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IN THE LITERATURE

Interprofessional Clinical Ethics Education: The Promise of Cross-Disciplinary Problem-Based Learning

Melissa J. Kurtz, MSN, MA, RN, and Laura E. Starbird, MS, RN

Lin YC, Chan TF, Lai CS, Chin CC, Chou FH, Lin HJ. The impact of an interprofessional problem-based learning curriculum of clinical ethics on medical and nursing students' attitudes and ability of interprofessional collaboration: a pilot study. *Kaohsiung J Med Sci.* 2013;29(9):505-511.

Abstract

A review of Lin et al.'s pilot study exploring the effects of an interprofessional, problem-based learning clinical ethics curriculum on Taiwanese medical and nursing students' attitudes towards interprofessional collaboration highlights the benefits of interprofessional collaboration and offers insight into how problem-based learning might be universally applied in ethics education. Interprofessional collaboration is an ideal approach for exploring ethical dilemmas because it involves all relevant professionals in discussions about ethical values that arise in patient care. Interprofessional ethics collaboration is challenging to implement, however, given time constraints and organizational and practice demands. Nevertheless, we suggest that when professionals collaborate, they can collectively express greater commitment to the patient. We also suggest future research avenues that can explore additional benefits of interprofessional collaboration in clinical ethics.

Introduction

Addressing ethical challenges in health care through interprofessional collaboration involves an active partnership among people from diverse training backgrounds who work together to identify, analyze, and resolve ethical questions or concerns in order to improve the quality of health care [1, 2]. Interprofessional collaboration is ideal for exploring ethical issues because it allows for inclusion of all relevant professional voices in discussions about ethical values in patient care. To identify and respond to ethical questions, an understanding of patients' and family members' values and preferences, as well as the values and preferences of the various professional stakeholders—such as chaplains, nurses, physicians, and therapists—is required. For example, decisions about

treatments near the end of life commonly lead to ethical dilemmas for the patient, family, and clinical team. In such cases, conflict can arise if the patient or family seeks to continue life-sustaining treatments for cultural, religious, or other reasons, while the clinical team recommends limiting life-sustaining treatments. Eliciting the perspectives of all persons involved in decision making—not only the patient and family but also all other relevant professional stakeholders—is paramount for ensuring the highest quality end-of-life care.

Current Challenges for Interprofessional Collaboration in Addressing Ethical Concerns

Although leading organizations, such as the World Health Organization, the Institute of Medicine, and the Robert Wood Johnson Foundation, have identified interprofessionalism as a key means of optimizing care delivery, particular challenges remain in utilizing interprofessional collaboration to respond to ethical questions [2-4]. Many clinical cases involve several health professionals from different specialties (chaplains, nurses, physicians, and therapists, for example), and when ethical discussions arise, each can offer a unique perspective shaped by personal and professional values, preferences, and culture [5]. While it is ideal to convene all involved health professionals to resolve ethical concerns, achieving interprofessional collaboration can be practically challenging as well as time consuming. Frequently, clinical case deliberation is time-sensitive, and ethically complex questions require action before an inclusive interprofessional collaborative discussion can be held. It's important to note that interprofessional collaboration can be compromised if and when some colleagues or stakeholders are left out of the ethics dialogue.

Commonly, ethical concerns are resolved through collaboration among nurses, physicians, and patients [6]. While this approach minimizes the challenges of coordinating multiple stakeholders' voices, it is not problem-free. The field of medicine continues to be predominantly male (66 percent men, 33 percent women) [7], while the field of nursing continues to be predominantly female (91 percent women, 9 percent men) [8]. Gender underrepresentation in medicine (for women) and nursing (for men) can be sources of ineffective or fragmented interprofessional patient care, perhaps due to power differentials rooted in each field's historically situated hierarchies and gender dynamics [9]. Adding to this, in the US health care system, physicians provide billable services, which create revenue, whereas nursing services—depending on the level of care—are not always billable [10, 11]. Differences in reimbursement policies can make power sharing between the two professions difficult and interprofessional collaboration challenging to achieve [12]. These systemic gender and occupational differences are part of the context in which ethics dialogues between nurses and physicians take place and can influence the outcomes of ethical deliberations.

Is There a Difference Between Medical Ethics and Nursing Ethics?

Some scholars have argued that nursing and medicine have fundamentally different ethical responsibilities. For instance, one difference between nursing and medicine has been characterized as caring for the health of persons (nursing) versus curing disease (medicine), with specific moral roles and responsibilities required to accomplish each of these goals [13]. Although nursing and medicine are distinct professions, each with its own code of ethics that guides practice, it is important to recognize the overlapping commitment of both professions to facilitating the best care for patients. According to the American Medical Association (AMA) *Code of Medical Ethics*, "the primary bond between the practices of medicine and nursing is mutual ethical concern for patients" [14]. Furthermore, the AMA *Code of Medical Ethics* and the American Nurses Association (ANA) Code of Ethics for Nurses share underlying ethical and justice-oriented principles—most notably, human dignity, access to health care, and commitment to the patient [14, 15]. These priorities highlight important sources of congruence between medical and nursing ethics [13].

Why Should Nursing and Medical Students Collaborate on Clinical Ethics Issues?

Interprofessional health care education has several benefits. Studies have found that groups of health care professionals who received interprofessional education interventions had better adherence to practice guidelines or standards and improved patient satisfaction and outcomes compared to control groups [16]. Moreover, students who participate in interprofessional collaborations bring different perspectives to ethical dialogues and learn from each other. For example, groups of medical, dental, and nursing students who received training fostering interprofessional collaboration demonstrated increased understanding of, and respect for, each other's roles and responsibilities in addressing ethical issues, while also showing the strengths of their own professional background [5, 17]. These studies, however, do not address how engagement in interprofessional education affects students' future participation in such collaborations.

Lin et al.'s Study of Interprofessional Clinical Ethics Education and its Implications

Lin et al. have studied variables that might affect interprofessional collaboration.

Purpose and methods. In 2013, Lin and colleagues piloted an interprofessional problem-based learning (PBL) curriculum in clinical ethics education to evaluate students' attitudes and confidence when performing collaborative teamwork [18]. Thirty-six nursing and medical students in Taiwan were recruited and randomly divided into three groups (nursing group, medical group, and cross-disciplinary group). Each group received the pilot PBL curriculum (one two-hour clinical ethics lecture, one PBL case study with two, two-hour tutorials, and one three-hour session of group discussion and feedback), which was implemented by a tutor. The PBL curriculum was carried out over 4 weeks, at the end of which students completed self-report evaluations assessing their attitudes and confidence related to interprofessional teamwork.

Results. The average self-evaluation score on interprofessional communication and collaboration was significantly higher for the cross-disciplinary group than the medicine group alone, which might indicate that interprofessional learning of clinical ethics content has benefits over profession-specific clinical ethics education. Because this was a small pilot study, these findings would need to be validated in future research using a larger sample and refined outcome measures.

Limitations. While the findings reported by Lin and colleagues [18] suggest that a problem-based interprofessional learning curriculum can positively impact nursing and medical students' attitudes toward and confidence in interprofessional collaboration, several limitations are noteworthy besides the small sample size. First, the authors fail to provide robust details of the PBL curriculum intervention, which limits the replication of findings. Furthermore, no baseline outcome data is provided; therefore, it is difficult to determine whether differences between the groups (i.e., nursing, medicine, cross-disciplinary) resulted from the PBL intervention or if group differences were present before the intervention was initiated. Also, outcomes were measured solely by students' self-report and thus it is difficult to determine whether the findings accurately represent the outcomes of interest. Relatedly, limited variability in the distribution of students' survey responses is apparent; a majority of students agreed or strongly agreed that their learning, critical thinking, and effective communication performance met PBL curriculum objectives. Additionally, the outcomes measured are affective, primarily students' perceptions (i.e., attitude, confidence), which can change over time and vary based on factors such as current mood, recent successes and failures, and desire to please the researcher or facilitator [19, 20]. Therefore, measuring these outcomes at one point in time is a limitation, albeit a common one among studies examining interprofessional education. Thus, the Lin et al. study, like other previous studies, does not provide evidence of the impact of interprofessional education on students' future interprofessional collaborations. Finally, the nursing and medicine groups each included both male and female students, while the cross-disciplinary group had only female nursing students and only male medical students. It could be beneficial to investigate whether and under which circumstances greater gender diversity—of both nursing and medical students—in the cross-disciplinary group would yield the same findings.

Future research. Subsequent studies should incorporate a broader range of health care professionals and measure affective outcomes, such as attitudes or perceptions, more than once over the course of a study. An interprofessional health care team includes not only nurses and physicians but also physician assistants, social workers, pharmacists, physical and occupational and speech therapists, optometrists, respiratory therapists, dietitians, counselors, spiritual care personnel, chiropractors, dentists, and others. Expanding interprofessional education to the entire health care team would give rise to

additional complexities, but a systems change is needed to motivate high quality and ethical care of patients.

One resource for this systems change is the Interprofessional Education Collaborative (IPEC), a group of national education associations of schools of health professions, which has created core competencies for interprofessional collaboration [21]. These competencies offer promising guidelines for instilling standardized ethical approaches in interprofessional and cross-disciplinary practice. Realizing these competencies would allow collaboration on ethical questions to expand beyond the clinical setting into the broader public health and policy arenas. Still unknown, however, are associations among interprofessional education, long-term interprofessional collaboration, and patient-specific outcomes [16].

Clinical Ethics Focused Problem-Based Learning Curricula in the US

Incorporating interprofessional, clinical ethics-focused PBL curricula in US health care education could be feasible, given that the majority of US medical schools already incorporate PBL in their curricula and some US nursing schools are beginning to explore what benefits PBL might afford over traditional learning methods [22, 23]. However, doing so could be more complex in the US than in other cultural contexts. In the US, there are various entry points (e.g., undergraduate, graduate) for those who wish to become nurses, and people with varying levels of experience can choose to enter medical school at any age. In the Lin et al. study, the PBL curriculum was piloted in Taiwan, where both medical and nursing education occurs at the undergraduate level [22]. One benefit of introducing an interprofessional clinical ethics curriculum to students who are at a similar point in their training is that the curriculum can target the specific learning needs of students based on their stage of educational development, which may result in more effective learning and greater impact on interprofessional-related outcomes.

One additional item to consider is the role of a facilitator in PBL clinical ethics education [24]. An effective PBL facilitator would guide students in exploring ethical challenges and help them identify the knowledge and strategies needed to address those ethical challenges. In the US, health professionals who would serve as clinical ethics PBL facilitators have varied levels of ethics experience and problem-based learning skills, and ensuring their effectiveness in implementing PBL methods as applied to ethics education would be important. At a minimum, guidelines should be introduced that include essential teaching and learning objectives and clear instructions for students that could also help facilitators engage students effectively in ethics-focused PBL [5].

Although not without challenges, interprofessional education using a problem-based format holds great promise for providing ethically inspired, quality care for patients, their families, and the broader health care community. Continued efforts to explore the effects of interdisciplinary, problem-based ethics education on the quality of patient care and on

clinician attitudes toward ongoing interprofessional collaboration would be fruitful for informing the implementation of interprofessional PBL ethics curricula in US health care education.

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Melissa J. Kurtz, MSN, MA, RN, is a doctoral candidate at the Johns Hopkins University School of Nursing in Baltimore and a registered nurse in the neonatal intensive care unit at the Johns Hopkins Hospital. From 2011-2013, she served as a bioethics fellow at Montefiore Medical Center. Her doctoral research focuses on the decision-making processes of parents with critically ill children and the provision of ethical care in intensive care settings.

Laura E. Starbird, MS, RN, is a doctoral candidate at the Johns Hopkins University School of Nursing in Baltimore. From 2011-2013, she served as a nurse case manager to HIV-infected adults at the San Francisco Department of Public Health. Her doctoral research focuses on improving access to and utilization of health care among persons co-infected with HIV and hepatitis C.

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