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Nurse Educators' Experiences With Medical Cannabis Education

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Walden University

College of Nursing

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Rachel A. Parmelee

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Walden University

2025

Abstract

Nurse Educators' Experiences With Medical Cannabis Education

by

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MSN, Purdue University Global, 2019

BSN, Eastern Michigan University, 2017

ASN, Washtenaw Community College, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Nursing Education

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Abstract

Medical cannabis is legal in more than half of the United States, and the National Council of State Boards of Nursing has provided guidelines indicating that nurses need to know about medical cannabis. However, most nurses report a lack of knowledge and education but believe that cannabis has therapeutic potential. The problem addressed in this study was the limited research on nurse educators' experiences with medical cannabis education and its meaning for nursing education. The purpose of this hermeneutic phenomenological qualitative study, supported by an emergent framework, patterns of knowing, was to explore nurse educators' experiences with medical cannabis education and its meaning for nursing education. Eleven nurse educators in states with medical cannabis programs and at least two years of experience teaching in an accredited nursing program participated in semistructured interviews. In vivo coding and phenomenological theming revealed six themes: (a) understanding therapeutic potential, (b) awareness of learning opportunities, (c) limited discussions with colleagues, (d) limited by time, (e) relevant to nursing content, and (f) curricular updates. Aligned with previous literature, this study indicated that nurse educators experience limited discussions, time constraints, and conflicting laws and policies. Future studies and research of how medical cannabis concepts are added to curricula could guide nurse educators to make curricular changes, thereby supporting positive social change by preparing nurses to educate patients about their use for a more informed approach to medical cannabis use.

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Dedication

For Tim, Myles, and Rowan—my most cherished gifts. This is for you.

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Chapter 1: Introduction to the Study

Introduction

Medical cannabis programs are being legalized in various jurisdictions across the United States. The National Council of State Boards of Nursing (NCSBN) recommended that nurses be educated about medical cannabis to care for patients who use it safely (NCSBN, 2018). The NCSBN (2018) highlighted the educational needs for prelicensure nurses, registered nurses, advanced practice registered nurses (APRNs), and APRN students but did not recommend who should teach cannabis content or how it should be taught. Cannabis is a Schedule I drug; therefore, limited human studies have been conducted, which is often a focus in the debate around efficacy and safety (NCSBN, 2018). The authors of one study assessed how cannabis policy is formed without complete empirical data. They concluded that beneath these debates are issues with epistemology and questions of ethics and morality (Zarhin et al., 2020), and how nurse educators come to know medical cannabis and interpret the meaning of their experiences for nursing education is mainly unknown.

This chapter includes an overall description and introduction of the study. In the background section, I clarify the context for the problem statement, purpose, and research question. I then describe the philosophical foundation and secondary lens as the conceptual framework, followed by the nature of the study. I also define key concepts and indicate the study's scope and delimitations, limitations, assumptions, and significance for nursing education.

Background

In the United States, as of December 17, 2024, medical cannabis was legal in 39 states, the District of Columbia, and three territories (National Conference of State Legislatures, 2024); however, it is illegal federally, as it is classified as a Schedule I drug under the Controlled Substances Act (Berman & Kreit, 2020). In August 2023, the Department of Health and Human Services (HHS) and the Food and Drug Administration recommended that the Drug Enforcement Agency (DEA) move cannabis to Schedule III (U.S. Department of Justice, 2024). In the past, the DEA has testified that it is bound to FDA recommendations related to medical and science matters (Congressional Research Service, 2023). The American Nurses Association (ANA) publicly applauded the HHS recommendations (ANA, 2024). The DEA requested public comment regarding the rescheduling, resulting in 42,925 comments posted until the deadline, July 22, 2024. The DEA summary or decision had not been published as of July 25, 2024; however, the Drug Policy Alliance (2024) analyzed the comments, indicating that 69.3% support legalizing cannabis at the federal level by descheduling it completely or decriminalizing it federally.

Meanwhile, medical cannabis was legalized in states as early as 1996 in California with the Compassionate Use Act (Berman & Kreit, 2020), and most healthcare professionals have been reserved as the laws about their role have been unclear. As a result, multiple organizations have formed to support healthcare professionals or written guidelines. For nurses, guidance came from the National Council of State Boards of Nursing in 2018; however, nursing academia has not implemented its recommendations

to educate all nurses, including prelicensure nurses, about caring for patients who use medical cannabis. In 2023, the 501c3 nonprofit American Cannabis Nurses Association (ACNA) applied for specialty practice approval, which the ANA granted in September 2023 (ANA, 2023). Following specialty recognition, the ACNA and ANA co-authored *Cannabis Nursing: Scope and Standards of Practice* (ANA & ACNA, 2024).

Multiple studies have been conducted to understand healthcare professionals' position on the topic of cannabis as a medicine. Gardiner and colleagues reviewed 26 studies to examine health professionals' beliefs, knowledge, and concerns about medical cannabis. They concluded that healthcare professionals generally supported medical cannabis as a therapeutic option, but self-perceived knowledge was poor (Gardiner et al., 2019). It is unclear how some healthcare professionals come to believe medical cannabis is a therapeutic option while others are reluctant, with most agreeing they need more education. The literature related to medical cannabis and nurses shows comparable results and is described in more detail in Chapter 2.

Exploring nurse educators' experiences with medical cannabis education and its meaning may also provide more information about how medical cannabis is interpreted as therapeutic, given the lack of knowledge and education reported by nursing professionals. Nurse educators are also positioned as experts in providing education and updating curricula, which could reveal why medical cannabis concepts are currently lacking in nursing education. Understanding nurse educators' experiences with knowing medical cannabis and its meaning could also reveal the value of different patterns of

knowing as Chinn and colleagues describe are necessary for nursing practice (Chinn et al., 2022).

Problem Statement

The research problem that was addressed through this study is that there is a lack of understanding of nurse educators' experiences with medical cannabis education and its meaning for nursing education. Research presented in the literature review follows a general pattern that healthcare professionals believe cannabis has therapeutic value but also report a lack of knowledge and education; therefore, there is a gap in the literature about how nurse educators' experiences with knowing medical cannabis form perspectives about its therapeutic value with little formal education. Nurse educators are positioned to provide medical cannabis education and offer insight into the challenges of doing so. However, this group and context are understudied (Parmelee & Clark, 2022). It is unclear how nurses come to believe medical cannabis is a therapeutic option. In contrast, other nurses are reluctant about the therapeutic value, with most agreeing that they need more education (Kurtzman et al., 2022a). This study explored nurse educators' experiences with medical cannabis education and its meaning for nursing education. The findings may provide rich details about the value of various patterns of knowing medical cannabis and its meaning for nursing education.

Purpose of the Study

The purpose of this phenomenological qualitative study was to explore nurse educators' experiences with medical cannabis education and its meaning for nursing education. The aim of this study was to understand more about how nurses acquire and

find meaning from the patterns of knowing medical cannabis in the absence of formal education. Through the exploration of nurse educators' experiences, this study may also illuminate why nurses and nursing students report a lack of education about medical cannabis.

Research Question

The research question addressed in this study was the following: What are nurse educators' experiences with medical cannabis education and its meaning for nursing education?

Theoretical Foundation and Conceptual Framework for the Study

The primary foundation used for this study was phenomenological philosophy, particularly hermeneutic phenomenology. Only in hermeneutic phenomenology can there be a secondary lens or conceptual framework after using phenomenological philosophy as the foundation (Peoples, 2021). The conceptual framework described in this section served as an emerging secondary lens to understand what patterns of knowing are meaningful when nurse educators experience medical cannabis knowledge. Researchers use phenomenological philosophy to understand the meaning of an experience (Peoples, 2021).

The secondary lens, patterns of knowing in nursing, originally developed by Barbara Carper in 1978 with further expansion by Peggy L. Chinn, Maeona K. Kramer, and Kathleen Sitzman (Chinn et al., 2022), served as the emergent conceptual framework for this study. The concepts of the framework are emergent and may not be revealed in the participants' experience; however, the interpretation of the types of knowledge

expressed by the participants clarify how nurse educators' patterns of knowing (empiric, ethical, personal, aesthetic, emancipatory) medical cannabis are situated within the foundation of the nursing discipline (Schwind & Manankil-Rankin, 2020). Additional concepts and themes are also considered based on the literature review.

In the literature review, nurses generally accept cannabis as a possible therapeutic modality yet report a lack of knowledge about medical cannabis, and it is unclear how experiences with knowing medical cannabis are meaningful in that medical cannabis could be therapeutic. The value of distinct types of medical cannabis knowledge among stakeholders has been associated with dissimilar epistemological and ontological views such as objective and empirical, subjective, lived experience, and issues with ethics, sociopolitical context, and regulations (Zarhin et al., 2020), which could potentially affect approaching the topic of medical cannabis in nursing education. Using phenomenology as the philosophical framework to frame this study provided a foundation from which to approach how meaning is made from experience by asking one main question with probing follow-up questions, allowing the data to emerge as the participant would describe them, rather than engaging in predetermined dialogue arranged in my ways of thinking. The conceptual framework situated the study within the nursing discipline to potentially clarify knowledge development in nursing as it relates to experiences with knowing medical cannabis. The logical connections and concepts are further analyzed in Chapter 2.

Nature of the Study

The research design was hermeneutic phenomenology to address the research question in this qualitative study. A phenomenological approach is a design used to explore experiences to understand the essence of a phenomenon (Creswell & Creswell, 2018). The hermeneutic phenomenological approach, where the researcher's fore-conceptions are expressed, guided this study to understand nurse educators' experiences with medical cannabis education (Peoples, 2021). I used semistructured, open-ended interviews with one central question and follow-up probing questions based on participant responses to encourage depth. I recruited participants based on meeting the inclusion criteria: nurse educators with at least 2 years of experience teaching at an accredited school of nursing in the United States and living in a state that legally allowed medical cannabis use. I searched social media for faculty groups, such as Facebook and LinkedIn, that allowed postings to invite volunteers to participate in the study once I received Institutional Review Board study approval. With permission, participation invitations would have been shared with the national nursing organization's faculty community forums and university deans in medical cannabis legal states in the United States, if saturation had not been met; however, saturation was met. The postings included a link to direct potential volunteers to connect with me, which is further described in Chapter 3. I recorded interviews using Zoom audio, maintained the confidentiality of participants by deidentifying names, and used codes such as P1 and P2 with documentation of how those were coded. The number of participants ranged from eight to 15 nurse educators experienced in teaching at nursing schools based on achieving

saturation when no new information was derived from the data. Participants with different experiences help explore the phenomenon in greater detail; therefore, participants were recruited using purposive and snowball sampling approaches (Creswell & Creswell, 2018).

To understand the meaning of the nurse educators' experiences, data analysis must remain as close to the participants' explanations as possible, using the constant comparative process against the original recordings (Ravitch & Carl, 2021). Data analysis was conducted using Saldana's (2021) coding manual to code and derive themes.

Definitions

Aesthetic knowing: "Unique meaning and intent in nursing situations" (Chinn et al., 2022, p. 2).

Cannabis nursing: Involves nurses who are knowledgeable regarding the endocannabinoid system and the use of cannabis for therapeutic purposes (ACNA, 2023).

Dasein: "Being there," which applies to the participant's experience and the researcher's interpretation of the encounter with the participant in the interview (Peoples, 2021).

Emancipatory knowing: "Issues of social justice" (Chinn et al., 2022, p. 1).

Empiric knowing: "The nature of what we can know through sensory experiences" (Chinn et al., 2022, p. 2).

Ethical knowing: "The nature of right and wrong" (Chinn et al., 2022, p. 1).

Fore-conception: A person's prior knowledge of a phenomenon that may include biases based on positionality (Peoples, 2021).

Hermeneutic circle: The process of understanding the phenomenon through a revision of fore-conceptions (Peoples, 2021).

Knowing: Fluid, internal, and unique to a person and their experiences. It may be indefinable that people know more than they could ever express as formal knowledge. Knowing is a way of being, and what people value drives what they know (Chinn et al., 2022).

Knowledge: Ideas expressed that are considered true and justified or empirically validated by disciplinary experts. “What we know drives knowledge development in a cyclic process” (Chinn et al., 2022, p. 3).

Medical cannabis: Cannabis used for medical purposes as defined by state law. Cannabis is used by individuals for therapeutic purposes (NCSBN, 2018).

Personal knowing: “Awareness of Self and others” (Chinn et al., 2022, p. 2).

Patterns of knowing: The patterns of knowing are the “being” of nursing, whereas nursing knowledge is epistemological or the expression of the being into definable knowledge about the nursing profession. Patterns of knowing are how individuals “do” nursing and are further delineated into emancipatory, ethical, empiric, personal, and aesthetic knowing (Chinn et al., 2022).

Praxis: The expression of emancipatory knowing through action to make a change (Chinn et al., 2022).

Qualifying condition: A medical condition or symptom that qualifies the patient to participate in the state’s medical cannabis program. Qualifying conditions vary among states in the United States (NCSBN, 2018).

Assumptions

Hermeneutic phenomenology assumes that the researcher's positionality cannot be separated or suspended and should be addressed throughout the research process (Peoples, 2021). Context is also important in shaping knowledge (Chinn et al., 2022). For this study, psychological, cultural, and sociopolitical contexts were considered when interpreting nurse educators' experiences with knowing medical cannabis and its meaning for nursing education. The hermeneutic circle is the mechanism by which a researcher's assumptions and prior knowledge are made explicit and revised as data emerge during the analysis (Peoples, 2021). While I participate in the medical cannabis education community and have done so since 2015, I was president of the ACNA when Cannabis Nursing was granted specialty practice, and I was an editor of *Cannabis Nursing: Scope and Standards of Practice*. My experience has been that all nurses may not feel at ease talking about cannabis, so I cannot expect all nurse educators to feel comfortable discussing cannabis or believing that cannabis is therapeutic. Another assumption I had was that all nurse educators have experience knowing medical cannabis in some capacity but may not recognize the differences between knowing and knowledge.

Scope and Delimitations

Not all nurse educators have used cannabis or taught it, but they have still experienced it in some capacity; the general term *experience* is used so that the participant described whatever experience they had encountered with knowing medical cannabis, which begins with experience with medical cannabis education. In this study, I explored all experiences of knowing medical cannabis and education, even if they had not

intimately worked with medical cannabis patients or had formal knowledge. I chose nurse educators because their experiences—in whatever capacity—would provide information about their interpretation of knowing medical cannabis and its meaning for nursing education.

Limitations

One challenge with interpretive analysis of qualitative data is that subjectivity is considered a weakness without a clear path for replication. However, replication is not the purpose of qualitative research because everyone's response is unique. I would also argue that no study is perfectly replicable as humans, by nature and through time, have different experiences and, therefore, different interpretations of meaning. I chose hermeneutic phenomenology as it allows for potential biases to be made conscious to recognize and avoid them as much as one can intentionally (Peoples, 2021). It is essential to recognize that unconscious bias is still ever-present, and maintaining data and meaning, as the participant describes them, is one way to address the concern. Additionally, documenting the detailed process, presenting the rationale, and continuing until saturation is achieved will assist with issues of dependability and transferability (Peoples, 2021). Generalizing the findings, however, is not the focus of phenomenology; it is attending to shared meanings of experiences (Peoples, 2021).

Potential barriers included gathering in-depth interviews about a possible controversial topic from nurse educators located in states where medical cannabis is legal. Access to participants with various experiences may pose a challenge if participants believe that they need direct experience or knowledge to participate, or some

could have been hesitant to discuss the types of experiences they had, especially if there was a concern about legality. Therefore, snowball sampling served as a backup; however, it was unnecessary. I established a trusting relationship by clarifying the process, confidentiality, and consent and reminded participants that they could stop the interview at any time or withdraw from the study. Communication during the interview was nonjudgmental and gentle in prompts to expand further.

Significance

This study is significant in that the exploration of nurse educators' experiences with medical cannabis education, whether personally, ethically, empirically, aesthetically, or emancipatory with patients, family, friends, colleagues, or the lack thereof, provided more context about the meaning of knowing medical cannabis in nursing education. Additionally, utilizing the conceptual framework offered insight into how nurse educators interpret the value of diverse types of knowing derived from experiences fundamental to the nursing discipline (Chinn et al., 2022). Phenomenological research also focuses on human experience, which is essential in individualized care rather than an overreliance on generalizations or standardized care (Hurley et al., 2022). In terms of social change, exploring the meaning of nurse educators' experiences with medical cannabis education provided more information regarding the reported lack of medical cannabis education and knowledge and may direct future research related to operationalizing medical cannabis content into nursing education. Operationalizing medical cannabis content into nursing education could provide an opportunity to improve patient education about the use of medical cannabis as well.

Summary

The problem is that there is a lack of understanding of nurse educators' experiences with medical cannabis education and its meaning in nursing education. The purpose of this study was to interview nurse educators to explore their experiences with medical cannabis education and its meaning for nursing education by using a hermeneutic phenomenological approach and a secondary lens of patterns of knowing in nursing by Chinn et al. (2022). This study is significant for understanding how nurse educators interpret the meaning of medical cannabis based on their experiences and nursing education. The data also provided more information about the lack of medical cannabis education for nurses, despite the 2018 NCSBN's recommendation that all nurses know about medical cannabis to care for patients who use cannabis therapeutically and effectively. This research has the potential to create social change by exploring the approach to educating nurses about the use of medical cannabis, which could lead to more open conversations between nurses and patients related to product safety and medication interactions to promote well-being. Chapter 1 included an overview of the study, and in Chapter 2, relevant literature is reviewed in detail.

Chapter 2: Literature Review

Introduction

The research problem that was addressed through this study was that there is a lack of understanding of nurse educators' experiences with medical cannabis education and its meaning for nursing education. The purpose of this phenomenological qualitative study was to explore nurse educators' experiences with medical cannabis education and its meaning for nursing education. The literature reiterates that there is a lack of knowledge and education for healthcare professionals related to medical cannabis, even though most feel it is important for safe patient care and believe it can be a therapeutic option for patients. Literature related to the topic of medical cannabis is often in search of knowledge and attitudes about cannabis use among healthcare professionals, nursing students, and nurse practitioners. However, Kurtzman and colleagues conducted two studies in 2022 that identified professors or deans and academia as a defining characteristic (Kurtzman et al., 2022a, 2022b). Their study, using a survey design, identified 42 professors or deans out of 811 participants (Kurtzman et al., 2022a), but the other, which included one person in academia out of 28 and utilized focus groups and interviews, was the closest study I found to my research topic, population, and qualitative-type design (Kurtzman et al., 2022b). Most studies were in survey form without interviews. Nevertheless, important findings from previous literature were found and are described in the next sections. This chapter includes the search strategy, the theoretical foundation, and the conceptual framework for this study. I also review the

literature that informed key concepts and describe how this study fills a gap identified in the literature.

Literature Search Strategy

The literature search strategy included CINAHL, Medline, ProQuest, PubMed, SAGE, and ERIC databases from the Walden University Library. The criteria set for the search were from 2018–2024 and peer-reviewed articles, and duplicates were removed. Search terms included *education, nursing education, nurse, educator, phenomenology, hermeneutics, experience, ways of knowing, ethical, empiric, aesthetic, personal, emancipatory, knowledge, students, curriculum, cannabis, marijuana, THC, CBD, tetrahydrocannabinol, and cannabidiol.*

Conceptual Framework

The theoretical foundation for this study was based on Martin Heidegger's philosophy for hermeneutic phenomenology, which is described throughout this section for alignment, and further expressed during data analysis. The patterns of knowing in nursing framework, revised by Peggy L. Chinn, Maeona K. Kramer, and Kathleen Sitzman, clarifies the various knowing patterns necessary in the nursing discipline, a framework originally developed by Barabara Carper in the 70s (Carper, 1978; Chinn et al., 2022). The overall idea is that nurses use multiple patterns of knowing beyond empirics to effectively practice as nurses. This framework aligns with this study because most nurses report not having knowledge or being educated about medical cannabis but still overwhelmingly support it as a therapeutic option, which is detailed in the Literature Related to Key Concepts section.

Identifying specific concepts before data collection is often contradictory in phenomenology, as it could narrow the researcher's interpretation of the participants' experiences based on their presuppositions before the data can be analyzed. However, in hermeneutic phenomenology, Heidegger argued that language already shapes people's ideals, and the process of interpretation cannot be rid of presuppositions (Palmer, 1969). A conceptual framework may be applied secondarily to the primary lens of hermeneutic phenomenological philosophy. However, the researcher's exploration must remain open to understanding beyond the preliminary conceptual framework to provide a more holistic account of the participant's experiences (Peoples, 2021). Interpretations are also considering what was left unsaid (Palmer, 1969). Therefore, the patterns of knowing in nursing are secondary to exploring the spoken and unspoken language that the participant uses to describe their experiences with knowing medical cannabis. Different patterns of knowing emerged, and I explore them in more detail to understand the types of knowing nurse educators describe and omit when describing what they know about medical cannabis. This approach speaks to issues with epistemology, morality, and ethics that medical cannabis evokes in various leadership positions when making policy decisions (Zarhin, 2020) by taking an ontological approach and exploring experiences that contribute to their knowing. As Heidegger indicated, knowing is understanding (Palmer, 1969).

Appreciating other patterns of knowing provided more insight into how nurse educators use different patterns of knowing beyond empirics alone. While most nursing education is focused on evidence-based practice or empirical knowledge, patterns of

knowing are aligned with the philosophy of hermeneutic phenomenology by addressing *being* a nurse and ways nurses know beyond empirical data (Chinn et al., 2022).

Concepts of Interest

Patterns of knowing are formed through experience (Bonis, 2009). Experience is an antecedent of knowledge, and the consequences of knowledge are understanding and meaning (Bonis, 2009). For this study, the hermeneutic phenomenological approach considers experience as a way of knowing, and knowing is expressed using language; language, already shaped by people's presuppositions, is how understanding becomes interpreted (Palmer, 1969). The language that describes patterns of knowing in nursing served as the secondary conceptual framework, including emancipatory knowing, personal knowing, ethical knowing, aesthetic knowing, empirical knowing, praxis, and context (Chinn et al., 2022). Because hermeneutic phenomenology served as the primary philosophical foundation for this study, its relation to the conceptual framework is further explicated.

Empiric Knowing

According to Chinn and colleagues, empiric knowing is the science of nursing. It is based on what people can physically view and verify and includes objective and subjective truth or "varying degrees of objectivity" (Chinn et al., 2022, p. 11). Interviewing and interpreting are empiric methods (Chinn et al., 2022), like what Heidegger described about the language used to understand and interpret meaning. Language has various meanings for different people, making it impossible to fully remove presuppositions or remain completely objective when searching for the meaning

of being (Palmer, 1969). An example of empiric knowing related to medical cannabis may be that the nurse has reviewed multiple research studies of patients reporting pain relief with using cannabis, which also include varying levels of objectivity. Multiple nurses indicated that they knew research about cannabis was evolving, but there were not many studies to draw from, which is an example of empiric knowing (Schuhmacher et al., 2024). Phenomenological studies are one method to formally express empiric knowing as empirical knowledge (Chinn et al., 2022).

Ethical Knowing

Ethical knowing includes ethics and morality. For example, ethical codes, guiding principles, laws, and role descriptions are epistemological in nature (Chinn et al., 2022). Morality, however, is behavior-based and typically formed based on past experiences, forming who people are (Chinn et al., 2022). Martinsen, a nurse philosopher, argued that nursing is a moral enterprise, and phenomenology aligns with nursing's ethical obligations by providing a means to understand individual needs by moving away from standardization and scientism (Norlyk et al., 2022).

Ethical knowing may not always align with an individual's morals as a nurse. Knowing that medical cannabis is illegal in one's state and that patients are using it anyway and look to one to understand drug interactions creates an ethical and moral dilemma. Are nurses morally sound if they refuse to provide safety information about an illegal substance, knowing it could cause harm to the patient? Phenomenology provides a method to understand the complexities of ethical knowing in nursing to help inform future practice (Hurley et al., 2022).

Aesthetic Knowing

Aesthetic knowing is compared to the art of nursing and is more than how skills are conducted. This type of knowing is to consider the whole, comparing it to what may have worked for patients or students in the past, such as cultural differences, generational gaps, level of education, learning preferences, tools available, and ability necessary to complete a lesson or caring encounter. Aesthetic knowing may include small modifications to practice based on the situation or how the patient reacts and the nurse's ability to read the room and act accordingly. One example Chinn and colleagues described is how a nurse approaches a fearful child. A nurse may use distraction, share information, and communicate to allow the child to relax (Chinn et al., 2022). An example of using medical cannabis as context is if a patient asks a nurse about their medical cannabis products after the provider advises the patient that cannabis interacts with their medications. To be effective, the nurse must use a nonjudgmental approach by providing education about potential medication interactions appropriate to that patient's learning needs.

Authors Josephine Paterson and Loretta Zerdad published *Humanistic Nursing* in 1976, using a phenomenological design to explicate the nursing discipline further. They highlighted how phenomenology was used to explore the artistic science of nursing, which was difficult to articulate with a positivistic approach (Norlyk et al., 2023). Heidegger also considered language an art; without it, there is no openness of *Being* to be understood (Dahlstrom, 2023).

Personal Knowing

Personal knowing may be negative if the nurse exercises bias and blocks therapeutic communication. Recognizing the experiences that have informed one's biases and reflecting on how they may affect the care provided is how one can come to know the Self in personal knowing (Chinn et al., 2022). In one study, a participant verbalized their personal bias against cannabis (Schuhmacher et al., 2024), which is an example of personal knowing.

Spirituality is also personal knowing (Chinn et al., 2022). The authors of one study sought to understand if religiosity mattered in university students' (medicine, $n = 163$; nursing, $n = 190$; social work, $n = 187$) attitudes and beliefs toward medical cannabis. They concluded that religious students were less likely to support medical cannabis use (89% vs. 95%; Edelstein et al., 2020). To provide an example of a lack of personal knowing, and without accounting for the study's confounding variables, if the participants of the study were unaware that their religion affected how they viewed cannabis, it would be considered implicit and not knowing the Self. In 1984, Patricia Benner referenced phenomenology to explore nurses' lived experience and uncover implicit aspects of personal knowing to improve nursing practice (Norlyk, 2023).

Emancipatory Knowing

An example of emancipatory knowing medical cannabis is knowing all patients cannot afford medical cannabis or have access based on governmental policies. Emancipatory knowing is revealed through questioning social constructs, knowing there is a more equitable solution, and envisioning a path for improvement (Chinn et al., 2022).

An example related to emancipatory knowing is recognizing that more Black people are arrested than Whites for cannabis even though rates of use are the same (American Civil Liberties Union, 2020) and considering ways to become involved with the community to promote social equity programs for cannabis business owners. Conducting phenomenological research is a method of formalizing emancipatory knowing by recognizing that the reductionist approach may, at times, be dehumanizing (Norlyk et al., 2022), and phenomenology explores the more humanistic aspects of knowing in nursing.

Praxis

Praxis is all patterns of knowing converging and pointing to an action that can be taken. For example, an immunocompromised patient uses cannabis from his friend and does not know what is in the product. Regardless of any bias (personal knowing) towards using cannabis, recognizing that an immunocompromised patient using untested cannabis could be a source of infection (empiric knowing) is a major concern for the patient population. However, because there are no opportunities to provide regulated cannabis products because it is illegal in one's state (ethical knowing), it calls to question if it is an equitable (emancipatory knowing) solution, given that most other states have allowed its use. Praxis would be working towards legalizing it in one's state to encourage product regulation. While nurses should not encourage patients to break the law, it may be unreasonable to expect the patient to stop using cannabis if, after other pharmaceuticals have failed, they found substantial relief with cannabis, and why the context of the situation also matters.

Context

Context is also important in shaping knowledge (Chinn et al., 2022). Heidegger also argued that “all understanding is temporal, intentional, and historical” (Palmer, 1969, p. 140). “When individual, professional, or societal values change, the potential exists for creating fundamental changes in knowledge and practice” (Chinn et al., 2022, p. 48). For this study, psychological, cultural, and sociopolitical contexts were considered when interpreting nurse educators’ experiences with knowing medical cannabis and its meaning for nursing education without judgment. Hermeneutic phenomenology allows participants to share rich data, which have the potential to uncover hidden meanings in knowing medical cannabis based on the absence of language related to each pattern. The hermeneutic principle can be compared to a body; all parts go unnoticed until a part breaks. It is not until that instance that the meaning of that part is revealed compared to the whole (Palmer, 1969), which takes context into account.

Literature Review Related to Key Concepts

Multiple studies have been conducted related to healthcare professionals and cannabis. Gardiner and colleagues (2019) reviewed 26 studies to examine health professionals’ beliefs, knowledge, and concerns about medical cannabis. They concluded that healthcare professionals generally supported medical cannabis, but self-perceived knowledge was poor (Gardiner et al., 2019). Out of 327 healthcare professionals, 87% believed that they knew therapeutic benefits; however, only 14% were prepared to talk to patients, and 94.6% wanted a university to provide training, supporting faculty roles, and

involvement in educating healthcare professionals in a formal setting (Jankie et al., 2023).

Throughout the literature, it was clear that medical professionals want more education about medical cannabis, and most support the use of cannabis for therapeutic purposes but also report a lack of knowledge.

Cannabis Law and Policy

In research studies about cannabis legality, authors concluded that whether cannabis was legal or not, nurse professionals held similar views about the use of medical cannabis (McCall et al., 2023; Parmelee & Clark, 2022). Qualifying conditions vary across states and are not always based on quality evidence, which may be the reason that in one study, nurse practitioners continued to select conditions that were not supported by evidence after an educational intervention (Klein & Bindler, 2022).

Students expressed that even though medical cannabis may not be legal in their state, they may take jobs in other states where it is legal or that it may become legal in their state in the future, which is why they believed there still should be education about it in school. Even in states where it was legal, one student mentioned that federal laws were still a barrier and may jeopardize their license (Parmelee & Clark, 2022). It shows that nurses may not understand the distinction between providing medical advice, which is outside most nurses' scope of practice, and education about a substance patients are consuming. This is where morality and ethics intersect. Nurse licensure is also governed by state law, and nurse practitioners (physicians, too) with prescribing privileges still cannot prescribe cannabis because it is a Schedule I drug.

When nurse leaders were interviewed, however, they reported that misaligned federal and state laws needed to be addressed. Nurse leaders also reported research challenges, access concerns due to hospital policies or practice authority, and added costs because insurance would not cover cannabis as additional challenges to practice (Kurtzman et al., 2022a).

Attitudes

Most healthcare professionals believed cannabis had therapeutic value even after reporting limited knowledge. Out of 811 nurse leaders, 76.9% believed cannabis should be removed from Schedule I drugs to facilitate research, 80.3% believed legal access supports patient preferences, 68.9% said cannabis would be safer than other prescriptions for treating pain, 78.5% believed legalizing cannabis would result in safer products, 88.5% believed that it is effective for treating pain or other conditions, 77.2% thought insurance should cover medical cannabis, and 88.9% believed patients should be able to use it medically. In contrast, 7.7% said they would always view cannabis as an illicit drug (Kurtzman et al., 2022b).

Attitudes about the sufficiency of scientific evidence were more mixed. Of the nurse leaders, 45.9% believed there was enough evidence, and 30.7% believed there was not enough evidence (Kurtzman et al., 2022b). Negative attitudes were reported in most studies, albeit at a fraction of those who held positive attitudes about medical cannabis use. However, due to the research design, negative attitudes were not investigated in detail. One participant in an interview indicated apprehension about the benefits of cannabis use because of their past experiences with substance-dependent individuals and

concerns about potential societal ramifications post-legalization (Kurtzman et al., 2022a). Past experiences may have informed their understanding of potential risks with medical cannabis.

Knowledge and Education

The studies related to medical cannabis and nursing highlighted the importance of nurses being educated and very few nurses reported learning about cannabis in the academic setting (Balneaves et al., 2019; Kurtzman et al., 2022b; Parmelee & Clark, 2022; Zolotov et al., 2021). Out of 811 nurse leaders, 85% believed cannabis education should have been included in prelicensure nursing programs (Kurtzman et al., 2022b), which also aligned with what nursing students have reported (Balneaves et al., 2023; Parmelee & Clark, 2022; Sokratous et al., 2022; Zolotov et al., 2021).

The NCSBN's six essentials of knowledge were used as a framework in a survey of 1,346 (completed) nursing students in the United States, that revealed nursing students were not taught about medical cannabis in their nursing programs and that most of their information came from media and news (Parmelee & Clark, 2022). However, in 2023, Balneaves and colleagues surveyed nursing students in Canada (N=220), where cannabis is federally legal, and 37.7% reported that they had received education about cannabis from nursing school, and 75% indicated that it should be taught in prelicensure programs (Balneaves et al., 2023). Of 144 Canadian nursing students in clinical rotations, 22 felt their instructors supported them in addressing cannabis use in practice, 29 students indicated their instructors were unsupportive, and a majority felt neutral (n=90) (Balneaves et al., 2023).

Students also perceived stigma and bias about cannabis from faculty. For example, one student wrote in the free-text portion of a survey, “Some instructors frown upon it or doubt its efficacy, but do not explain why.” Another student wrote, “My teachers know nothing about what is currently used. There have been too many taboos and stigmas surrounding cannabis for any of my teachers to provide accurate information.” Some students believed that the stigma was the reason it was not provided in education, writing, “One of the reasons I have not been educated is because of the stigma around marijuana use” (Parmelee & Clark, 2022, p. 19).

A pilot test with 17 nurses who pursued a Doctor of Nursing Practice degree in a Nurse Anesthesia program measured pre- and post-education about medical cannabis. After taking the researchers’ piloted course, median knowledge scores increased from 3 to 16 (King et al., 2023). Researchers of another study indicated that their cannabis education intervention for nurse practitioners resulted in more willingness to discuss medical cannabis with their patients (Klein & Binder, 2022). This showed that continuing education courses may be effective for attitudes, stigma, knowledge, and willingness to discuss with patients. The NCSBN recommended that all nurses should be educated about cannabis to care for patients who choose to use cannabis as medicine (NCSBN, 2018).

Experiences With Medical Cannabis

A survey design was used for two studies about experiences with cannabis. Nursing students were the subject of one of the studies (Parmelee et al., 2022), and the other included 42 professors or deans out of the 811 nurse leader participants (Kurtzman

et al., 2022b). Of 811 nurse leaders, 63.9% indicated that they had family members, friends, or patients who had benefitted from medical marijuana use, which may provide clues as to why most nurses believed it had therapeutic value without formal education. However, 88.9% believed patients should be able to use cannabis for therapeutic purposes (Kurtzman et al., 2022b), but that left about a quarter of believers without personal experience of medical cannabis use. Of 291 nurse leaders, 5.8% reported that cannabis was dispensed like other pharmaceuticals, and 3.4% kept cannabis locked in patients' rooms for self-administration. Otherwise, 49.4% of nurse leaders reported that patients were given opioids instead of allowing them to use medical cannabis (Kurtzman et al., 2023). This study explored nurse educators' experiences in more depth and provided more context related to experiences similar to the nurse leaders' reports.

Justification of Concepts

Knowledge and knowing do not mean the same thing. Knowledge is a formal expression of knowing (Chinn et al., 2022). It was unclear if nurses were reporting a lack of empirical knowledge, the formal expression of empiric knowing, or if other patterns of knowing medical cannabis informed their attitudes about cannabis therapeutics. Previous literature has highlighted the challenges related to legality, the desire for more education in nursing programs, and the belief that medical cannabis can be therapeutic. However, when it came to the reported lack of knowledge, the belief that medical cannabis was therapeutic was where the gap occurred. Another limitation was limited research exploring nurse educators' experiences of knowing medical cannabis because they would be responsible for providing such education. A closer look at how nurse educators

experience patterns of knowing medical cannabis could provide a better understanding of the phenomenon or the barriers to including it in nursing curricula. Clarity around how nurse educators know medical cannabis could inform future development in educational interventions for faculty, nursing students, and nurses in practice.

Summary and Conclusions

The theoretical foundation used for this study was the philosophy of hermeneutic phenomenology for interpreting experiences. The conceptual framework, or secondary lens, patterns of knowing in nursing, was an important reminder that nursing knowledge is developed by experiences and learning empirical knowledge. The patterns of knowing illuminated other ways nurses know and how it informs practice. Research showed a desire for medical cannabis content to be included in nursing education. The literature review revealed gaps in nurse educators' experiences of knowing medical cannabis and what it meant for nursing education. Clarity around nurse educators' patterns of knowing medical cannabis could inform future development in educational interventions for both faculty and nursing students. Understanding how nurse educators experienced medical cannabis education and its meaning for nursing education may also reveal how education adapts to societal changes.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore nurse educators' experiences with medical cannabis education and its meaning for nursing education. This chapter provides an in-depth explanation of this study's research design and methodology. It describes the research design, rationale, and researcher role. The methodology section includes information on participant selection logic, instrumentation, and procedures for recruitment, participation, and data collection. The data analysis plan is also presented, along with a discussion of issues of trustworthiness and ethical procedures.

Research Design and Rationale

The research question for this study was the following: What are nurse educators' experiences with medical cannabis education and its meaning for nursing education?

The research design was hermeneutic phenomenology. Qualitative research is conducted when little is known about a topic, and the topic aligns with exploring individuals' experiences in depth to understand meaning (Ravitch & Carl, 2021). Phenomenology is focused on the experiences of a phenomenon as described by the participants. Hermeneutics is a tradition of phenomenology that allows for interpretation because it is believed that all biases cannot be completely bracketed from the research (Peoples, 2021). Hermeneutics also allows the researcher to consider the context and language used that could potentially affect experiences with a phenomenon (Peoples, 2021).

The secondary lens facilitates clarity around “knowing” and “knowledge” in nursing and attends to the curiosity that many nurses believe cannabis is therapeutic (knowing) but lack education (knowledge). Knowing emerged as different patterns, as described by Chinn and colleagues (2022). However, the essence of nurse educators’ experiences with knowing medical cannabis and its meaning for nursing education was the primary focus, which aligns with the qualitative hermeneutic phenomenological design.

Role of the Researcher

My role as a medical cannabis nurse educator influenced the choice to explore medical cannabis; however, my role as an active listener of participants’ experiences and perspectives remained the priority (Rubin & Rubin, 2012). Therefore, I was responsible for engaging with participants with differing perspectives and being mindful of personal beliefs’ influence on the overall process (Rubin & Rubin, 2012). My demeanor during the interview was nonjudgmental, nonleading, kind, approachable, and accepting of the participants’ responses, even if the response was not to answer or continue with the interview, which fostered a sense of trust (Ravitch & Carl, 2021). Clear communication about what to expect during the interview process, confidentiality, risks, benefits, and freedom to withdraw at any time was reiterated during the invitation and interview phase. Participants were asked screening questions, demographics, and one main open-ended question, and answers did not affect performance evaluations; therefore, if they were familiar with me or my work, they could decide if they wanted to proceed.

Writing memos throughout the process allowed reflexivity and continued engagement as I read each participant's transcripts individually and then together as a whole during data analysis (Ravitch & Carl, 2021). The hermeneutic circle, or how my understanding changed throughout the process, was documented as memos as my fore-conceptions or biases were acknowledged and revised as I interpreted the phenomenon (Peoples, 2021). While this process is something I was aware of, the goal was to authentically express the participants' experiences by using their words to describe their experiences (Rubin & Rubin, 2012). Acknowledging my biases throughout the process was ongoing and traceable through reflective memos.

Methodology

Participant Selection Logic

Participant inclusion criteria were (a) nurse educators in the United States, (b) 2 or more years of experience teaching in an accredited nursing program, and (c) in a state where medical cannabis is legal.

Participants with different experiences help explore the phenomenon more thoroughly (Creswell & Creswell, 2018); therefore, purposive and snowball sampling methods were used for this study. I chose a national sample because cannabis laws vary among states in the United States. However, the participants needed to reside in a state where cannabis is medically legal to avoid potential admissions of illegal activity. For this study, knowing medical cannabis also included firsthand experiences according to Chinn and colleagues' update to Carper's patterns of knowing (Chinn et al., 2022). If the criteria were that participants must have experience with medical cannabis knowledge, it

may be presumed that it only includes taking courses or teaching about medical cannabis. The criteria for having at least 2 years of experience teaching in an accredited nursing program were to gather data from those with experience in academic settings for information-rich responses of their experiences with knowing medical cannabis in the context of nursing education. Participants were notified of the inclusion criteria through recruitment and screening before the interview began. Two participants indicated that they did have experience teaching in an accredited nursing program. However, as the interviews continued, I realized that they misunderstood the criteria for accredited contact hours for teaching colleagues. While their extensive knowledge regarding medical cannabis education, in general, was valuable, I excluded the data from the analysis to remain focused on accredited nursing programs.

The number of participants was established through data saturation. Data saturation occurs when no new information emerges, which may be around eight to 15 participants or as little as 10 (Peoples, 2021). Breadth is less important than depth because qualitative phenomenology is focused on the phenomenon's essence or meaning for a group of participants at a particular time, not the generalizability of the findings (Peoples, 2021).

Instrumentation

In qualitative research, the researcher is the main instrument for collecting and analyzing the data (Bloomberg, 2023). Semistructured interviews are appropriate for capturing the phenomenon's characteristics while allowing flexibility based on participants' responses (Bloomberg, 2023). In the interview, demographics and one main

question were asked only about the participant's experience of the phenomenon (Peoples, 2021). Participants may describe their opinions rather than an experience about the phenomenon, and I asked if they provided an example of an experience that shaped their opinion (Peoples, 2021). Prompts related to what the participant shared were also used to encourage in-depth discovery, such as “Tell me more about that ...” The interview protocol instrument served as a guide to follow a series of steps during the interview, including an introduction, consent review, verbal consent to record the audio portion of the interview, the main interview question with possible prompts, and concluding remarks with what to expect moving forward (see Appendix A).

Recording the audio of an interview allows the researcher to transcribe and review over the course of the study using a comparative method for accuracy (Creswell & Creswell, 2018). Virtual interviews allowed access to participants located across the United States, where medical cannabis is legal. I used Zoom to record and downloaded (audio only) the MP4 to an encrypted password-protected folder on my personal computer for transcription. MAXQDA qualitative research software was used to transcribe the audio. From personal experience, MAXQDA transcribes audio more accurately than Zoom transcription. MAXQDA also tags the audio to match the transcript so the researcher can quickly find the audio that matches the transcript. There were no video recordings for privacy. A data collection log tracked all recruitment, data collection, and management steps by date, as recommended by Walden University (n.d.). Memos track the researcher's reflections about past experiences and how that may shape

interpretation (Creswell & Creswell, 2018), as well as thoughts about the interview, and, during analysis, they allow tracking of interpretations and biases (Bloomberg, 2023).

Procedures for Recruitment, Participation, and Data Collection

Nurse faculty with at least 2 years of experience teaching in an accredited nursing program in a medical cannabis legal state were recruited with permission through faculty-related social media forums (Facebook and LinkedIn). For social media faculty groups, I first requested permission from the group's administrator through private messaging. Saturation was achieved using this method. If saturation had not been achieved, email invitations would have been sent to nursing school deans in states where medical cannabis is legal. A social media template provided by Walden University was used to develop the social media post (see Appendix B). My contact information was included if potential volunteers had questions about the study. If volunteers believed they met the criteria and wanted to participate, the link to schedule an interview appointment was also provided on the post. The appointment settings did not allow participants to schedule within 7 days, so the welcome email and consent form (see Appendix C) were sent and returned before the interview.

The interview protocol (Appendix A) introduced the study, confirmed consent, screened participants, asked demographic questions, asked one main question with possible probes, and a debrief. It included an opportunity for the participant to ask questions and emphasized that the participant could stop the interview at any time. Interviews took place in a private, free-from-distraction location and were audio-recorded with verbal consent.

Participants were emailed a researcher-funded \$20 Amazon gift card to show gratitude for participating after the interview was completed. All actions related to the research were documented by date on a data collection log for transparency. All data collected are kept confidential in a 15+ character password-protected and encrypted folder on my personal computer. All identifying information are kept separate from the interviews, and identifying information was removed from the transcripts and replaced by assigned codes, such as P1, P2, etcetera. Documents will be stored for 5 years and destroyed by deleting them off my personal computer and emptying the computer's trash.

Data Analysis Plan

Heideggerian phenomenology differs from Husserl's phenomenology in that the researcher's biases and presuppositions are made known to understand how the researcher interpreted the data rather than bracketed or removed (Bloomberg, 2023). Husserl believed bracketing would set aside researcher assumptions as if the researcher's role could be removed (Bloomberg, 2023). However, for this study, I interpreted the meaning of the nurse educators' experiences coconstructed with the participants through open-ended questioning guided by Heidegger's hermeneutic phenomenology.

The data included the participants' responses to the main interview question, probing questions, and demographics. Participant demographics included age, state, nursing experience, education level, and type of nursing program experience. Memos of each interview were written immediately after and stored in password-protected folders on my personal computer. Verbatim transcriptions were read and reread while listening to the audio for a comprehensive understanding, known as the constant-comparative

method. Listening to the audio while reviewing the transcript was an important part of data analysis, as tone, speed, pauses, and the unspoken are also considered data, with more than half of communication expressed through nonverbal cues and body language (Peoples, 2021).

In vivo coding was employed during the first cycle of analysis. For a novice researcher, in vivo coding allows verbatim coding to align closely with what the participants share about their experiences (Saldana, 2021). Attention to the use of metaphors was also a cue to examine those meanings more closely. Metaphor clarification naturally occurred during the interview or as I compared the transcript with the audio by describing how I interpreted the meaning. The in vivo codes were condensed into categories that represent units of meaning. In phenomenology, coding data rather than reviewing the experience limits the researcher's insight into the meaning of the experiences. Therefore, I also used a strategy to help theme the data phenomenologically by continuing to ask what the phenomenon is or means (Saldana, 2021). For example, I asked what “medical cannabis is ...” or “medical cannabis means ...” and inserted the primary themes for comprehension.

Interpreting the meaning is the role of the researcher, who is also considered present in the analysis (Bloomberg, 2023). Attributes that speak to the meaning of the participants' experiences determined essential themes. Personal narratives or quotes that exemplified the meaning of the participant's experiences with medical cannabis knowledge were highlighted as they emerged. The commonalities among the participants

were coded and interpreted to understand the participants' experiences with medical cannabis education and its meaning for nursing education.

The secondary lens, the revised Patterns of Knowing (Chinn et al., 2022), was analyzed as it emerged from the data according to empirical, emancipatory, aesthetic, personal, and ethical knowing definitions (Chinn et al., 2022). The discovery was also open to additional patterns of knowing; however, none were identified. Analyzing the patterns or ways of knowing medical cannabis revealed the types of knowing nurses rely on when considering the therapeutic value of medical cannabis in the absence of formal education; however, this was not the primary focus of this study.

I applied the data to the theoretical foundation of hermeneutic phenomenology by asking and documenting the process of the hermeneutic circle (Peoples, 2021). I asked myself how my presence (Dasein) affected the research and how the research affected my presence. I described my fore-conception about knowing medical cannabis and how my understanding of it changed during analysis in memos (Peoples, 2021). Additionally, I applied the questions to interpret the participant's understanding of their experience. I considered how the participant was Dasein (being there) in the experience, what their knowledge was before the experience, and how that changed after the experience (Peoples, 2021).

I analyzed the data by reviewing the transcript against the audio for accuracy, removing identifying data and unnecessary words, such as "uh," "um," "you know," etcetera, reviewing the entire transcript with audio, and writing a reflective memo of initial thoughts or meaning. Then, I conducted in vivo coding and reviewed metaphors to

improve clarity of meaning, categorized codes into themes by considering what the phenomenon is and what it *means*, organized themes according to the context of the participant's experience, and highlighted direct quotes. I repeated those steps for all participants and wrote memos about similarities, differences, or how my understanding of the phenomenon changed. I reviewed collective data and identified essential themes of meaning in general.

Issues of Trustworthiness

The trustworthiness of findings is measured by credibility, transferability, dependability, and confirmability (Ravitch & Carl, 2021), which required continued methodological transparency (Bloomberg, 2023).

Credibility is gained when coresearchers and readers recognize the experience, and there is a fit between participants' experiences and the researcher's representation of them (Lincoln & Guba, 1985). Credibility was established through methodological alignment, transparent recruiting, acknowledging my positionality and knowledge of the phenomenon, and indicating discrepant cases during the research process and reporting (Saldana, 2021).

Transferability requires thick descriptions and providing recruitment and data collection details, so readers have sufficient context about the source of data (Lincoln & Guba, 1985). This was achieved by describing the selection criteria and rationale for participant recruitment. Generalizing the findings was not the goal of this study; however, providing rich and thick data allows the reader to determine applicability for their situation (Bloomberg, 2023).

Dependability necessitates using logical and traceable procedural approaches described in the research design, collection procedures, and reporting flaws (Ravitch & Carl, 2021). Data collection logs kept track of the steps I took for the study. Detailed memos utilizing the hermeneutic circle and data analysis process were ongoing. A constant-comparative approach was used against original recordings.

Confirmability requires that interpretations are linked to the data set and clearly represent the interpretation process, which is described when categorizing and identifying themes (Saldana, 2021). Confirmability was achieved through transcription, constant comparison with voice recordings, reflexive memos, and clear rationales of interpretations as themes were developed. Confirmability was also demonstrated by acknowledging my positionality and influence over the research in memos.

Ethical Procedures

The Institutional Review Board approval number for this study is 10-18-24-1022089. The approval was received before data collection to ensure minimize the participant's risk. Discrepant cases where criteria were not met were removed from the study.

Informed consent was obtained before interviews were scheduled. The informed consent was provided before the interview and reviewed during the interview introduction, which included potential risks and benefits, see Appendix C. Potential risks included emotional distress if the participant had a negative experience with medical cannabis. Participants were reassured before and during the introduction that they could stop the interview at any time or withdraw their participation without judgment or

questions and that participation was completely voluntary. Additional resources were provided for participants as a caution. Recruiting participants from states where medical cannabis is legal limited the risk of participants disclosing illegal activities related to cannabis. Additionally, I was prepared to redirect participants if the conversation led to illegal activities that may incriminate them if the data is subpoenaed. To review the interview protocol, see Appendix A. There were no direct benefits to the participants. However, their contributions could inform future education programs and direct future research related to medical cannabis content in nursing education. To show gratitude, participants who completed the interview received a researcher-funded \$20 Amazon gift card.

For confidentiality and privacy protection, identifying characteristics were removed or separately stored from the interview data, and names were replaced with codes in the transcript. All information related to the study was encrypted and stored in password-protected folders that only I can access. Different passwords and separate encryption were used for each folder. The data was stored on a computer requiring a password to be re-entered after 10 minutes of idle time. Demographics are reported as a general summary and not individually aligned with interview responses, limiting the reader's ability to deduce participants' identity. The priority is the participants' well-being and upholding privacy standards.

Summary

The design of this study is hermeneutic phenomenology to explore nurse educators' experiences with medical cannabis education and its meaning for nursing

education. I was the main instrument for this study, which makes personal biases and experiences known during the data collection and analysis process. The analysis was emergent as the data was analyzed. Themes were derived as the participants shared their experiences that formed the foundational meaning of the experience. Trustworthiness was established through consistent transparency in the study, and the Institutional Review Board approved the study before data collection. The results of the study are detailed in Chapter Four.

Chapter 4: Results

Introduction

The purpose of this qualitative hermeneutic phenomenological study was to explore nurse educators' experiences with medical cannabis education and its meaning for nursing education. The research question addressed in this study was the following: What are nurse educators' experiences with medical cannabis education and its meaning for nursing education? This chapter will describe the study's setting, participant demographics, data collection and analysis, evidence of trustworthiness, and results.

Setting

The setting of the study was in the United States, in states where medical cannabis was considered legal. The states represented are described in Demographics. Interviews were conducted via Zoom from my private office. The participants also needed to be in a private location where they could answer questions freely, which was confirmed by each participant at the beginning of the interviews. Participants and I could see each other, but the Zoom software's video recording was toggled off, so only audio was recorded. Recording only began once the participants confirmed consent and screening criteria and indicated that they understood that they would be audio recorded. As the interviewer, I made small talk to help participants feel at ease before we got started. Participants appeared comfortable; some were excited, and a couple were cautious with words.

Demographics

Demographics for the 11 participants included age, practice state, education level, years of experience as a nurse educator, and type of nursing programs they had

experience teaching in; see Table 1. Age was included due to the rapidly changing cannabis laws over the last 40 years. Participants' ages ranged from 34 to 71 years old, with an average of 49.18 years old. The nurse educators practiced in nine different states that allowed medical cannabis in some form. There were seven nurse educators with master's degrees and four with Doctor of Philosophy degrees. Years of experience as a nurse educator ranged from 2–25 years, averaging 8.60 years of experience. The types of programs the participants had experience teaching in were Licensed Practical Nurse, Registered Nurse, Bachelor of Science in Nursing, Master of Science in Nursing, and Registered Nurse to Doctor of Education.

Table 1*Participant Demographics*

Demographics	Data
Age	
30–39	4
40–49	1
50–59	3
60–69	2
70–79	1
State	
California	1
Michigan	1
Missouri	1
New York	2
New Hampshire	1
North Carolina	1
Ohio	1
Pennsylvania	2
Virginia	1
Education level	
Master’s degree	7
PhD	4
Teaching experience type	
LPN	3
RN	6
BSN	6
MSN	1
RN to EdD	1
Teaching experience years	
2–9	7
10–19	3
20–29	1

Data Collection

The Institutional Review Board at Walden University approved this study on October 18, 2024. The approval number is 10-18-24-1022089. The flyers were posted on LinkedIn, and I requested permission to post on a Facebook faculty group page. Most of the initial volunteers did not meet the criteria. Once I obtained approval from the Facebook faculty group, more volunteers met the inclusion criteria. Emails with consent were sent to the email addresses used to schedule the interview, which were returned. All

but one showed up for their scheduled interviews. The first interview took place on November 6, 2024, with one to three interviews a week until the last interview on December 19, 2024.

Out of the 13 interviewed, two participants did not meet the inclusion criteria of having experience teaching in an accredited nursing program. Though they answered “yes” to the screening question of having experience teaching in an accredited nursing program, their experience was with teaching patients or colleagues. While the participants had valuable experience teaching about medical cannabis, it was too broad for this study’s purpose of finding the meaning for nursing education. Therefore, 11 participant interviews were analyzed. For each participant, the interview protocol (see Appendix A) was used to ask them one main question, and, depending on the participant’s responses, I gently probed for further details of their experiences with knowing medical cannabis to elicit rich details about their experiences. Each interview ranged from 20–90 minutes. The participants were also notified that I would send a link to the publication once it was published. The interviews and audio recordings went as planned during data collection without unusual circumstances. Once the interviews ended, more than half of the participants wanted to understand how I decided on this topic for my dissertation.

The audio was recorded using Zoom. It was then downloaded to an encrypted file and uploaded into MAXQDA software for a better quality transcription. The MAXQDA software allowed me to play whatever section I read for comparison and accuracy.

Data Analysis

I listened to the audio and read the transcripts using a constant comparative method. In vivo codes were highlighted in MAXQDA as I listened to the audio. I reviewed the data by reading the transcripts, listening to the audio, and highlighting verbatim phrases that I interpreted as significant considering the whole discussion. This continued with each interview until no new information emerged. The interviews were coded by using verbatim words that represented participants' experiences. However, with phenomenology, understanding the meaning of the participants' experiences also requires interpreting statements in the context of how they are expressed (Peoples, 2021). While listening to the interviews as I coded, I added codes that represented the meaning of their experiences compared to the whole. For example, Participant 11 said, "So I understand the need for having different types of pain modalities at the disposal of family members, especially with terminal illness, and how there can be some utility in that type of access to that type of medicine." I placed this statement under the code "medical utility" to represent that the participant considered cannabis medicinal in some circumstances. I repeated this with all transcripts, where common codes emerged to form units of meaning or categories.

I considered the categories by prefacing each code with "knowing medical cannabis is ..." and "knowing medical cannabis means ... for nursing education" to identify the major themes. This ensured that I coded the data phenomenologically without straying too far from the essence of their experiences. See Results for examples of how participant statements were coded and arranged into categories to identify major themes.

Evidence of Trustworthiness

Credibility

Credibility was demonstrated by using the phenomenological approach based on the hermeneutic philosophical foundation while also allowing for patterns of knowing to emerge as I explored nurse educators' experiences with medical cannabis. Recruitment included LinkedIn and Facebook, and saturation was reached so there was no need to reach out to deans and directors as initially thought. My knowledge of the phenomenon was considered during the analytical phase to ensure that I captured the participants' experiences without inserting my own beliefs. Discrepant cases were noted for each theme, and the rationale for excluding two participants was explained.

Transferability

The goal in hermeneutic phenomenology is not to replicate findings; however, providing rich descriptions of the data source, recruitment strategies, inclusion criteria, and rationale provides context to determine relevance to the reader (Bloomberg, 2023). I provided sufficient data and context to the reader to determine applicability to their settings. Recruitment and data collection were described, and exact verbiage was shared in the Appendix section. The demographics, inclusion and exclusion criteria, and rationale also achieved transferability.

Dependability

I demonstrated dependability by maintaining data logs, consents, transcripts, and recordings and writing detailed memos that tracked each step during the study for traceability. Additionally, the data analysis section described logical procedural steps,

and the constant comparative approach required multiple iterations of interpretations and understanding.

Confirmability

To ensure confirmability, tables included direct quotes, codes, categories, and themes to demonstrate interpretive alignment and accuracy. Although my awareness of medical cannabis could have influenced my interpretations, participant quotes ensured that interpretations were grounded in the nurse educators' words. Additionally, transcripts were checked for accuracy through constant comparison with the voice recordings to understand the meaning accurately.

Results

This section details the six major themes, evidenced by the participants' verbatim descriptions of their experiences with medical cannabis and what it means for nursing education. Tables with verbatim quotes, corresponding codes, categories, and phenomenological themes accompany each theme. The six themes related to nurse educators' experiences with knowing medical cannabis were as follows: (a) understanding therapeutic potential, (b) awareness of learning opportunities, (c) limited discussions with colleagues, (d) limited by time, (e) relevant to nursing content, and (f) curricular updates for nursing education.

Theme 1: Understanding Therapeutic Potential

When I asked each participant to describe their experience of first learning about medical cannabis, listed in Table 2, a few described an academic program (P4), a course they took (P8, P11), or awareness of the laws (P5). Others described searching for more

research-based information (P1) or information from a movie (P9). One was not sure where they first learned about it (P10). Four participants (P2, P3, P6, P7) first described a situation where a patient, family member, or friend used it medicinally. As the interviews unfolded, four additional participants (P1, P4, P5, P8) recalled experiencing a patient, family member, or friend using cannabis medicinally, which totaled eight participants (P1–P8) who had personally witnessed the effects of cannabis use. Participants P9, P10, and P11 did not share a direct experience but reflected on past caregiving experiences (see Table 2) and expressed acceptance of the potential benefits of medical cannabis to ease suffering. The emotional resonance of witnessing suffering strengthened participants' belief in the value of cannabis as a treatment option, particularly for terminal illnesses or severe conditions. Therefore, the phenomenological theme is that nurse educators' experiences with knowing medical cannabis involve understanding therapeutic potential.

Table 2*Participant Examples of Theme 1*

Participant responses	Codes	Category	Major theme
P1 “They’re getting the relief they never expected. How can you condemn that?”	Relief	Experience of medicinal cannabis use	Understanding therapeutic potential
P2 “A friend of mine was diagnosed with pancreatic cancer ... learn the medical benefits.”	Medical benefits		
P3 “When my husband was diagnosed ... and I had already worked in home health and saw the benefits with paraplegic and quadriplegic patients.”	Saw benefits		
P4 “Now I see as a self-medication to her terrible anxiety.”	Self-medication		
P5 “... has really bad anxiety precipitated by the pandemic and everything, so she’s been using gummies ... and has been able to decrease her PRN meds over the last few years.”	Decrease PRN meds		
P6 “Everyone knew what it was, and the nurse couldn’t give it. The parent had to give it, and it was like this whole process.”	Parent had to give		
P7 “If he didn’t have it, taking care of him was really difficult because just to try and move him, the spasms would be so severe.”	Difficult without		
P8 “I’ve had patients that utilize it for pain especially, and I mean it’s outstanding they’re not using any opiates.”	Patients utilize		
P9 “My grandmother was sick with cancer, and I saw her go through a lot of pain, and I think oh, my goodness, there was another way to deal with this instead of chemo, or maybe this was a way for her to help deal with chemo.”	Another way	Reflection on caring encounter	
P10 “I’ve worked before clinically as a hospice nurse ... and if that’s going to help, then whatever. Especially when we think about some of the other substances we use to stimulate appetite.”	If going to help		
P11 “And I’ve taken care of cancer patients, and my dad died when I was about [young]. So, I understand the need for having different types of pain modalities at the disposal of family members, especially with terminal illness, and how there can be some utility in that type of access to that type of medicine.”	Medical utility		

Theme 2: Awareness of Learning Opportunities

This theme captured how nurse educators sought out or were provided opportunities to learn about medical cannabis in a more formal way. Direct quotes are listed in Table 3. P2, P3, P7, and P8 took courses specifically about medical cannabis, and P4 and P6 were aware of medical cannabis courses. P5 noted that it was presented in their required annual education, and P11 indicated that medical cannabis was discussed in a couple of nursing courses they took. P1, P2, P3, P6, P9, P10, and P11 mentioned researching or the importance of research related to medical cannabis. P4 and P9 also mentioned learning about medical cannabis from the media. Expert opinion also surfaced to learn about medical cannabis (P6, P7, P9). The phenomenological theme is that nurse educators' experiences of knowing medical cannabis education involve awareness of learning opportunities.

Multiple participants prefaced their learning experiences with curiosity; however, P8's curiosity led to a visit to a dispensary where they provided educational material:

It piqued my interest, and I wanted to know more...there was an opportunity to take a class...I learned so much. Then, after a conference, being the curious sort, I wanted to go to a dispensary ... told them I was curious for my patients, and he shared a lot.

Table 3*Participant Examples of Theme 2*

Participant responses	Codes	Category	Major theme
P1 "I was curious about the benefits and harms. I'm enough of a nerd to go look it up. It's not my primary focus, but I at least wanted to learn about it. I've got this entire poster presentation with probably 25 references."	Curious Researched	Learning more	Awareness of learning opportunities
P2 "I said, oh, this sounds really interesting. I want to know more I went to a program put on by the community. I found out about [academic courses], and I did that. I kept reading, researching, and going to webinars."	Curious Courses about MC Research Webinars		
P3 "I found [organization] and seeing the research, participating in education It wasn't that the research was just coming out. It was that I discovered the research."	Education about cannabis Researched		
P4 "I've had colleagues go through a certificate program, I myself have wanted to enroll if I get a moment to breathe Listening to NPR about it."	Aware of courses, time barrier Media		
P5 "It has been utilized in [state] for many years, and it's uses were included in some of our required annual education."	Part of an annual education		
P6 "...the research was there to support that this is actually helping people. Neurology was like we are letting parents do this. I know that there are courses where nurses can specialize in medical cannabis."	Research Expert opinion Aware of courses		
P7 "I can remember doing a CME. There were 2 over the years that I have attended that were specific to medicinal marijuana and they were very helpful in helping me become more solidified. Just to hear some of those physicians talk and bring some of the statistics to back the efficacy and the safety of those products."	Courses about MC Expert opinion		
P8 "It piqued my interest, and I wanted to know more...there was an opportunity to take a class...I learned so much. Then, after a conference, being the curious sort, I wanted to go to a dispensary ... told them I was curious for my patients, and he shared a lot."	Curious Course about MC Conference Dispensary		
P9 "It was from media that I first learned about medical cannabis My husband works [court system], so I hear about it from him I've done some research We need more research."	Media Husband's occupation, Research need		

Participant responses	Codes	Category	Major theme
P10 “I mean, there’s plenty of credible research. I think there's such a disconnect from many educators to keep up with current practice and the research because it is so hard to keep up and not burn yourself out.”	Research vs. time		
P11 “The first time I heard about it was in nursing school. I took a death and dying course. I remember it getting brought up in an ethics class, too. We have to be mindful of the research . . . It doesn’t mean it's quality”	Part of nursing courses Research		

Theme 3: Limited Discussions With Colleagues

When I asked each participant about their experiences discussing medical cannabis with colleagues, conversations were limited to discussing issues of drug testing students or experiencing negative reactions from colleagues, noting it is illegal on the federal level. As indicated in Table 4, most discussions were related to student and staff use of medical cannabis (P5, P6, P7, P8, P10, P11). Although P3 shared positive experiences, they were aware of some nurses’ negative experiences, like P1 and P2. P4’s colleagues teach about medical cannabis but had not shared a discussion with a colleague. The phenomenological theme is nurse educators’ experiences of knowing medical cannabis education is *limited discussions with colleagues*.

Table 4*Participant Examples of Theme 3*

Participant responses	Codes	Category	Major theme
P1 “She was very, very much against having any information on medical marijuana at the conference because it's still not legal federally.”	Resistance to discuss	Negative	Limited discussions with colleagues
P2 “Until they learn the medical benefits from cannabis, they're still going to have that stigma. I really wanted to share this with the faculty. This one fourth semester instructor said Well, we can't do that. It's illegal.”	Have stigma	Negative	
P3 “I hear so many nurses say how they've been bullied, belittled, harassed. spoken down to, you know. Criticize all of those things ... But for me, personally, I have had really good responses.”	Aware of negative/ Acceptance	Positive	
P5 “I think we're all pretty positive because, again, we tried as a program to get that requirement removed. But we couldn't do it because one clinical partner required it.”	Positive Restrictive	Student use	
P6 “Not our current director, but the one before at an information session for prospective students - flat out said, we don't test for marijuana as part of our admission drug screen.”	Student	Student use	
P7 “Honestly, I think they could all appreciate a medicinal aspect from it. But again, we also have that stance that we are licensed nurses, so none of us would partake, and none of our students should partake because, you know, above and beyond. We have to be a prudent nurse and follow the letter of the law.”	Medicine appreciated but not for nurses	Student & nurse use	
P8 “I know that in Deans and Directors meetings, my colleagues at national meetings, the conversations didn't focus on the content ... they were more focused on how we deal with students who tested positive”	Colleagues focus more on drug testing	Student use	
P9 “We've had conversations, you know, in the hallways about the introduction of medical marijuana. In the instances of psychiatric disorders.”	Informal conversations re: psychiatric	Informal	
P10 “Anything to do with cannabis, we are always told to make sure their students understand any cannabis use under any condition; they risk their license. So, we don't really talk much about that.”	Strict policy—no discussion	Student use	

Participant responses	Codes	Category	Major theme
P11 "I've had people ask me about what I think about drug use before The only way you interact with that is they have a drug-free policy. So, the expectation is, not only are the employees not engaging in recreational or medicinal use of cannabis, but that extends to the patient population."	Drug-free policy	Nurse use	

Theme 4: Limited by Time

During the interviews, as indicated in Table 5, participants shared ways they have discussed medical cannabis with students, and others described barriers to teaching medical cannabis content. Most expressed a lack of time or extensive content to include in nursing curricula (P1, P6, P7, P10, P11). Four nurse educators discussed medical cannabis briefly (P2, P3, P5, P9). P4's colleagues teach about medical cannabis, but they noted a lack of time to learn about it themselves. P8, however, indicated that faculty owns the curriculum, which needs to be discussed since nurses will be affected by it. The phenomenological theme is that nurse educators' experiences of knowing medical cannabis education is *limited by time*.

Table 5*Participant Examples of Theme 4*

Participant responses	Codes	Category	Major theme
P1 "So I don't have time to provide that kind of education in the clinicals yet Just because in nursing school there's so much information to cram into them to get them to pass the boards."	Lack time	Barriers	Limited by time
P2 "I tell them, so here you are, you're one of the lucky ones. You're getting one hour of cannabis education. So, I let them know what the NCSBN guidelines are requiring."	Lucky 1 hour		
P3 "Pain is one of the big ones that they talk about. And I do one lecture on pain specifically, and looking at it from the science, the anatomy, and physiology, those physiological responses. And then I tie in the endocannabinoid system."	Taught in one lecture		
P4 "I myself have wanted to enroll if I get a moment to breathe."	Limited time to learn		
P5 "So we talk about pain management and how it can be difficult if patients in the hospital are used to medical cannabis. And now, all of a sudden, we're going to try and put them on narcotics - they might be resistant. That's usually a discussion we have in our pain module, but I think that's the only place I'm aware of that it's even mentioned in curriculum."	Discussed once		
P6 "We would love to teach them every nook and cranny of every specialty in the field of nursing, but at some point, we get too content saturated."	Too much content		
P7 "You know there are so many things every day that we are bombarded with . . . there's just not enough hours in the day or time to be able to make it a full-blown lecture."	Not enough time		
P8 "Remember that faculty owns the curriculum in any accredited program. So, we provide curriculum. That is timely, accurate, and meets the framework for accrediting bodies and holistic medicine. But you have to put it out there as a nonjudgmental educative experience . . . everyone is affected or potentially affected by this."	Own it		
P9 "In the 1st lecture of Pharmacology, we introduced some of the introductory topics, including the 1970 Controlled Substance Act, in which Marijuana was scheduled and classified as Schedule I. I don't think it's in any other course that I teach I don't think we bring it up."	Introduced in Pharmacology		

Participant responses	Codes	Category	Major theme
P10 “We've added in so much content so recently in different programs I've taught; there's just so much, and there's so little time.”	Content vs. time		
P11 “But I also don't want to waste my time on something that I know realistically probably not in my lifetime going to see a patient in my work having legal access to that through the medical system that I'm planning to continue remaining being a part of.”	Time		

Theme 5: Relevant to Nursing Content

Throughout the interviews, participants shared how medical cannabis fits into nursing content either by suggesting courses it was related to or by sharing a condition for which it was used. This theme is presented in two separate tables. Table 7 indicates the courses participants mentioned as relevant to medical cannabis content. Table 8 shows the types of conditions they knew medical cannabis had been used for. The phenomenological theme is that nurse educators’ experiences of knowing medical cannabis education is *relevant to nursing content*.

Table 6

Relevant Courses Participants Mentioned, Theme 5

Topic	Participant mention
Legal/Ethical	P2, P3, P4, P5, P7, P8, P9, P10, P11
Pharmacology	P1, P2, P3, P5, P7, P8, P9, P11
Holistic/Alternative	P2, P3, P4, P8, P10, P11
Mental Health/Sub abuse	P2, P7, P9, P11
Home Care	P1, P3, P7, P9
Advocacy	P3, P7, P8, P9
Community	P2, P10, P11
Pain	P3, P5, P11
Research	P3, P8, P11
Cultural	P4, P8
Leadership Management	P7, P10
APN Prescription Rights	P8, P10
CHF	P2
Endocannabinoid	P3
Anatomy & Physiology	P3
Long-term Care	P3
Spiritual	P4
Professional Practice	P9
Death & Dying Course	P11

Table 7*Relevant Topics Participants Mentioned, Theme 5*

Condition	Participant mention
Cancer	P1, P2, P3, P7, P8, P9, P11
Pain	P1, P2, P5, P7, P8, P11
Appetite	P1, P7, P8, P10
Anxiety	P4, P5, P7, P11
Pediatric seizures	P1, P6, P8
End of life	P3, P11
Neurology	P3, P9
Sleep	P1
Urinary	P3
Glaucoma	P5
Cannabis hyperemesis	P6
Spasms	P7
PTSD	P9

Theme 6: Curricular Updates

I asked the participants, based on their experiences with medical cannabis, what they think it means for nursing education. Direct quotes from the participants are included in Table 8. Nine participants (P1, P2, P3, P5, P6, P7, P8, P9, P11) emphasized the importance of incorporating medical cannabis into nursing curricula, noting that it is medicinal. P1 and P6 indicated it would likely be in the future. P2 and P3 also highlighted the National Council of State Boards of Nursing (NCSBN) guidelines as a rationale for including medical cannabis in curricula. P10 mentioned we should keep up with it but indicated a lack of time. P4's response differed from the others in that they described a more significant movement with medicinal plants in general; their university already offers medical cannabis courses. P8, however, had already successfully updated their curriculum to include concepts related to medical cannabis. The phenomenological theme is that nurse educators' experiences of knowing medical cannabis education mean *curricular updates* for nursing education.

Table 8*Participant Examples of Theme 6*

Participant responses	Codes	Category	Major theme
P1 “This is going to take decades to get to, but I think that eventually, it will become part of the pharmacology classes there; there will be some touch on it just because there are so many different benefits, for so many different people, with so many different ailments that it will be as common as Tylenol at some point.”	Future curriculum	Curricular needs	Nursing curricular updates
P2 “I think most nurse educators don't know hardly anything about cannabis. I think they're fearful of the law about cannabis. I think it should be taught in nursing schools - absolutely. The NCSBN says what we need to know about it. Where else are we going to learn?”	NCSBN guidelines		
P3 “I think we are at a point where we're going to have to get this in the curriculum. NCSBN knows it. They've already put the information out there. If we are going to educate prelicensure nurses, we have to get that education started - and even for those who are post licensure, they still need to know, and they deserve to know.”	NCSBN guidelines		
P4 So I think medical cannabis or medical mushrooms, ayahuasca, is in this family of ancient knowledge and use of plant medicine. But as with anything, not revering it, not having a good relationship with it, using it recreationally, or for very superficial purposes of fun and interest, rebelliousness. That's not what I'm talking about. In my mind, they're called Nino Santos in Mexico. It falls under that category. So, it's almost like reclaiming its place as a true medicine, as an ally in plant form.”	Larger movement of medicinal plants		
P5 “I think it means we need to include it in nursing education. It's medical. We teach medical treatment modalities all the time.”	Need in education		
P6 “So I think as it becomes more and more a thing, it's probably something worth us incorporating into curriculum in some capacity. I could see where, if it truly makes it into full legality, it would be testable on boards, like this would be a medication. We'd need to discuss.”	Future curriculum		
P7 “Well, I think you almost need to put it into that category of nurses need to advocate for their patients. For a nurse to advocate to a physician – hey, maybe we could try this. And I think our students need to know that.”	Advocacy		
P8: “I create curriculum and I've been the head of [three types of nursing] programs. and it's something that we touch on. We thread it through the curriculum. Students need to know because they will be going out and being those practitioners. After six years, the feedback was great.”	Changed curriculum		
P9 “I think it needs to be in nursing education at some point... I think it's important for all of us to know what the laws are and what's changing, and how that can, and will ultimately affect our practice and especially how we teach it.”	Need in education		
P10 “I think it's just like everything else; we have to keep up with what's currently going on ... I just don't think there's	Limited time to remain current.		

Participant responses	Codes	Category	Major theme
enough time, so I don't think most educators keep up with what's current."			
P11 "I think, like alcohol, like tobacco products, and all their various forms now - it needs to be presented because it's something that patients and our community members are using. You need to have familiarity with it. I think that it is important, whether you partake in it, and whether you morally or ethically agree with it, you should be exposed to it."	Used in		community

Summary

The purpose of this hermeneutic phenomenological study was to explore nurse educators' experiences knowing medical cannabis education and its meaning for nursing education. Eleven nurse educators from states that allowed medical cannabis in the United States were interviewed, asking one central question about their experiences with knowing what medical cannabis is and what their experiences mean for nursing education. The iterative analytical process moved from verbatim quotes to In vivo codes. The codes were then categorized into related units of meaning. The final step included phenomenologically theming the data by asking what the phenomenon of interest *is* and what the phenomenon of interest *means*. The exploration of nurse educators' knowing medical cannabis and its meaning for nursing education revealed six significant themes: (a) understanding therapeutic potential, (b) awareness of learning opportunities, (c) limited discussions with colleagues, (d) limited by time, (e) relevant to nursing content, and (f) curricular updates. The Discussion, Conclusions, and Recommendations are further explained in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to explore nurse educators' experiences knowing medical cannabis education and its meaning for nursing education. I used a hermeneutic phenomenological approach to interview 11 nurse educators using semistructured interviews guided by one main question. A secondary lens, patterns of knowing in nursing (Chinn et al., 2022), served as an emergent framework to further understand patterns of knowing medical cannabis beyond empirical knowledge. This study was informed by the gaps in the literature related to nurses reporting a lack of knowledge yet believing that it can be therapeutic. Furthermore, it was unknown why medical cannabis concepts were not included in nursing curricula despite multiple states legalizing medical use.

Six major themes emerged from the data in relation to nurse educators' experience with knowing medical cannabis: (a) understanding therapeutic potential, (b) awareness of learning opportunities, (c) limited discussions with colleagues, (d) limited by time, (e) relevant to nursing content, and (f) curricular updates. Additional findings indicated that all patterns of knowing in nursing contributed to nurses' belief in the therapeutic potential of cannabis despite a lack of formal education for some, which is described in the Interpretation of the Findings.

Interpretation of the Findings

I used a hermeneutic phenomenological design to guide data analysis for this study. I asked the participants to describe their experience of first learning about medical cannabis. Clarifying questions included the following:

- What have your experiences been with others when the discussion is about medical cannabis?
- Based on your experiences with medical cannabis, what do you think it means for nursing education?

I used constant-comparative analysis, in vivo coding, categorization, and phenomenological theming by considering what the phenomenon is and means. Six themes describe what nurse educators' knowing medical cannabis is and means for nursing education: (a) understanding therapeutic potential, (b) awareness of learning opportunities, (c) limited discussions with colleagues, (d) limited by time, (e) relevant to nursing content, and (f) curricular updates for nursing education.

Understanding Therapeutic Potential

The first theme was related to how the participants described learning about medical cannabis. Eight participants shared situations involving patients, family members, or friends who had a terminal illness or chronic condition and found relief in the use of medical cannabis. Although three other participants did not indicate a direct experience with the use of medical cannabis, they reflected on their experiences with family or patients at the end of life as to how they understood ways medical cannabis could be used in some situations. Ways nurses know medical cannabis can be therapeutic

appear to be influenced by emotionally resonant experiences, either directly or through reflection.

In previous research, 88.9% of nurse leaders believed that medical cannabis may be helpful for therapeutic purposes, while only 63.9% indicated that they had family, friends, or patients who benefited from its use. This indicated that there was a 25% gap between those with experience of its use and those without but indicated that nurses believed in cannabis's therapeutic potential even though they indicated a lack of knowledge.

The use of the hermeneutic phenomenological design to explore the essence of nurse educators' experiences allowed the space for nurse educators to describe how they knew medical cannabis. Furthermore, a secondary analysis using the patterns of knowing framework revised by Chinn et al. (2022) provided the structure to interpret how nurses know beyond empirics. Although all patterns of knowing were relevant to the first theme of understanding therapeutic potential, personal knowing was reflected throughout the participants' sharing of their experiences and what medical cannabis meant to them.

Awareness of Learning Opportunities

Additional ways the participants learned about medical cannabis also highlighted that nurse educators are aware or have sought out more formal learning opportunities. The participants who experienced medical cannabis use with someone they knew emphasized curiosity as a motivator to seek out additional learning opportunities. Participants who sought out more than two formal opportunities to learn about medical cannabis were more likely to include medical cannabis concepts throughout their

teaching. Opportunities included researching information from credible resources, courses, or continuing education courses specifically about medical cannabis, as well as webinars, expert opinions, media, and conferences. One participant's curiosity led to a visit to a dispensary where they were provided educational material and a free t-shirt; they explained,

Evidently, the smell that was attached to the shirt and the material set off whatever sniffers they had, and so they were looking for dope, I guess, in my suitcase. So, the suitcase was, in effect, ruined, and they left it with all the little notes in it.

Anyway. At that point, I became kind of a big fan.

Their interest grew out of a drastic response to a benign situation to learn more, which I interpreted as emancipatory knowing.

Previous studies related to medical cannabis and nursing highlighted the importance of nurses being educated, yet very few report learning about it in an academic setting (Balneaves et al., 2019; Kurtzman et al., 2022b; Parmelee & Clark, 2022; Zolotov et al., 2021). This study aligned with previous research; however, it seems that nurse educators who seek out opportunities to learn about medical cannabis are more likely to expand empiric knowing and share that information with students. Klein and Binder (2022) also indicated that their educational intervention with nurse practitioners resulted in their willingness to discuss cannabis with patients.

Limited Discussions With Colleagues

Consistent with findings from Kurtzman et al. (2022a) and Parmelee and Clark (2022), the study also indicates issues with stigma, policy misalignment, and legal

uncertainty as barriers to integrating cannabis education into nursing programs and professional practice. This theme emphasizes the limited discussions with colleagues about teaching the content. However, nurse educators are aware of institutional policies as the laws change. The authors added that federal illegality continues to shape conversations in academic and professional settings, particularly influencing faculty hesitancy and institutional policy enforcement, and reflects ethical knowing. Ethical knowing is expressed through moral-ethical comportment, which is acting in a way that is justifiable and morally acceptable (Chinn et al., 2022).

Limited by Time

Using a phenomenological design, the study addresses a gap in the previous research to understand why medical cannabis concepts are not included in the curricula despite NCSBN's call that all nurses be knowledgeable about medical cannabis use, which two participants explicitly mentioned. Although four nurse educators described teaching medical cannabis, it was restricted to an hour or briefly mentioned in a lecture. Other participants reported the lack of time compared to the amount of content they had to teach for students to pass the board exam for practice. Multiple patterns of knowing emerged within this theme. Personal knowing was demonstrated through the awareness of time limitations. Nursing educators recognized that the amount of content and focus on nursing students passing the board exam demonstrated ethical knowing. Furthermore, praxis was clearly demonstrated by one participant who threaded medical cannabis concepts throughout curriculum. Additional patterns emerged; however, it is important to

recognize that patterns of knowing occur throughout each experience in a fluid-like manner and are highly contextual (Chinn et al., 2022).

Relevant to Nursing Content

Medical cannabis is relevant to nursing educational content and practice. Throughout the interviews, participants named various courses that medical cannabis concepts could be included in. Additionally, they indicated various medical conditions that they believed medical cannabis may be helpful for. This theme highlights the areas where medical cannabis could be threaded throughout the curriculum or discussed. The participant's ability to envision how medical cannabis could fit into nursing curricula illustrates an imaginative and forward-thinking approach to shaping future nursing education, thereby demonstrating aesthetic knowing. Like other themes, all patterns of knowing are demonstrated throughout the participants' dialogue.

Curricular Updates

I asked each participant what they thought their experiences with medical cannabis education mean for nursing education, which revealed the need for curricular updates. Findings from this study align with previous literature in that nurses report the desire for the use of medical cannabis to be included in nursing curricula (Balneaves et al., 2023; Gardiner et al., 2019; Kurtzman et al., 2022b; Parmelee & Clark, 2023; Sokratous et al., 2022; Zolotov et al., 2021). Participants demonstrated emancipatory knowing by indicating that their experiences with medical cannabis education mean curricular updates for nursing education. Six participants went beyond recognizing and demonstrated praxis by updating their curriculum, attempting to educate despite

institutional barriers, and attempting to change conflicting policies even after experiencing negative reactions from colleagues.

Limitations of the Study

The limitations of this study are that the findings are not generalizable and may be difficult to replicate given the approach used for this study. The focus of the study was not to generalize findings but to explore shared meanings of experiences at this place and time. As I highlighted in Chapter 1, replicability of studies is not a perfect process because social contexts continue to change perspectives and experiences over time. However, by attending to shared meanings and documenting each step throughout the process, the reader may determine if this study applies to their situation.

Researchers also approach data with unique perspectives and experiences, which may affect data interpretation. My approach to addressing this concern was by using a design, hermeneutic phenomenology, which acknowledges personal biases to make them known and, therefore, recognizable to be addressed and limited. I ensured trustworthiness by using direct quotes and including exactly what was said after asking specific questions.

Initially, I was concerned that nurse educators would believe that they need direct experience with teaching medical cannabis. However, six participants did not have this experience, which allowed variance in the participants' experiences to enhance the credibility of the interpretations of their shared experiences. Another concern was that because of the controversial topic, nurse educators would be hesitant to share detailed information; however, my priority was ensuring a trusting relationship by following the

procedures approved by the Institutional Review Board. As the quotes demonstrate, nurse educators spoke candidly about their experiences and provided rich data to analyze.

Recommendations

Based on the previous literature and the findings of this study where nurses and nurse educators experienced negative interactions with other faculty members, further hermeneutic phenomenological studies using the patterns of knowing as an emergent framework could include exploring experiences of nurse faculty with negative attitudes towards medical cannabis to understand the lack of communication and stigma among colleagues. It was evident that changing laws and policy updates affect educational and clinical practice. Expanding research on how federal and state policy conflicts affect educational and clinical practice could provide an informed approach to bridging these gaps. Also, designing and evaluating educational interventions that include all patterns of knowing may provide strategies for including medical cannabis education in nursing curricula. Another study could investigate how many schools have already added these concepts throughout their curriculum, as one participant described in this study.

Implications

The potential for positive change utilizing hermeneutic phenomenology as the philosophical foundation with the addition of patterns of knowing in nursing is described in this section.

Implications for Positive Social Change

It is clear from previous research and this study that nurses in states with legal medical cannabis need education and guidance for caring for the individuals in their

community regardless of testing blueprints. Social change may occur at the institutional level; however, it requires open communication and critical questioning to improve nursing education as practice evolves. Additionally, if concepts are creatively threaded throughout the curriculum, there is potential to provide guidance to other nurse educators who want to include medical cannabis concepts in nursing curricula but lack time. Future studies of how medical cannabis concepts are added to curricula could guide nurse educators to make these changes, thereby supporting positive social change by preparing nurses to educate patients about their use for a more informed approach to medical cannabis use.

Theoretical and Conceptual Implications

The theoretical foundation, hermeneutic phenomenology, is a philosophical approach to understanding and interpreting the meaning of a phenomenon as expressed by a participant that requires the process of viewing, preparing, and analyzing data to interpret the essence of an experience. However, it is essential to understand that hermeneutic inquiry is not to identify solutions to answers but to keep the conversation open and alive (Patton, 2015). Utilizing this foundation allowed openness to expression and added to previous research in new ways. Particularly how nurse educators know medical cannabis can be therapeutic, although there is a lack of education and experience with its use.

Patterns of knowing in nursing supported the secondary analysis for this study as it clarified ways nurses know and was useful for identifying how nurses know and appreciate the fluidity of the patterns to form praxis. Praxis is the action taken after all

ways of knowing converge where a nurse reflects on the issues of society. This study provided another way readers could understand the value of all patterns of knowing defining nursing practice beyond empiric knowing. Patterns of knowing were not the focus and did not guide the design of this study, which would have been contraindicated to exploring experiences in the words of the participant. However, after reviewing the data for essence, I recognized how patterns of knowing emerged throughout all experiences. The concepts were not explicit in that they aligned perfectly with each theme; rather, they were fluid, often co-occurring, woven throughout expressions of their experiences, and rooted in contextual factors. This realization implied that phenomenology as a foundational approach coupled with patterns of knowing in nursing provides a deep understanding of how nurses know through experience and could be used effectively to explore the more nuanced aspects that define the nursing profession.

Conclusion

Using hermeneutic phenomenology as the philosophical foundation, I explored the research question: What are nurse educators' experiences with medical cannabis education and its meaning for nursing education? Nurse educators' experiences with knowing medical cannabis *are* understanding therapeutic potential, awareness of learning opportunities, limited discussions with colleagues, limited by time, and relevant to nursing content, and nurse educators' experiences with knowing medical cannabis *mean* curricular updates for nursing education. Furthermore, a secondary conceptual framework, patterns of knowing in nursing, was considered as I explored gaps in the literature. It was unknown how nurses reported a lack of knowledge or experience with

its use, but they know medical cannabis is therapeutic. Based on the findings from this study, I submit that nurse educators know that medical cannabis is therapeutic from emotionally resonant experiences, either directly with a family member, patient, or friend, or through reflection of a patient or family member at the end of life. Patterns of knowing—empiric, personal, ethical, aesthetic, and emancipatory knowing—were threaded, often merging, and woven throughout participant experiences, and six participants demonstrated praxis by taking action to include medical cannabis concepts in their instruction. The potential for positive social change is that educating nursing students about medical cannabis use prepares them to provide patient education, which allows patients to make more informed decisions about medical cannabis risks and benefits.

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Appendix A: Interview Protocol

Introduction

Thank you for participating in this study about nurse educators' perspectives on medical cannabis education. I am excited to be here with you because your experiences as a nurse educator will help us understand medical cannabis knowledge and its meaning for nursing education.

Private Location

First, I would like to make sure you are in a comfortable, private location where you may answer questions related to cannabis freely. Would you confirm that you are in a private area where you can answer questions freely without others overhearing our conversation about potentially sensitive subject matter?

Consent

Next, let's review the informed consent, which allows you to understand the study before deciding whether to participate. Please stop me if you want me to clarify any part of the consent. [Read Consent] Do you have any questions about consent? If you understand the study and that the audio will be recorded and wish to volunteer, please indicate if you consent to be interviewed and audio recorded.

Voluntary Nature

Please note that you may stop the interview anytime, even after consent, and no questions will be asked. There are also no right or wrong answers, and you may take time to reflect or process, where I will respectfully remain silent. I also may not show agreement or disagreement as in a normal conversation. As the researcher, it is important

that your voice is heard based on your experience, without outside influence. I am interested in your unique experiences and thoughts and truly value your story, which will never be judged or taken for granted. Keep in mind that this is confidential; however, it is important that you do not use real names or share incriminating data in the rare event that the data is subpoenaed. I will first ask a few questions about you; then, I will ask one main question and see where that takes us! If there are no more questions, are you ready to get started?

Appendix B: Interview Questions

Screening Questions

1. Are you a nurse educator?
2. Do you have at least two years of experience working in an accredited nursing program in the United States?
3. Do you live in a state where medical cannabis is legal?

Demographic Questions

1. What is your age?
2. What state do you practice in?
3. What is your education level?
4. How many years have you been a nurse educator?
5. What type of nursing program do you have experience teaching in?

Main Question

I would like to know about your experience or experiences around knowing what medical cannabis is. Would you describe your experience of first learning about medical cannabis?

Possible Probes

1. You mentioned... tell me more about that.
2. When you said cannabis is/is not ... can you give me an example of an experience you had to make you feel that way?
3. What have your experiences been with others when the discussion is about medical cannabis?

4. Tell me about your experiences with medical cannabis education.
5. Based on your experiences with medical cannabis, what do you think it means for nursing education?

Interview Exit

And that concludes the interview! I want to thank you again for taking the time out of your day to help me understand the idea of medical cannabis from a nurse educator's perspective and explore how the topic has progressed to where we are today. If you have any questions, you may reach out to me at (removed), and if you have any concerns about the interview or process, you may reach out to a research committee member at (removed). Do you have any questions for me before we conclude?

Thank you so much and have a wonderful day!

Appendix C: Social Media Invitation



Caption: A new study about nurse educators' experiences and medical cannabis could help us understand its meaning for nursing education. If you are aware of medical cannabis, regardless of how much you know, and meet the criteria below, you are invited to participate in this important study.

Volunteer Criteria:

- Nurse educator in the United States
- Experience in accredited nursing programs
- Located in a state where medical cannabis is legal

About the study:

- 30–60-minute Zoom interview that will be audio-recorded (no videorecording)
- Volunteers will receive a \$20 Amazon gift card as a thank-you.
- Confidential participation – encrypted, 15+ character password-protected files, identifying information will not be included in the publication, and more –

Reach out privately for more details!

If you are ready to get started, schedule your interview here:
Removed

Please message Rachel A. Parmelee privately if you have any questions at
 Removed

This interview is part of the doctoral study for Rachel A. Parmelee, a Ph.D. student at Walden University. Interviews are expected to take place in November.