

# Educational strategies supporting the development of ethical competence among nursing students: an integrative review

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## Educational strategies supporting the development of ethical competence among nursing students: an integrative review

### Cover Page Footnote

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## Introduction

Ethics is a fundamental requirement for nursing (Hold et al., 2015). A number of studies have shown that health care professionals, including nurses, face moral stressors that can cause distress or moral suffering (Salari et al., 2022). These ethical dilemmas or issues seem to be related to the care to be provided and are apparently embedded in all clinical nursing contexts (Caux et al., 2020). In competency-based health programs, ethics is considered one such embedded factor. In this literature review, ethical competence (EC) will therefore be defined as a body of clinical and human knowledge in nursing that allows health professionals to initiate reflections based on patient risks versus benefits, while respecting human dignity and the best medical decision. These ethical reflections must therefore be linked to the care to be provided and integrated into all nursing clinical contexts (Caux et al., 2020).

Supporting the development of EC to help future nurses deal with the ethical issues and dilemmas they encounter in their work is therefore paramount. We have relied on an integrative review of the literature published in 2018 to delineate and define EC components and their interconnections. This review indicates that ethical sensitivity is essential for an optimal exercise of EC. A fundamental dimension of EC is reflection based on ethical knowledge, which then triggers a decision-making process, thus contributing to a specific ethical action, the end being to manifest a more generalized pattern of ethical behaviour (Lechasseur et al., 2018).

The academic environment is a good place to develop EC. Such an environment can promote the sharing of ethical knowledge and the exchange of ideas necessary for ethical reflection (Langlois & Lapointe, 2010). Some researchers on different dimensions of EC indicate that case studies can enhance ethical sensitivity (Lee et al., 2017) and that debate can support ethical decision-making (Choe et al., 2014), while other studies indicate that the effects of EC are not significant (Baykara et al., 2015). Thus, teachers and health professionals involved in education do not have conclusive results to support their pedagogical choices, especially in a competency-based approach. Research is required to identify the most promising teaching strategies or those that need to be developed.

The overall goal of the project is to support the development of EC in nursing students and to help them deal with ethical issues and dilemmas. More specifically, we want to provide pedagogical recommendations to guide teachers and professionals involved in nursing education. The associated research questions are as follows:

1. What are the pedagogical strategies that can contribute to the development of EC?
2. What are the pedagogical strategies that can support the resolution of ethical issues and dilemmas?

## Methods

An integrative review was conducted to summarize past empirical and theoretical literature (Whittemore & Knaf, 2005). This approach allows the integration of diverse methodologies in order to capture the context, processes, and subjective elements of the strategies used to develop EC and to support the resolution of ethical issues and dilemmas among nursing students. It was conducted in the following databases: CINAHL, PubMed, Embase, Education Source, and ERIC. Our research covered a 10-year period (2009–2019). We used the following keywords, and their variations, in combination with each other: “ethics,” “nurse,” “students,” “student nurse,” and “teaching methods.” Studies selected met specific inclusion criteria: they were derived from a

scientific study, involved nursing students from across all years, focused on teachings methods and EC, and were published in English or French. We excluded conference papers, proceedings, literature reviews, non-intervention studies, and studies in other health specialities.

First, two reviewers independently screened the titles and abstracts of all retrieved documents and disagreements were resolved by discussion. Following this first screening, the same two members of the research team independently reviewed the full text of each potentially relevant article and compared their results. Inclusion was definitively determined after a review of the areas of agreement or disagreement with the principal investigator of the project.

Second, relevant data from the included studies were extracted: the first author; the year of publication and the title; the type of intervention and its characteristics; the ethical issues or dilemmas raised; the health professionals involved and their characteristics; the patients and caregivers involved and their characteristics; the ethical decision makers and their related issues; and statistical analyses, results, clinical and teaching implications, and comments.

Finally, we used the Mixed Methods Appraisal Tool (MMAT) to assess the quality of studies for this review. The tool was selected because, to the best of our knowledge, it is the only instrument that allows for concomitant appraisal of the methodological quality of quantitative, qualitative, and mixed method studies, applying a specific, valid, and usable set of criteria. The maximum MMAT score is 5. As suggested by Pluye et al. (2011), all articles with a score of less than 3 were rejected.

## **Results**

Electronic searching yielded 2704 citations. Among them, 510 studies were duplicates and 1998 were excluded after a reading of the titles and abstracts. Only 196 studies were left for full text reading. Out of these, 146 articles were eliminated for failure to meet the selection criteria. In addition, 29 out of the 50 studies extracted were excluded on the grounds of not providing sufficient data for further investigation and of not being empirical studies. Thus, 21 publications were selected for the final review. A study selection flow diagram is presented in Figure 1.

**Figure 1**

*PRISMA Flow Diagram*

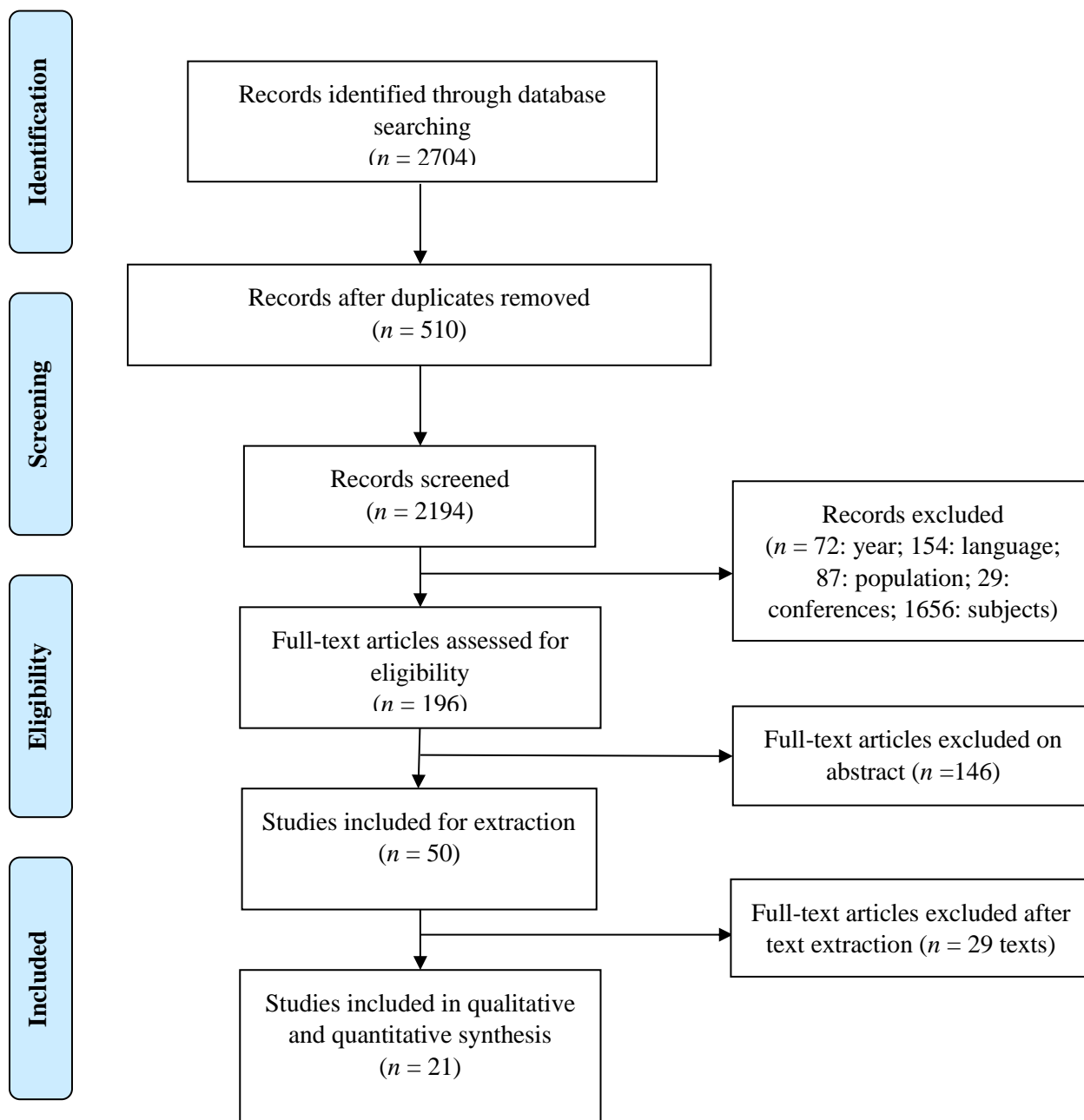


Table 1 lists the 21 selected studies in ascending order of years. Note that on average two relevant studies were published per year. In 2014, no such studies were published, and the maximum yield was four studies in 2010 and four others in 2019. The geographical distribution of the studies shows that Asia is the continent that is most interested in this question ( $n = 12$ ), followed by North America ( $n = 7$ ), Europe ( $n = 1$ ), and Australia ( $n = 1$ ).

**Table 1***Characteristics of Included Studies*

First author	Year	Title	Country	MMAT score
Nasrabadi, A.	2009	A new approach for teaching nursing ethics in Iran	Iran	5
Gropelli, T.	2010	Using active simulation to enhance learning of nursing ethics	USA	4
Haddad, A.	2010	What health science students learn from playing a standardized patient in an ethics course	USA	4
Lin, C.	2010	A comparison of problem-based learning and conventional teaching in nursing ethics education	Taiwan	3
Allana, S.	2012	An approach to teaching resolution of ethical dilemmas	Pakistan	4
Brykczynski, K.	2012	Clarifying, affirming, and preserving the nurse in nurse practitioner education and practice	USA	5
Smith, K.	2012	High-fidelity simulation and legal/ethical concepts: A transformational learning experience	USA	3
Park, E. J.	2013	The development and implications of a case-based computer program to train ethical decision-making	Korea	5
Willsher, K. A.	2013	The legacy of “Joanna”: the role of ethical debate in nurse preparation	Australia	5
Park, E. J.	2015	Effectiveness of a case-based computer program on Students’ ethical decision making	Korea	4
Trobec, I.	2015	Developing nursing ethical competences online versus in the traditional classroom	Slovenia	4
Gazarian, P.	2016	Effectiveness of narrative pedagogy in developing student nurses’ advocacy role	USA	4
Pariseau-Legault, P.	2016	Constructing an ethical training for advanced nursing practice: An interactions and competency-based approach	Canada	3
Chao, S. Y.	2017	Development, implementation, and effects of an integrated Web-based teaching model in a nursing ethics course	Taiwan	4
Krautscheid, L.	2017	Embedding micro ethical dilemmas in high-fidelity simulation scenarios: preparing nursing students for ethical practice	USA	4
Tsuruwaka, M.	2018	Narrative writing as a strategy for nursing ethics education in japan	Japan	5
Basak, T.	2019	Comparing two teaching methods on nursing students’ ethical decision-making level	Turkey	4
Khatiban, M.	2019	Lecture-based versus problem based learning in ethics education among nursing students	Iran	4
Maddineshat, A.	2019	Teaching ethics using games: Impact on Iranian nursing students’ moral sensitivity	Iran	5
Kim, W.-J.	2019	The effects of debate-based ethics education on the moral sensitivity and judgment of nursing students: A quasi-experimental study	Korea	3
Zhang, F.	2019	A comparison of inquiry-oriented teaching and lecture-based approach in nursing ethics education	China	5

Table 2 presents the main objectives, theoretical models, design, samples, interventions, and results of each study, which are summarized thereafter.

**Table 2**

*Description of Study's Goal, Design/Methodology, Sample, Strategies, and Results for Each Selected Article*

First author (year)	Goal or objective	Design	Intervention	Sample	Theoretical model/framework	Results
Nasrabadi, A. (2009)	Change nursing students' negative perceptions of nursing ethics using innovative teaching methods	Mixed methods	Teaching: using innovative methods	78 students	Not specified	Traditional teaching group: negative perception of "nursing ethics"; new teaching method group: positive and encouraging feedback
Gropelli, T. (2010)	Investigate multiple ethical issues and various perspectives on issues	Case study	Simulation, role-playing game	Committee members and family's members, patients	Lachman model	The mock ethics committee helps the nurses think about issues, use ethical decision-making models, and communicate effectively.
Haddad, A. (2010)	Gather descriptions of what nursing students learned from the experience with standardized patient	Exploratory study	Clinical simulation	32 students	Not specified	The nursing students learned several things from the experience that could probably not be learned in any other way save being an actual patient.
Lin, C. (2010)	Compare problem-based learning and conventional teaching of nursing ethics in Taiwan.	Experimental study	Problem-based learning vs conventional teaching	142 senior nursing students	Not specified	Problem-based learning was shown more effective than peer tutoring.
Allana, S. (2012)	Resolve ethical dilemma using the MORAL model	Case study	Simulation	Not specified	MORAL model	The MORAL model serves very well to consider all possible options with the ethical dilemma. It is a systematic approach for analysis.
Brykczynski, K. (2012)	Describe how a nurse practitioner teaches nurse practitioner students about holistic nursing	Qualitative study	Teaching: role modelling and sharing narratives of actual cases	24 Nurses practitioners	Not specified	The holistic nursing dimensions were specifically included in teaching nurse practitioner students in both didactic and clinical courses.

First author (year)	Goal or objective	Design	Intervention	Sample	Theoretical model/ framework	Results
Smith, K. (2012)	Describe the development and preliminary evaluation of a high-fidelity human simulation scenario (HFHS) as an innovative and transformational teaching method	Case study	Simulation by HFHS scenario	60 students	Not specified	The HFHS provided an effective disarming dilemma, a more personal experience, and the opportunity to reflect on and discuss the scenario experiences in the debriefing session. HFHS scenario was determined to provide the best transformational learning experience.
Park, E. J. (2013)	Use a case-based computer program as a complementary tool in a nursing ethics course. Evaluate the students' reactions.	Quasi-experimental study	Case-based computer program	251 nursing students	ADDIE model	The students' responses showed that their attitudes towards studying nursing ethics or ethical conflicts changed more positively when they use the case-based computer program.
Willsher, K. A. (2013)	Increase the student's competences and critical thinking skills throughout a scenario	Case study	Simulation by the Joanna case	32 students (2 classes)	Not specified	The Joanna case study provided the opportunity for both classes to benefit from enhanced critical thinking skills and to engage in ethical debate incorporating a wide number of perspectives.
Park, E. J. (2015)	Detect the effects of the use of a case-based computer program, which is based on the integrative ethical decision-making model	Pre-and post-intervention	Case-based computer program for case analysis	158 nursing students Intervention: ethic course	Integrative ethical decision-making	The students' perception of preparedness to cope with ethical conflicts improved after taking the ethics course. This progress was significantly greater among students who used the computer program for case analysis than it was for those in the control group.
Trobec, I. (2015)	Identify the readiness and responsiveness of current organisation of nursing	Quasi-experimental study	Online learning	115 students	Not specified	The results of the content analysis showed that the students' active engagement with the active learning methods in the group enables the development of ECs and the related

First author (year)	Goal or objective	Design	Intervention	Sample	Theoretical model/framework	Results
	higher education in Slovenia					communicative competences, interpersonal skills, collaboration, and critical thinking.
Gazarian, P. (2016)	Evaluate the effectiveness of narrative pedagogy on the development of advocacy in student nurses	Quasi-experimental nonrandomized study	Clinical simulation	44 nursing students	FESOR ethical framework model	The nursing students' perceptions of patient advocacy increased during the educational experience. Areas significant for increased changes include environment and educational influences and support for advocacy.
Pariseau-Legault, P. (2016)	Construct a training program inspired by discourse and narrative ethics	Exploratory study	Training program	No sample	Ethical decision-making	The authors suggested that this pedagogical approach has the potential to optimize the consolidation of ethical, reflective, and deliberative competencies among advanced practice nurses.
Chao, S. Y. (2017)	Develop and implement an interactive situational e-learning system  Evaluate the effects of this course on student nurses' ethical decision-making competence	Quasi-experimental study	Teaching: e-learning and ethics education	100 nursing students	Integrated Web-based teaching model	The interactive e-learning system integrated into nursing ethics course lets students identify ethical dilemmas, approach problems using multiple viewpoints, and make decisions based on deliberate consideration. The system also fostered greater growth in recognition of different viewpoints than the traditional teaching methods.
Khatiban, M. (2019)	Compare the effectiveness of problem-based learning and lecture-based methods in ethics education	Quasi-experimental study	Ethics education	66 nursing students	Problem-based learning methods	The use of the problem-based learning method in teaching ethics improved the moral development of nursing students.
Krautscheid, L. (2017)	Confront students with a micro ethical dilemma	Qualitative study	Simulation	89 nursing students	Bloom's Taxonomy	Simulation promoted congruence between knowing what to do and acting on one's convictions

First author (year)	Goal or objective	Design	Intervention	Sample	Theoretical model/framework	Results
Tsuruwaka, M. (2018)	Explore the effectiveness of learning nursing ethics using narrative writing used in nursing ethics classes in a graduate school in Japan	Qualitative descriptive research	Narrative simulation	86 graduate students	Not specified	These findings suggested that narrative writing in nursing ethics education could lead to ethical practice. The narrative writing in research may be helpful as a strategy to clarify ethical issues and the awareness of nurses in clinical settings.
Basak, T. (2019)	Compare the effects of case analysis and simulation with standardized patients in a nursing ethics course	Quasi-experimental study	Ethics education	70 undergraduate nursing students	Not specified	The simulation had a positive effect on students' ability to make ethical decisions. This method is a more effective teaching method than the case analysis method.
Maddineshat, A. (2019)	Develop a method of teaching ethics using games.	Quasi-experimental study	Teaching: game approach	30 nursing students	Not specified	The games prepared the students to deal with moral problems and make ethical decisions in the clinical environment.
Kim, W.-J. (2019)	Compare the effect of debate-based ethics education and lecture-style ethics education on moral sensitivity and moral judgment	Quasi-experimental study	Debate-based ethics education	64 nursing students	Not specified	The debate-based ethics education for undergraduate nursing students is very effective in promoting moral judgment and the ability to make ethical choices.
Zhang, F. (2019)	Compare the effect of inquiry-oriented teaching and lecture-based approach on nursing ethics education for undergraduates	Quasi-experimental study	Teaching: the inquiry-oriented teaching and the lecture-based approach	97 undergraduate nursing students	Not specified	The combination of inquiry-oriented teaching and the lecture-based approach is suggested to become part of the curriculum design for nursing ethics education.

## Theoretical Model/Framework

Of all the studies selected, 9 out of 21 used a theoretical model to construct their research (Allana, 2012; Chao et al., 2017; Gazarian et al., 2016; Gropelli, 2010; Khatiban et al., 2019; Krautscheid, 2017; Pariseau-Legault & Lallier, 2016; Park, 2013; Park & Park, 2015). Of the nine models proposed, five used less-common models (i.e., Lachman model, MORAL model, ADDIE model, FESOR ethical framework model, or Bloom's Taxonomy). Two out of 10 studies (Park & Park, 2015, in Asia and Pariseau-Legault & Lallier, 2016, in Canada) used the integrative ethical decision-making model, and two studies (Khatiban et al., 2019, in Iran and Chao et al., 2017, in Asia) used the problem-based learning methods model.

## Design

Nearly half of the selected studies were quasi-experimental in nature and met the research objectives (Basak & Cerit, 2019; Chao et al., 2017; Gazarian et al., 2016; Khatiban et al., 2019; Kim & Park, 2019; Lin et al., 2010; Maddineshat et al., 2019; Park, 2013; Trobec & Starcic, 2015; Zhang et al., 2019). Most commonly, the data collection method used was based on a questionnaire administered to an experimental group and a control group during the intervention. The other studies were qualitative and mixed (Brykczynski, 2012; Haddad, 2010; Krautscheid, 2017; Nasrabadi et al., 2009; Pariseau-Legault & Lallier, 2016; Tsuruwaka & Asahara, 2018). The most widely used data collection methods were face-to-face or telephone interviews and focus group discussions. Four studies used a case study approach (Allana, 2012; Gropelli, 2010; Smith et al., 2012; Willsher, 2013), and one study used a pre-post intervention (Park & Park, 2015).

## Sample

All participants were university students in nursing whose educational levels varied from first to third year. In most studies, participants' socio-demographic characteristics were ill-defined. Other people involved in the studies were clinical professors, teachers, or health professionals who played the roles of standardized patients in simulation.

## Intervention

Two main types of interventions were identified. The first was conventional theoretical ethics instruction ( $n = 11$ ), defined as lectures, sometimes including PowerPoint presentations, without student participation or feedback, occasionally accompanied by clinical courses (Basak & Cerit, 2019; Brykczynski, 2012; Chao et al., 2017; Khatiban et al., 2019; Kim & Park, 2019; Lin et al., 2010; Maddineshat et al., 2019; Nasrabadi et al., 2009; Pariseau-Legault & Lallier, 2016; Trobec & Starcic, 2015; Zhang et al., 2019). Among the 11 publications, 5 compared the effectiveness of a new teaching method with conventional and theoretical ethics teaching (Basak & Cerit, 2019; Khatiban et al., 2019; Kim & Park, 2019; Lin et al., 2010; Zhang et al., 2019). In these studies, the new teaching method was sometimes based on theoretical models or participatory debate. Finally, the remaining six studies in this group consisted of the development, implementation, and evaluation of learning methods or curriculum based on e-learning, problem-based learning, action learning, debate learning, team-based learning, and a game-based approach (Brykczynski, 2012; Choe et al., 2014; Maddineshat et al., 2019; Nasrabadi et al., 2009; Pariseau-Legault & Lallier, 2016; Trobec & Starcic, 2015). The second type of intervention identified was simulations ( $n = 10$ ), that is, a teaching method that forces the student to confront simulated ethical situations based on scenarios or clinical case studies. The modalities used for the simulations were either face-to-face or online (Allana, 2012; Gazarian et al., 2016; Gropelli, 2010; Haddad, 2010;

Krautscheid, 2017; Park, 2013; Park & Park, 2015; Smith et al., 2012; Tsuruwaka & Asahara, 2018; Willsher, 2013).

## **Study Results**

The studies argued that regardless of the approach to teaching ethics, students acquire essential ethical-dilemma-solving skills. Conventional theoretical ethics instruction appears to have the most negative impact and is inconclusive on the development of EC in nursing. All of the studies that used simulations reported that students learned many things from these simulation experiences that they would not likely have learned otherwise, such as critical thinking skills, active engagement in their learning, moral development, and the ability to make an ethical decision. Being confronted with real-life scenarios and encouraged to debate enables students to better identify, understand, and address situations that raise ethical issues or dilemmas. Overall, the combination of lecture and simulation seems to be recommended.

## **Discussion**

This integrative review aims to support the development of EC in nursing students and to help them deal with ethical issues and dilemmas. More specifically, the authors sought pedagogical recommendations to guide teachers and professionals involved in nursing education. However, the studies identified are few in number and represent only 13 countries.

It has been noted that patient safety and well-being depend, to a large extent, on the ethical decisions of professionals (Park, 2012). A health care professional with low or no ethical standards should be considered unfit to practise (Grundstein-Amado, 1993). For these reasons, we believe that this area of expertise should be the subject of more international research. The realities of practice are likely to be specific to each country, and education must be adapted to the environment and take into account the socio-cultural, legal, and financial contexts that influence different health systems (Wong et al., 2021); moreover, as an additional stumbling block, the lack of research in the field makes it difficult to establish broad guidelines that can be generalized and the educational strategies that are required to promote EC.

Our main results showed several gaps in the methodologies used. The first is the lack of consensus as to the definition of EC. This observation is confirmed by several other studies (Lechasseur et al., 2018; Wong et al., 2021), pointing to the absence of a specific theoretical framework for EC instruction. We find that the studies reviewed are still trying to identify the key determinants to teach, how to teach them, and how to standardize this teaching (Allana, 2012; Haddad, 2010). Among the articles reviewed, generic terms such as “ethical dilemmas,” “ethics of care,” “moral dilemmas,” “ethics education,” and “ethical decision-making” are often used; these terms attempt to circumscribe the definition of EC by using the term “ethics” itself, which does not specify what EC connotes with any degree of precision. The term “moral dilemmas” appeals to emotional and individual values, not to the clinical rationality and deontology that should guide an ethical decision (Beauchamp & Childress, 2001). We suggest that a definition that breaks down EC into structural determinants be considered, as there may still be a need for grounded theorizing research in the field.

The problem of definition leads to a lack of consensus as to what constitutes EC, how it is developed, or any theoretical framework for the concept itself. As a result, several articles fail to apply a theoretical framework, and others attempt to use a more or less proven and known theoretical framework. Among the theoretical frameworks used that could be relevant, Crisham’s

(1985) MORAL model proposes a systematic, step-by-step process for exploring, analyzing, and resolving ethical dilemmas. This framework has the advantage of being designed to resolve ethical dilemmas: it has been developed using nurses' responses to ethical problems. The MORAL model is well suited for use in nursing. The second theoretical framework that may be of interest is problem-based learning based on a teaching style that challenges students to become the drivers of their own learning (Khatiban et al., 2019). This framework has not been developed specifically for teaching EC, which may result in gaps in learning. In addition, it is learner-based, and the learner may not have had prior ethical instruction. This teaching method promotes self-learning. Students are encouraged to take the initiative and responsibility for their own learning. Problem-based learning may prove to be a fruitful theoretical framework, but only if students receive conventional courses on EC beforehand. In this regard, all of the selected articles that compare the conventional approach and the learner-based approach conclude that the best method is a mixture of the two types of learning. This conclusion is supported by Wong et al. (2021), who contends that an interactive, multimodal, and interdisciplinary team teaching approach should be adopted. The third model, integrative ethical decision-making, was developed and evaluated by Park (2013). Nursing student participants stated that using the model in the ethical problem solving process allows students to address clinical ethical problems in more depth and to feel more accountable for their decisions since they have considered the preferences of all involved stakeholders and the entire range of possible long- and short-term outcomes (Park, 2013).

All of the interactive and multimodal teaching methods, however diverse and original, discussed in the articles we read were deemed effective and relevant by the authors. It should be noted here that approaches to learning, whether face-to-face or e-learning, did not lead to differences in the results of the studies. Among the pedagogical approaches, the conventional theoretical approach was rated the least appealing by participating students, but not necessarily the least effective (Cannaerts et al., 2014). Cannaerts et al. (2014) concluded that conventional "ethics education increases nursing students' ethical perception and development of reflective and analytical skills" (p. 1). Moreover, when combined with a learner-based approach, it becomes very beneficial (Cannaerts et al., 2014; Wong et al., 2021). The use of simulation was found in 10 of 21 articles and was also rated as highly relevant and as congruent with the goals to be achieved in teaching EC. The simulation scenarios cited in these articles were mostly related to clinical practice. Clinical practice in ethics education has proven to be essential for nursing (Lechasseur et al., 2018) and Smith et al. (2012) mentioned that students did not value the theory and law/ethics-based courses as much as their clinical courses. The use of multimodal instruction increases student interest. Similarly, Gropelli (2010) confirmed that simulation is currently a popular teaching strategy and that high-fidelity simulation has emerged as an effective teaching method in nursing education and practice (Gropelli, 2010).

Finally, our results showed that the new educational strategies of ethics education with active student engagement were effective and enabled students to develop EC and related communicative skills, interpersonal skills, collaborative capacities, and critical thinking. The different ways in which EC has been developed, as identified in our review, are consistent with those listed in the integrative review by Lechasseur et al. (2018).

As well, there is another important finding to note. In the articles read, the target populations (i.e., students and instructors) were sociodemographically ill-defined. Inclusion/exclusion criteria were also often missing. We believe that these deficiencies should be addressed. As it stands, EC instruction seems to target indiscriminately first-, second-, or third-

year nursing students, in the form of a unimodal or multimodal course. The teaching delivered did not differentiate in content or learning methods according to the level of the students. For example, the level of EC one might expect in a first-year student in a basic degree program (who may have no previous postsecondary education) would be very different from the expectations from a third-year student. In addition, several authors (Fox et al., 1995; Goldie et al., 2000; Wong et al., 2021) highlight the importance of vertically and horizontally integrated teaching, which involves teaching EC over a period of three years, not once in three years according to a prefabricated schedule. In other words, programs should be designed differently, with EC instruction spread over the entire program, thus helping students to acquire, over time, the full range of knowledge and skills that will enable them to make informed choices about ethical issues or dilemmas.

### **Limitations**

This review has a number of limitations. It incorporates original studies that included only nursing students. This limits the generalizability and possible recommendations for all health care professionals. The years covered are 2009–2019, before the COVID-19 pandemic. Thus, the review provides a status report before the major public health crisis that has been experienced since 2019. This crisis may have had significant effects on the ethical issues or dilemmas experienced by nurses and allow for a rethinking of the teaching of EC by integrating crisis situations. However, the methodology applied, that is, the use of two independent reviewers and the MMAT grid, did serve to reinforce the validity of the approach and to ensure the quality of the study.

### **Conclusion**

During the 2009–2019 period, teaching EC was a significant ongoing challenge. Circumscribing its definition and developing a theoretical model adapted to nursing should remain a priority to better guide teachers in the years ahead. Developed in 1985, Crisham's MORAL model seems to offer a framework that could be considered and adapted to the current reality of 2022. Finally, multimodal teaching methods seem to be unanimously accepted and to meet the learning objectives set by various studies. These methods should be taught and referenced throughout the nursing curriculum and adapted to the level of the students, thus enabling them to acquire vertically and horizontally integrated EC. Overall, a combination of lecture and simulation seems to be recommended.

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