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titleEvaluating the Influence of Ethical Awareness Training on Professional Con-
duct Among Nursing Practitioners
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authorVivienne Davis, Cooper Hall, Gracie Turner
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beginabstract This study investigates the impact of a novel ethical awareness
training intervention on professional conduct among nursing practitioners, em-
ploying a mixed-methods approach that combines quantitative behavioral met-
rics with qualitative phenomenological analysis. Unlike traditional ethics train-
ing that focuses primarily on theoretical principles and case studies, our inter-
vention incorporates immersive virtual reality scenarios, reflective journaling,
and peer-mediated ethical deliberation sessions. We recruited 245 registered
nurses from three urban healthcare facilities, randomly assigning them to either
the experimental training group or a control group receiving standard ethics
education. Pre- and post-intervention assessments measured changes in ethical
decision-making, moral reasoning, and self-reported confidence in handling eth-
ical dilemmas. Additionally, we developed an innovative observational protocol
to document actual ethical behaviors in clinical settings. Results demonstrated
statistically significant improvements in ethical sensitivity ( $p < 0.001$ ), moral
courage ( $p = 0.003$ ), and consistency in ethical decision-making ( $p < 0.001$ )
among the experimental group compared to controls. Qualitative analysis re-
vealed enhanced moral imagination and greater capacity for ethical perspective-
taking among trained participants. The findings suggest that comprehensive,
experiential ethics training can substantially influence professional conduct be-
yond knowledge acquisition, potentially transforming how healthcare organiza-
tions approach ethics education. This research contributes original insights into
the mechanisms through which ethical awareness translates to improved pro-
fessional practice, offering a replicable model for ethics training development
across healthcare disciplines.
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endabstract
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sectionIntroduction
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The nursing profession operates within an increasingly complex ethical landscape, characterized by rapid technological advancements, resource constraints, and evolving patient expectations. Traditional approaches to ethics education in nursing have predominantly emphasized theoretical frameworks and case-based learning, with limited attention to the development of practical ethical competencies that translate directly to professional conduct. This study addresses a critical gap in the literature by examining how a comprehensive ethical awareness training program influences not only ethical knowledge but also observable professional behaviors among nursing practitioners.

Contemporary healthcare environments present nurses with ethical challenges that extend beyond conventional dilemmas involving patient autonomy and beneficence. These include navigating algorithmic decision-making in patient care, addressing health disparities through ethical practice, managing moral distress in resource-limited settings, and maintaining professional integrity amidst institutional pressures. While nursing ethics education has historically focused on preparing practitioners to recognize and analyze ethical issues, there remains insufficient evidence regarding interventions that effectively transform ethical awareness into consistent ethical action.

Our research introduces an innovative training methodology that moves beyond cognitive ethical development to address the affective and behavioral dimensions of ethical practice. By integrating immersive simulation, structured reflection, and collaborative ethical deliberation, the intervention targets the development of moral habits and ethical resilience. This approach recognizes that ethical competence in nursing requires not only the ability to identify ethical issues but also the courage to act ethically and the capacity to navigate the emotional complexities of ethical decision-making.

The primary research questions guiding this investigation are: How does participation in a comprehensive ethical awareness training program influence nursing practitioners' ethical sensitivity and moral reasoning? To what extent does such training translate to observable changes in professional conduct within clinical settings? What mechanisms within the training experience most significantly contribute to the development of ethical practice? These questions address fundamental aspects of professional development in nursing that have received limited empirical attention despite their critical importance to patient care and professional integrity.

This study makes several original contributions to the literature on nursing ethics education. First, it develops and validates a multidimensional approach to ethics training that integrates complementary pedagogical strategies. Second, it employs innovative measurement techniques to assess both cognitive and behavioral outcomes of ethics education. Third, it provides empirical evidence regarding the transfer of ethical learning to professional practice. Finally, it offers insights into the relational and contextual factors that support or hinder the application of ethical principles in complex healthcare environments.

sectionMethodology

subsectionResearch Design

This study employed a sequential explanatory mixed-methods design, incorporating both quantitative and qualitative approaches to comprehensively examine the influence of ethical awareness training on nursing practitioners. The quantitative phase featured a randomized controlled trial comparing an experimental group receiving the novel ethical awareness training with a control group participating in standard ethics education. The qualitative phase utilized phenomenological interviews and reflective journals to explore participants' lived experiences of ethical decision-making following the training intervention.

subsectionParticipants and Setting

A total of 245 registered nurses were recruited from three urban healthcare facilities representing diverse clinical specialties including medical-surgical, critical care, emergency, and psychiatric nursing. Participants ranged in experience from newly licensed nurses to those with over twenty years of clinical practice. The sample demonstrated diversity in age, gender, cultural background, and educational preparation, reflecting the heterogeneous nature of the nursing workforce. Participants were randomly assigned to either the experimental training group (n=123) or the control group (n=122) using stratified randomization to ensure comparable distribution of clinical experience and specialty areas across conditions.

subsectionEthical Awareness Training Intervention

The experimental intervention consisted of a comprehensive 12-week ethical awareness training program incorporating three complementary components: immersive virtual reality ethical scenarios, structured reflective journaling, and peer-mediated ethical deliberation sessions. The virtual reality component presented participants with ethically complex clinical situations requiring immediate decision-making, with scenarios adapted from real-world ethical challenges identified through preliminary focus groups with experienced nurses. The reflective journaling component provided structured prompts guiding participants to examine their ethical assumptions, emotional responses to ethical situations, and patterns in their ethical reasoning. The peer deliberation sessions created facilitated spaces for collaborative analysis of ethical dilemmas, emphasizing perspective-taking and ethical justification.

The control condition participated in standard ethics education consistent with typical continuing education offerings, consisting of six two-hour sessions covering ethical principles, professional codes of ethics, and case study discussions. Both interventions required equivalent time commitments, with the experimen-

tal condition redistributing instructional hours toward experiential and reflective activities.

subsectionData Collection and Measures

Quantitative data collection occurred at three time points: pre-intervention, immediately post-intervention, and three months following training completion. Primary outcome measures included the Ethical Sensitivity Scale for Nursing Practice, the Moral Courage Measure for Healthcare Providers, and the Nursing Ethical Decision-Making Inventory. Additionally, we developed and validated an original instrument, the Observable Ethical Behavior in Nursing Scale, which trained raters used to document specific ethical behaviors during structured clinical observations.

Qualitative data included semi-structured interviews with a purposive sample of 30 participants from the experimental group, selected to represent variation in training responsiveness and clinical contexts. Participants also maintained reflective journals throughout the intervention period, providing rich data regarding their ethical development processes. Interview transcripts and journal entries were analyzed using interpretive phenomenological analysis to identify themes related to ethical awareness development and application.

subsectionData Analysis

Quantitative data analysis employed repeated measures ANOVA to examine changes in ethical outcomes over time between experimental and control conditions. Multiple regression analyses explored relationships between training components and outcome measures, controlling for demographic and professional characteristics. Qualitative data underwent thematic analysis using a combination of deductive coding based on theoretical frameworks of ethical development and inductive coding to identify emergent themes. Integration of quantitative and qualitative findings occurred during the interpretation phase, with each dataset informing understanding of the other.

sectionResults

subsectionQuantitative Findings

Analysis of pre- and post-intervention data revealed statistically significant differences between the experimental and control groups across multiple ethical dimensions. Participants in the ethical awareness training group demonstrated substantial improvements in ethical sensitivity, with mean scores on the Ethical Sensitivity Scale increasing from 3.45 (SD=0.62) to 4.28 (SD=0.51) compared to a minimal change in the control group from 3.52 (SD=0.58) to 3.61 (SD=0.55). This between-group difference was statistically significant

($F(1,243)=42.37$, $p<0.001$, partial eta squared=0.15), indicating a large effect size.

Similar patterns emerged for moral courage, with experimental participants showing significant increases from pre-intervention ($M=3.21$, $SD=0.71$) to post-intervention ($M=3.89$, $SD=0.63$) compared to control participants (pre: $M=3.18$, $SD=0.69$; post: $M=3.29$, $SD=0.66$). This between-group difference was also statistically significant ($F(1,243)=9.84$, $p=0.003$, partial eta squared=0.04). The Nursing Ethical Decision-Making Inventory revealed enhanced consistency in ethical reasoning among experimental participants, with significantly reduced variability in responses to ethically ambiguous scenarios following training (Levene's test, $p<0.001$).

The Observable Ethical Behavior in Nursing Scale documented meaningful differences in professional conduct between groups during clinical observations conducted three months post-intervention. Trained raters, blind to group assignment, identified significantly higher frequencies of ethical behaviors such as patient advocacy, transparency in communication, and ethical boundary maintenance among experimental participants compared to controls ($t(243)=4.92$, $p<0.001$).

Regression analyses indicated that participation in peer deliberation sessions emerged as the strongest predictor of improvements in ethical sensitivity ($\beta=0.38$, $p<0.001$), while engagement with virtual reality scenarios most strongly predicted increases in moral courage ($\beta=0.29$, $p=0.002$). Reflective journaling demonstrated significant associations with multiple outcome measures, suggesting its role as an integrative mechanism supporting ethical development.

subsectionQualitative Findings

Analysis of interview transcripts and reflective journals revealed several themes regarding participants' experiences of ethical development through the training program. First, participants described enhanced ethical perception, characterized by increased awareness of ethical dimensions in routine clinical situations that they previously viewed as purely technical or procedural. One participant reflected: "I began to see ethical considerations in places I never noticed them before - how we schedule appointments, how we phrase explanations, even how we organize the medication cart."

Second, participants reported greater confidence in ethical decision-making, attributing this to both increased ethical knowledge and developed skills in ethical reasoning. The peer deliberation sessions particularly contributed to this confidence by providing opportunities to practice articulating ethical justifications and considering alternative perspectives. As one participant explained: "Hearing how my colleagues approached the same situation completely differently expanded my own thinking. I'm less quick to judge and more likely to consider multiple angles now."

Third, participants described the development of what they termed "ethical habits" - automatic responses to ethical situations that reflected their training. These included pausing to identify ethical dimensions before acting, consciously considering vulnerable perspectives, and routinely examining their own motivations in clinical decisions. The reflective journaling practice appeared instrumental in forming these habits by creating structured space for ethical self-examination.

Fourth, participants highlighted the emotional dimension of ethical practice, noting that the training helped them develop greater comfort with the discomfort of ethical uncertainty. The virtual reality scenarios, which often lacked clearly right answers, particularly contributed to this tolerance for ambiguity. As one participant noted: "I used to feel anxious when there wasn't a clear ethical path. Now I understand that ethical practice isn't about finding the right answer but about navigating complexity with integrity."

subsectionIntegrated Findings

The integration of quantitative and qualitative findings reveals a coherent picture of how ethical awareness training influences professional conduct. Quantitative improvements in ethical sensitivity align with qualitative reports of enhanced ethical perception, suggesting that the training successfully sharpened participants' ability to recognize ethical dimensions in clinical practice. Similarly, increases in moral courage correspond to participants' descriptions of greater confidence in addressing ethical challenges.

The relationship between specific training components and outcomes suggests different mechanisms through which ethical development occurs. Peer deliberation appears particularly effective for developing ethical reasoning skills, possibly through exposure to diverse perspectives and practice with ethical justification. Virtual reality scenarios seem to strengthen moral courage by providing low-stakes opportunities to practice ethical action in emotionally charged situations. Reflective journaling supports the integration of ethical learning into professional identity and habitual practice.

The persistence of behavioral differences three months post-intervention indicates that the training influenced not only immediate ethical competencies but also lasting changes in professional conduct. This sustainability suggests that the intervention successfully supported the development of ethical habits rather than merely temporary knowledge acquisition.

sectionConclusion

This study provides compelling evidence that comprehensive ethical awareness training can significantly influence professional conduct among nursing practitioners. The innovative training approach, which integrated immersive simulation, structured reflection, and collaborative deliberation, demonstrated sub-

stantial advantages over traditional ethics education in developing ethical sensitivities, moral courage, and consistent ethical decision-making. The findings challenge conventional approaches to nursing ethics education that prioritize cognitive ethical knowledge over the development of ethical habits and emotional resilience.

The original contributions of this research are threefold. First, it establishes an evidence-based model for ethics training that addresses the multidimensional nature of ethical competence, recognizing that ethical practice requires not only knowledge but also perception, courage, and habitual excellence. Second, it demonstrates the transfer of ethics education to observable professional behaviors, addressing a critical gap in the literature regarding the practical impact of ethics training. Third, it identifies specific mechanisms through which different training components contribute to ethical development, providing guidance for future educational design.

The implications for nursing education and professional development are substantial. Healthcare organizations seeking to enhance ethical practice should consider moving beyond traditional ethics lectures toward experiential, reflective, and collaborative approaches. The training model developed in this study offers a replicable framework that can be adapted to various healthcare contexts and professional groups. Additionally, the measurement approaches utilized, particularly the Observable Ethical Behavior in Nursing Scale, provide valuable tools for evaluating the effectiveness of ethics education initiatives.

Several limitations warrant consideration. The study was conducted in urban healthcare settings with volunteers, potentially limiting generalizability to other contexts. The relatively short follow-up period (three months) leaves questions about long-term sustainability of training effects. Future research should examine the durability of ethical development over extended periods and explore how organizational factors support or undermine the application of ethical training in practice.

This research opens several promising directions for future investigation. Studies examining the relationship between ethical training and patient outcomes would strengthen understanding of the practical significance of ethical development. Research exploring how ethical competence develops through different career stages could inform targeted educational approaches. Investigations of how technological advancements, particularly artificial intelligence in healthcare, create new ethical challenges for nursing practice would ensure continuing relevance of ethics education.

In conclusion, this study demonstrates that thoughtfully designed ethical awareness training can profoundly influence professional conduct among nursing practitioners. By addressing the cognitive, affective, and behavioral dimensions of ethical practice, comprehensive training approaches can support the development of ethical habits that sustain professional excellence amidst the complex challenges of contemporary healthcare. The findings affirm the potential for

ethics education to transform not only individual practice but also the ethical climate of healthcare organizations.

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