I was able to meet her with my parents by my side which was something I only had imagined. On 16 April 2019, my birth mother passed away of lung cancer that had metastasized. She told me that she held my little hand when I was born until they took me away and I was honored to hold her hand as she left this world and joined our Father. My parents drove six hours to be with me after she passed away and were there to provide comfort and grieve with me. I have felt the presence of God throughout my life even through the sad times. Though I cannot see God's physical face in real life, I know He is present, and it is His presence that drives me forward. Nursing students also need to feel the presence. It is my hope and prayer that my students feel my presence even when separated by a computer but more so feel the presence of God.

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