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Exploring a guide for codes of ethics for the development of ethical competence in Iranian nursing students: a systematic review and meta-synthesis

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Abstract

Background Improving the ethical competencies of nursing students, as an important dimension of professional competence, is a primary objective of nursing education. Thus, this study aimed to explore a guide for codes of ethics for the development of ethical competence among nursing students in the healthcare system of Iran.

Methods This is a systematic review and meta-synthesis of qualitative studies conducted in the healthcare system of Iran. The review included studies published between January 1, 2000 and March 2024. We conducted a comprehensive search in various international and national databases, including Web of Science, PubMed, Embase, PsycINFO, Cochrane Library, CINAHL, Scopus, Barakatns, MagIran and SID. Initially, 86 qualitative studies were identified, and after a meticulous screening process, 39 studies were carefully reviewed. Finally, 10 qualitative studies were selected for analysis. The meta-synthesis employed an interpretive approach by thematic synthesis.

Results Based on our results, four main themes and 10 categories, along with summarized codes, were extracted as crucial elements of the codes of ethics for the professional competence of Iranian nursing students. The main themes identified were knowledge, standards, experiences, and attitudes (KSEA).

Conclusions The concept of codes of ethics for developing professional competencies in Iranian nursing students was detected as a multidimensional concept with four major areas. By emphasizing the rights of clients and the standardization of nursing practice, this set of ethical codes can contribute to preventing clinical errors and legal issues at hospitals and educational settings. Furthermore, it fosters a positive environment that encourages professional behaviors among nursing students. Nursing students, as future nurses, should apply codes of ethics when facing emerging ethical challenges. Nurse educators have a crucial role in providing students with the necessary preparation and guidance during their professional socialization process in nursing schools.

Keywords Professional competence, Ethical competence, Codes of ethics, Nursing education, Qualitative research

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Introduction

Enhancing the professional competence of students is one of the key objectives of nursing education. Professional competence empowers nurses to carry out their duties efficiently [1]. Evidence shows that ethical competence is one of the dimensions of professional competence in nursing, and ethical codes as a crucial aspect can contribute to the development of ethical competence [2]. Teaching codes of ethics trains nurses to possess professional competence, commitment and responsibility for providing high-quality care. Clear-sighted moral theorists emphasize the role of education in enhancing nurses' ability to address ethical issues [3]. Nursing schools play a vital role in explaining and defining professional competencies. In recent years, a key concern among those involved in nursing education has been reaching a consensus on determining the different competencies of nurses, including the code of ethics. This enables them to train capable students to deliver accurate and safe nursing services to their clients [4]. Therefore, teachers play a crucial role in increasing the capabilities of students in various fields, including the development of professional and ethical competencies [5].

Ethics and moral values play a crucial role in guiding the behavior of nurses in their work and activities. This is particularly evident in the realm of nursing education and educational activities [6]. Ethics can be seen as a systematic body of knowledge that governs the communication and behavior patterns of individuals and organizations, emphasizing the respect for the rights of all parties involved. It contributes significantly to nursing science, knowledge, and education [7].

We tried to produce a guide for development of codes of ethics for nursing students in our society. The code of ethics includes practical-interpretative statements that can be extracted from available documents and guides in each country based on their cultural context. They can provide more specific guidance for nursing students' practice in the clinical and educational environments in different societies. They represent the commitment of individuals to maintain values and standards in their profession and act ethically. In the nursing profession, codes of ethics reflect a framework of rules and principles that nurses are expected to adhere to [2, 8].

One of the primary concerns in nursing education revolves around enhancing nurses' ability to apply ethical principles effectively. A guide for professional codes of ethics can serve as a shared framework of goals and values, guiding nurses' decision-making and ethical performance. The compilation of nursing principles and codes of ethics aims to establish expected standards for nurses' activities, inform society about these standards, and foster a cohesive professional structure [9]. Therefore, it is essential to equip nurses with the necessary professional

competence to navigate ethical challenges and make ethical decisions effectively. Ethical responsibility should be an integral part of the preparation for a professional role in nursing students [10]. Nurse educators play a vital role in educating graduates who are equipped with decision-making skills and can effectively deal with daily ethical challenges [11]. Nursing instructors play a vital role in nurses' education, enhancing students' capabilities in various areas such as self-esteem and the use of learning opportunities. The greater the involvement of instructors as meta-cognitive guides in teaching ethics, the stronger the ethical reasoning and decision-making abilities of nursing students. Nursing instructors have a significant impact on shaping the ethical values of their students [12]. Raising awareness of professional code of ethics among nursing educators and their nursing students is important for preparing them to deliver patient care in an ethical and professional manner [13].

A review of the literature demonstrates that education programs have proven effective in facilitating the development of ethical judgment in nursing students [14]. Furthermore, emphasis should be placed on teaching and developing codes of ethics to reflect the realities of modern healthcare. Integrating these codes into nursing education will ensure that they become an integral part of the nursing profession and practice [15].

Evidence shows that specific ethical codes and guidelines for nursing students have been developed in other countries based on their cultural backgrounds [16, 17]. Most of the available studies in Iran indicate the importance of paying attention to the ethical competence and the professional ethics of nurses, and their results have been the compilation of nursing ethical guidelines, patient rights charters, and the compilation of Iranian nursing ethics [2, 5]. In addition, while there are clear guidelines about the codes of ethics for Iranian nurses and the ethical charter of patients in the country [8], there are only a number of qualitative studies in the field of nursing students' ethics [18]. Thus, there is still a need to formulate a specific guideline as code of ethics for nursing students in order to practice in the clinical and educational environments in our country.

Authors in this study have recognized the importance of conducting a comprehensive meta-synthesis study to explore the experiences of Iranian nursing students and faculty members regarding the various aspects of code of ethics for nursing students in educational and clinical settings. Given the potential impact of cultural factors as well as educational and clinical settings on ethical competencies, we decided to conduct a systematic review and meta-synthesis in this area. Such a study brings together the results of previous qualitative studies to form a new interpretation of the codes of ethics for Iranian nursing students within the context of nursing education. Thus,

this study aimed to explore a guide for development of the code of ethics in nursing students that contribute to improve their professional ethical competence in the clinical and educational environments in our society.

Methods

Design

This study is a systematic review and meta-synthesis of qualitative studies focusing on a guide for development of codes of ethics in Iranian nursing students. The review included studies published in both the national and international databases from January 1, 2000 to the end of March 2024. This study followed a six-steps meta-synthesis strategy developed by Sandelowski and Barroso [19], which is widely recognized as a highly effective approach for synthesizing qualitative research. The six steps of the meta-synthesis strategy include: conceiving the qualitative synthesis study, searching and retrieving literature, classifying the findings from qualitative reports, synthesizing qualitative findings into meta-summaries, and synthesizing qualitative research findings into meta-synthesis [19].

Step 1: conceiving the qualitative synthesis study

In the first step, the research team was formed, and a clear research question was formulated to guide the study and ensure alignment with the research aim [20]. The research question was: "What are the key components of the code of ethics for nursing students in educational and clinical settings to achieve professional ethical competence, based on the experiences of nursing students and their teachers in nursing schools?"

Step 2: Searching and retrieving literature

In the second step, a comprehensive search was conducted to retrieve relevant literature for the systematic review of qualitative studies on the topic of code of ethics in nursing students. Various databases were searched using a combination of essential keywords, including

nursing students, faculty members, professional ethics, codes of ethics, professional competence, and ethical competence. The search strategy was organized using the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, and Research type) [20], (Table 1).

The search was conducted in both international and national scientific databases, including Web of Science, PubMed, Embase, PsycINFO, Cochrane Library, CINAHL and Scopus. Additionally, national databases such as Barakatns, MagIran and SID (Scientific Information Database of Academic Center for Education, Culture and Research) were searched. Furthermore, grey literature was searched using Google Scholar. The search strategy employed the following keywords and phrases:

1. ("students, nursing" AND ("ethics, professional" OR "Codes of Ethics")) OR "competency-based education/ethics" OR "education, nursing/ethics" AND ("qualitative research" AND ("value" AND "Iran")).
2. ("Students, nursing" AND "Codes of Ethics") OR "Competency-Based Education/ethics") OR "Education, Nursing/ethics" AND "Qualitative Research" AND ("Iran")
3. ("Students, nursing ") AND "Codes of Ethics" AND "Teacher Training") AND "Competency-Based Education/ethics" AND "Qualitative Research" AND "Iran."

Step 3: study inclusion and exclusion criteria

The inclusion criteria of the study were as follows: original qualitative studies with accessible full text articles in English or Persian language, studies conducted between January 2000 and March 2024 that focused on the experiences, opinions, views, and impressions of nursing students and/or their teachers regarding the code of ethics for nursing students, studies that provided a comprehensive report of their finding, excluding conference abstracts or letters to the editor. Considering that the initiatives related to nursing students' ethics began in the early 2000s in our society [3, 21], the database search was conducted starting from January 2000. Furthermore, due to the limited number of studies available, we decided to use mixed sample groups with nursing students too.

The process of study selection followed the PRISMA-2009 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses-2009) guideline [22] (Fig. 1). Additionally, the search results were exported into the Endnote™ version 21, where duplicates were removed and the findings from databases and grey literature were merged.

Table 1 Application of the SPIDER tool to define the review questions and organize the search strategy

Elements of SPIDER	Elements of SPIDER applied to the current study
S - Sample	Nursing student, faculty member, educator, instructor, teacher
PI - Phenomenon of interest	Codes of ethics in developing of professional-ethical competencies of nursing students
D - Design	Published literature with qualitative design in the specific national and international databases, and grey literature
E - Evaluation	Experiences, perspectives, opinions, views, impressions
R - Research type	Qualitative studies and grey literature, including information on the healthcare organization site, Theses.

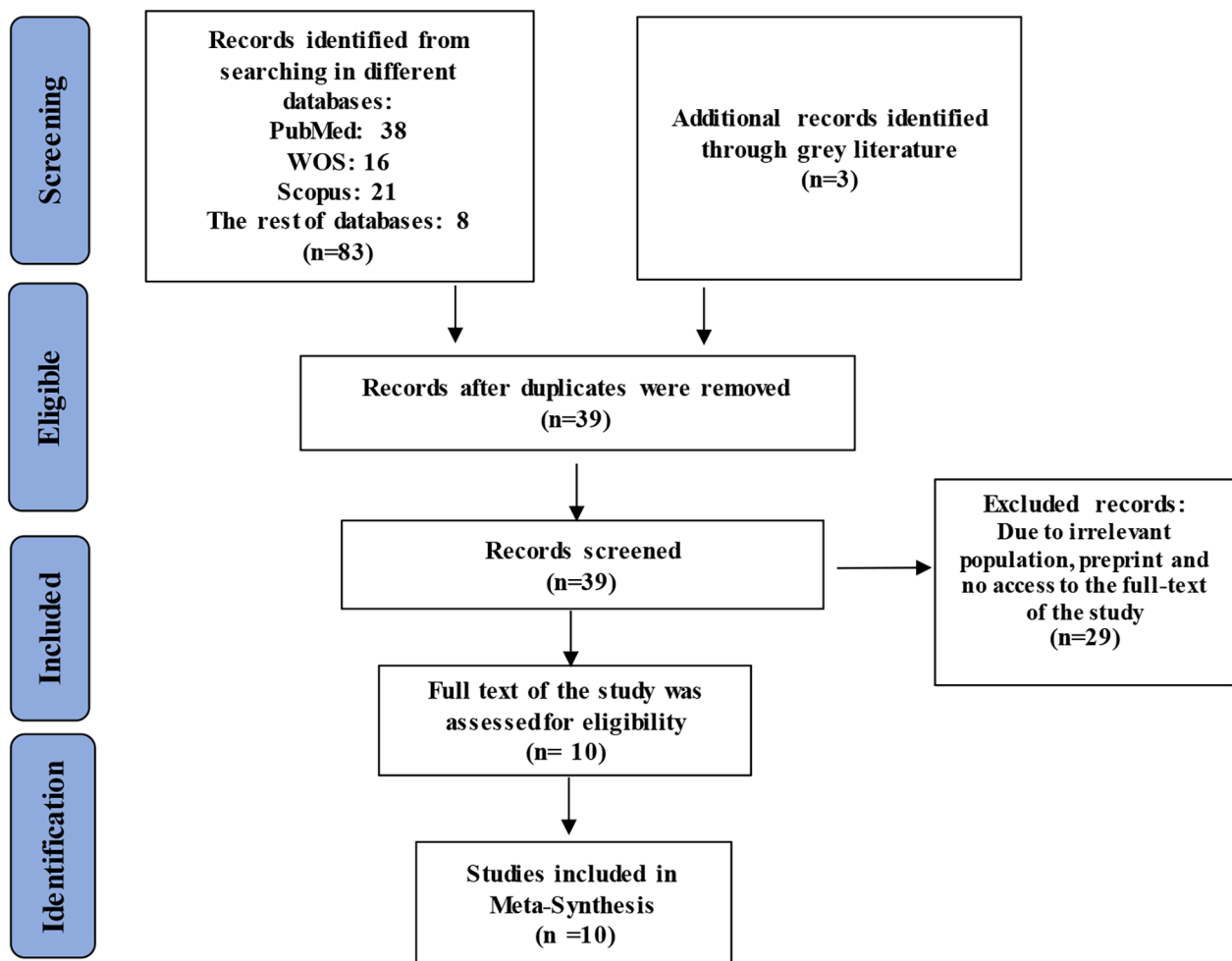


Fig. 1 The process of study selection according to the PRISMA (2009)

Step 4: classifying the findings in qualitative reports

In step 4, a data extraction form was prepared by the research team based on the objectives of the study, and the necessary information were extracted. Two authors (ISH, ZKH) independently extracted and recorded the information in the data collection form, including the name of the first author, year of publication, study location, aim of the study, study type, sample size and main results.

Step 5: Study Quality Assessment

In step 5, the reports of the included studies were appraised for quality and validity. Two authors independently assessed the studies using the Critical Appraisal Skills Program (CASP) checklist, which consists of 10 questions specifically designed to evaluate the quality of qualitative research [23]. We used the modified version (modified LOW critical appraisal criteria, The Critical Appraisal Skills Program - CASP) [24]. The CASP is a non-scoring tool that is not recommended by the CASP

organizing committee. However, the checklist covers various aspects of the study, including study objectives, participant selection process, data collection, data analysis, the researchers' roles in the results, and ethical considerations. Each question was answered with "yes", "no", or "cannot be said" (Supplementary Table 1).

Step 6: data synthesis and presentation

In step 6, two authors (I.S and J.F) independently extracted all the codes from the included studies. Subsequently, these codes were analyzed according to Thomas and Harden's method in 2008 [25]. This approach is widely used for analyzing qualitative studies and includes three phases. In the first phase, all the codes from the studies were examined and categorized based on their meaning and content. The codes were created without establishing a hierarchical structure, using a line-by-line procedure [26]. In the second phase, the authors identified similarities and differences between the codes and generated new codes based on these similarities to

form final themes. This phase involved grouping similar codes together to facilitate the extraction of themes that closely aligned with the findings of the studies. In the third phase, thematic analysis was performed based on the authors' insight and judgment [27]. The final themes were extracted by reviewing the content of the studies. In cases where there was disagreement between the two authors, a third author facilitated a discussion to reach a consensus.

In the sixth step, the trustworthiness of the findings was evaluated using the peer evaluation method to keep the internal homogeneity and external heterogeneity of data analysis [28]. The coding, classification, and determination of data categories were discussed within the research team. To ensure accuracy and reliability, they were also reviewed by two external referees [26], both with experience in qualitative studies and meta-synthesis, and holding doctoral degrees in nursing. Additionally, the research team reviewed the entire research, including the process of meta-synthesis, to ensure that the research steps were carried out in accordance with the scientific process. This review process aimed to minimize potential biases and ensure the integrity of the research. Furthermore, collaborative working and group reflexivity were employed to enhance the quality and rigor of the study.

Results

A total of 86 qualitative studies were initially included in the study based on the search results. After screening and removing duplicates, 39 studies remained for evaluation. Out of these, 29 studies that did not meet the specified criteria were excluded. Finally, the full texts of 10 studies were selected and thoroughly analyzed. Figure 1 depicts the process of study selection based on the PRISMA 2009 guideline.

Table 2 presents the characteristics of the 10 selected studies. These studies involved 261 participants, with ranging from 8 to 50. participants include 254 students and 7 teachers (nursing students=247 and midwifery students=7).

The data collection methods varied, with eight studies utilizing semi-structured interviews and two studies [3–5, 12, 29–32] applying focus groups. All of the studies used content analysis method as their qualitative method for study design [18, 31].

According to the analysis of the selected qualitative studies, 74 codes were identified. These codes were then carefully compared, classified, and integrated to determine the most important elements of the codes of ethics for the ethical competence of nursing students. Overall, four main themes and 10 categories, along with summarized codes and examples of interview quotations, were extracted (Table 3). Additionally, Fig. 2 illustrates the main themes and categories.

Main themes

The analyses revealed a guide for codes of ethics for development of the ethical competence of Iranian nursing students in clinical and educational settings. It includes four main themes that indicate components of Knowledge, Standards, Experiences, and Attitudes.

Theme 1: knowledge

Knowledge consisted of six categories. Among these categories, the relationship between nurses and education emerged as one of the most challenging themes. The majority of participants acknowledged the crucial role of nursing education in forming codes of ethics. There were no differences between nursing student and nurse educator participants [12, 31, 33]. This theme encompassed six categories of education, including the use of appropriate or inappropriate teaching methods for ethics instruction [30], the facilitation of ethics learning [12], the failure to provide patients with sufficient and accurate information and knowledge [30], the impact of professional role models [12, 18], and the curriculum [29, 33].

Regarding the curriculum [29], nursing students expressed agreement on its inadequacy and lack of comprehensive content [29, 33]. Additionally, the influence of effective professional role models [12, 18] was highlighted as another important category in the field of nursing education, which significantly affected the practical education of professional ethics.

Theme 2: standards

Standards consisted of five categories. Participants' experiences highlighted the role of nurses and their professional commitments in the codes of ethics and the professional competence of nursing students. These categories include:

1. Educational justice [4, 29]: emphasizing the importance of fairness in education.
2. Promotion of competence [4]: encompassing the ethical, cultural, spiritual, technical, and religious competencies of nursing.
3. Scientific competence of professors and students [18, 29]: highlighting the necessary knowledge and skills that nursing students and professors must possess in order to be recognized as competent individuals.
4. Commitment and accountability [4, 12]: identifying the nursing profession and taking responsibility for one's actions. Participants highlighted the importance of commitment to implementing the curriculum and educational goals as a key aspect of nursing professionalism.

Furthermore, the implementation of control measures emerged as an important category within the theme of

Table 2 Characteristics of the 10 selected qualitative studies on codes of ethics in Iranian nursing students

Number	Authors, (Reference number)	Publication year	Aims of the study	Location (City)	Participants (sample size)	Data collection method	Analysis approach	approach of analysis
1	Dehghani et al. [18]	2020	To explore factors affecting professional ethics development in nursing students	Jahrom (Southeast of the country)	Nursing students in Bachelor's program ($n=32$)	Semi-structured and focus group interviews	Content analysis	Conventional
2	Boozaripour et al. [4]	2018	To explore ethical values perceived by nursing students and their educators	Tehran (Capital city)	Faculty members in Bachelor's and Master's programs ($n=7$), nursing students in Bachelor's program ($n=25$)	semi-structured interviews (between 90–120 min).	content analysis	Thematic
3	Sanagoo et al. [3]	2018	To explore ethical challenges in the clinical and educational environment of the university	Gorgan (North-central of the country)	Nursing ($n=16$), and Midwifery ($n=10$) students, both in Bachelor's program	Semi-structured interviews (between 30–60 min)	Content analysis	Conventional
4	Borhani et al. [32]	2013	To illuminate the meaning of ethical sensitivity in nursing students	Tehran (Capital city)	Nursing students in Bachelor's program ($n=18$)	Semi-structured interviews (they were coordinated by students)	Content analysis	Not mentioned
5	Mohammadpour et al. [29]	2013	To survey the ethics among nursing students at the university of medical sciences	Urmia (Northwestern of the country)	Nursing students in Bachelor's program ($n=35$)	Semi-structured interviews (60 min)	Content analysis	Conventional
6	Borhani et al. [31]	2013	To investigate nursing students' understanding of factors influencing ethical sensitivity	Kerman (Southeast of the country)	Nursing students in Master's program ($n=8$)	Semi-structured and focus group interviews	Content analysis	Not mentioned
7	Sadeghi et al. [30]	2011	To explore ethical problems observed by nursing students	Tehran (Capital city)	Nursing students = in Master's program ($n=50$)	Semi-structured interviews (60 min)	Content analysis	Conventional
8	Borhani et al. [33]	2011	To understand barriers to acquire ethical sensitivity in nursing students	Tehran (Capital city)	Nursing students in Bachelor's program ($n=25$)	Semi-structured interviews lasting for one hour	Content analysis	Conventional
9	Borhani et al. [12]	2011	To understand perception of nursing teachers about nursing students' ethical competency	Tehran (Capital city)	Nursing teachers in Bachelor's and Master's programs ($n=20$)	Semi-structured interviews lasting for one hour	Content analysis	Conventional
10	Borhani et al. [5]	2010	To explore the role of nurse instructors in nursing ethical competence	Tehran (Capital city)	Nursing students in Bachelor's program ($n=15$)	Semi-structured interviews lasting between 50 and 75 min	Content analysis	Conventional

nurses and professional competence. This category contributed to standardizing nursing practice [31]. Participants highlighted that while laws and regulations alone may not be sufficient, the enforcement of these measures can help foster individuals with a strong sense of adherence to the law and professional competence.

Theme 3: experiences

Experiences consisted of five categories. Nurses' diverse and complex professional roles, their interactions with clients, and other healthcare professionals often give rise to ethical challenges. Participants in the study identified the importance of skills, experience, and effective communication as key elements of codes of ethics [33].

Among the various categories discussed, mutual understanding emerged as a significant theme [31]. Nursing students recognized mutual understanding as a crucial ethical value that necessitated effective communication with at least one other person. Another category highlighted was interpersonal interactions [18], which encompassed the establishment of constructive relationships with patients, their families, and other members of the healthcare team. Some articles referred to this category as "constructive human relations" [4]. Furthermore, unethical behaviors or practices [31] were identified as another important category in the context of nurses and society.

Table 3 The results of qualitative synthesis, including main themes, categories, summarized codes and examples of interview quotations

Main themes	Categories	Summary of codes	Examples of interview quotations
Knowledge	Training	Irregular clinical education, Lack of theoretical learning, Disorganized theoretical training, Specialized knowledge, Lack of necessary preparation and sufficient scientific information of students about common diseases and hospital ward routines, Unpreparedness of students to perform invasive and non-invasive procedures, Situational knowledge, an educational gap between practice and theory	<i>Professional information is really effective. Sometimes, individuals may desire to take action but lack the necessary knowledge. As a result, clients may perceive them as unethical, but they do not know [31].</i>
	Different teaching methods	E-learning, sharing knowledge, traditional methods, lack of adequate equipment in university hospitals or nursing schools, teaching moral resilience to the nursing students, failure to teach nursing ethics in a problem-oriented method, training with a computer program and improving ethical decision-making skills	<i>We often grasp the concept of communicating with patients more effectively when it is demonstrated through examples or demonstrations. Unfortunately, this teaching method is rarely used [30].</i>
	Facilitating creative learning	Foresight, innovation, provision of supportive, learning conditions, inter-professional relations considering the multi-dimensional growth (comprehensiveness), encouragement of critical thinking and decision making, creative evaluation and feedback	<i>By engaging in discussions about the ethical challenges faced by patients in different wards, instructors can provide students with valuable opportunities to learn how to effectively address and solve ethical dilemmas [12].</i>
	Failure to provide sufficient information to patients	Not respecting the rights of patients, not allowing patients to ask questions, failing to answer patients' questions, failing to inform the patients about the procedures related to the treatment, and ignoring patients' questions	<i>During the intestinal surgery, the patient and her companions were unaware that the central venous pressure (CVP) guide wire had been left inside the patient's vein due to the negligence of the anesthesiologist. Furthermore, the reason behind this occurrence was not explained to the patient [33].</i>
	Effective professional role model	Model of clinical skills, Model of professional commitment, Individual characteristics and personality of the teacher, Individual characteristics and patterns of beliefs teacher, Teacher's practical models in ethics, Family value patterns	<i>I vividly remember one of our trainers who displayed remarkable patience and cheerfulness. Even when she was tired, she always wore a smile and instilled in us the importance of showing kindness and gentleness towards our patients [12].</i>
	Curriculum weakness and insufficient harmony with society's needs	Similarity and repetition of internships, appropriate timing of courses, irregular presentation of educational materials, lack of transparent and structured content, need-based curriculum,	<i>Throughout my seven nursing semesters, I noticed that the same topics were repeatedly covered in different study units. Unfortunately, when it came to the field of ethics, we were only provided with very limited information [12].</i>

Table 3 (continued)

Main themes	Categories	Summary of codes	Examples of interview quotations
Standards	Educational justice	Fair assessment, fair critique, no discrimination between students, lack of respect for the rights of patients, lack of support from the internship instructor, creation of equal gender opportunities, conflict of evaluations in courses, justice in education and laws	<i>One of our teachers had a better relationship with male students than with female students [4].</i>
	Competency promotion in different aspects (cultural, spiritual, technical),	Spiritual competence, cultural competence, religious competence, ethical competence, technical competence	<i>An internship instructor should not only focus on academic improvement but also support the spiritual growth of their students and help them develop a closer connection with God [4].</i>
	Academic competencies of faculty members and students	Improper training of instructors, professional knowledge and awareness, out-of-date instruction and knowledge, scientific competence	<i>Unfortunately, many of our professors, particularly instructors, tend to overlook ethical issues in clinical practice. Instead, they primarily focus on technical aspects of the work, such as administering medication [29].</i>
	Commitment and accountability	Commitment to implementing curriculum, commitment to solving problems, responsible use of learned data, responsible use of patient data, being a good listener	<i>Regular and hidden curriculum should be carefully planned for every session. In order to achieve educational goals, both teachers and students must be fully committed to its implementation [32].</i>
	Internal and external controls	Supervisor-subordinate interactions, interaction with health personnel, interaction with peers, self-assessment, lack of effective evaluation method, organizational environment and supervisory management	<i>The implementation of appropriate rules and regulations helps to increase our awareness of various matters. A notable example of this is the patient's bill of rights, which serves to inform individuals about their medical treatment and ensure they are well-informed throughout their healthcare journey [31].</i>
Experiences	Establishing humanistic and effective communications	The ability to know the patient and understand his/her condition, ability to create ethical relationship with patients, family and the health-care team members, the right of patients to know about the type of treatment and care procedures	<i>When discussing professional ethics, effective communication with the patient stands out as a primary aspect [33].</i>
	Interpersonal interaction	Respect for patients and their families, relationship between students, doctor-nurse-patient relationship, improper communication between doctors and patients, student-teacher interaction	<i>The presence of a negligent clinical trainee within our team has become a concerning issue. Instead of addressing and compensating for their negligence, we have repeatedly neglected the matter, which can have a detrimental impact on the development of our professional ethics [18].</i>
	Mutual understanding	Flexibility, trust, support, kindness and openness, perception of sympathy, minimal relationships, trust in nurses to prioritize patients' needs, putting yourself in the patient's shoes	<i>It is important to consider that the clinical trainee's negligence may stem from a lack of knowledge and inadequate training. However, if we were in the position of being a patient, we would not tolerate such behaviors. It is disheartening to think that if we were hospitalized in another facility, we might not receive the diagnosis or the care we deserve [31].</i>
	Experiencing unethical behaviors or practices	Misusing students and colleagues, hypocrisy, delay in providing timely treatment and care, failure to properly implement, unnecessary measures to improve practical skills	<i>If you have made a previous decision that led to a negative experience, it is crucial to acknowledge the impact of that decision and view it as an opportunity for growth. Reflecting on past mistakes allows us to learn from them and make more informed decisions in the future [31].</i>

Table 3 (continued)

Main themes	Categories	Summary of codes	Examples of interview quotations
Attitudes	Personal characteristics and beliefs	Internal commitment to do the right thing, personal and professional integrity, the role of religious beliefs, inner guidance and support, knowing yourself, others and your profession	<i>If a student possesses a strong moral compass, it can greatly enhance their effectiveness in their career. For instance, someone who is inherently kind and compassionate will extend that kindness to their patients as well [12].</i>
	Ability to think critically and make decisions	Decision making in the face of ethical dilemmas, creative thinking, conflict of interests, decision making in the face of problems, creative reasoning, the ability to do moral reasoning	<i>The student's ability to make the best decisions for each patient directly influences their capacity to provide effective care [29].</i>
	Interest	Motivation, interest in profession, interest in patients and their family, no feeling the need to learn, lack of passion for professional education	<i>When you deeply care for a patient, it can feel as though one of your own family members is lying on the hospital bed [29].</i>
	Human dignity	Respect for the patient, respect for the student, respect for instructors and colleagues, violation of patient privacy, failure to pay attention to patients' requests, the dignity of the classroom and course, compliance with student affairs	<i>During a conference room speech, our session was abruptly interrupted by a doctor who urgently requested the room for a lecture. The instructor, in response, asked us to leave the class immediately [4].</i>
	Wisdom	Perfect behavior, privacy, theology, self-knowledge, knowing the value of life and time, knowing the value of science and learning	<i>It is desirable for students to genuinely recognize the value of their education and comprehend that the pursuit of knowledge often requires sacrificing their time, energy, and youth [4].</i>

Theme 4: attitudes

Attitudes consisted of five categories. Nursing, unlike other healthcare professions, holds a unique position due to its inherent ethical nature. Neglecting this aspect can significantly affect the effectiveness of nurses in providing patient care, leading to a significant gap [34]. This theme encompassed the following categories:

1. Personal characteristics and beliefs [33] or personal motivations and tendencies [18, 33]: This category focuses on defining the personal characteristics of nursing students. It highlights the participants' recognition of spiritual foundations and religious beliefs as essential elements of codes of ethics and professional attitudes.
2. Ability to think critically and make decision [12, 32]: This category holds immense importance in fostering students' creativity, decision-making skills, and ethical competence. It can be considered a central aspect of professional attitude and ethical competence.
3. Interest: According to nursing students and professors in the selected research [29, 33], the two main areas of focus within this category were patient-centeredness and dedication to the nursing profession.
4. Human dignity [4, 32]: This category emphasized the significance of adopting a holistic approach to patient care.

5. Wisdom [4, 12]: This category encompassed subcategories of theology, self-knowledge, and cognition [32]. It represents the culmination of ethical values and codes in nursing professional competence.

Discussion

This study aimed to explore the code of ethics that contribute to the professional competence of Iranian nursing students in clinical and educational settings. The findings of this study revealed that the codes of ethics were categorized in the four major areas: Knowledge, Standards, Experiences and Attitudes.

Knowledge

A close examination of the themes and their categories indicates six categories in the area of knowledge, including: "training," "different teaching methods," "facilitation of creative learning," "failure to provide sufficient information to patients," "effective professional role model," and "curriculum weakness and lack of alignment with social needs." The absence of a specific framework and educational process leads to a lack of transparent and structured content related to professional ethics education. This issue has been highlighted in previous studies as well. Enhancing students' knowledge and awareness of professional ethics and its theoretical foundations is a fundamental step towards improving professionalism [35]. Zanjani et al. (2014) emphasized the importance

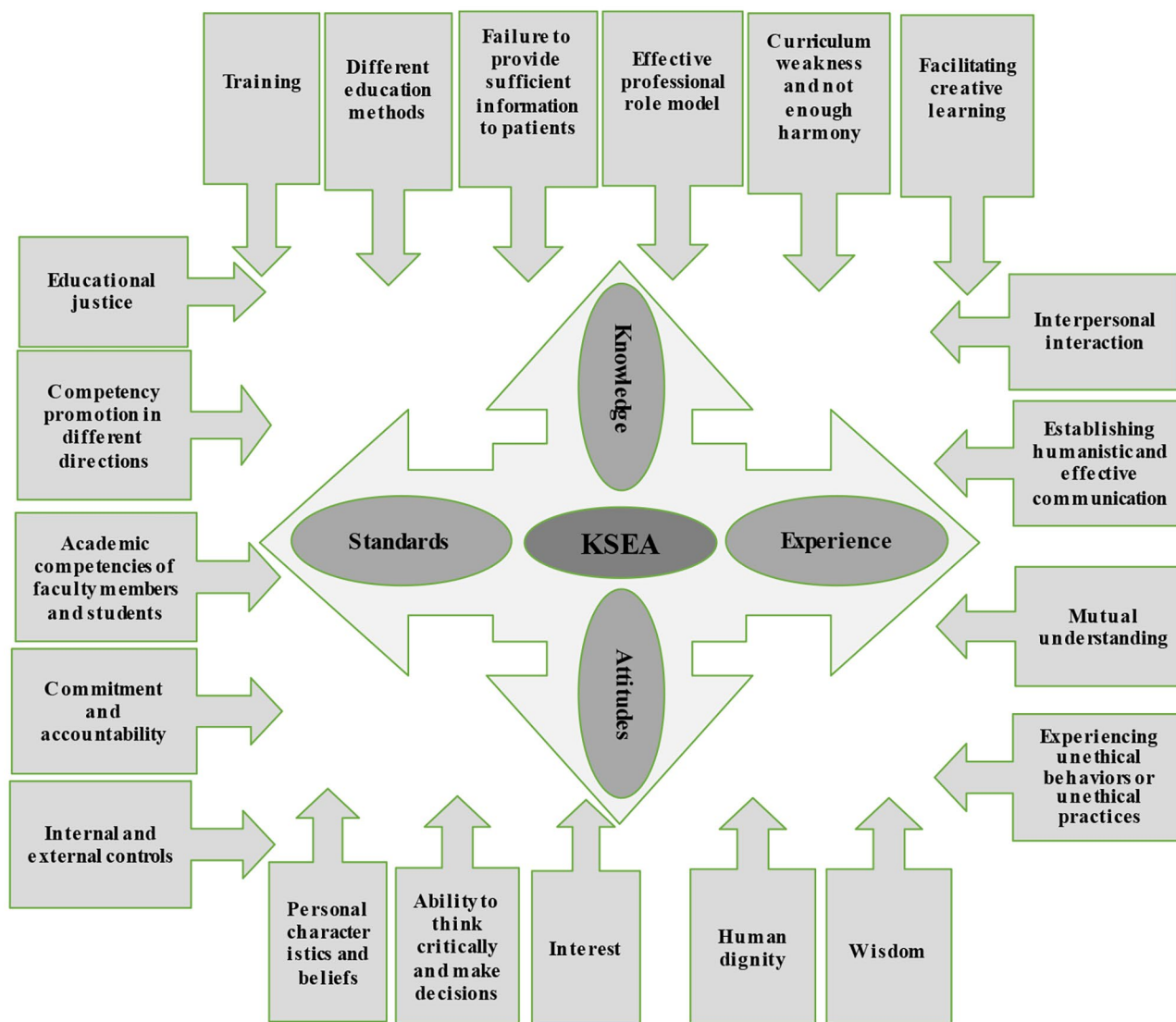


Fig. 2 Diagram of the Meta-Synthesis findings, containing four main themes in the middle and 10 categories around

of a targeted training program in practice to ensure the effectiveness of professional ethics education [36].

One significant consequence of employing different teaching methods for students is the enhancement of their capacity to make autonomous ethical decisions. Instructors, through the use of diverse teaching methods, help creation of this capability [12]. Considering that the nature of nursing work is patient care, it is crucial to employ teaching methods that promote both theoretical knowledge and technical skills in students. Relying solely on experiential learning implies learning from mistakes.

In this study, nursing students identified a lack of sufficient and correct information provided to patients [30]. Previous research emphasizes that doctors and nurses often believe they can make decisions on behalf of patients in the best way, without feeling the need

to explain or seek their opinions [37]. The qualitative research conducted by Mohamadkhani et.al. also highlighted the importance of the "Charter of patient's rights" in addressing patient's informational needs [38]. Furthermore, the presence of effective professional role models can significantly influence students' adherence to professional ethics [35]. Many students, who are future healthcare professionals, expressed dissatisfaction with the curriculum's inadequate coverage of ethics and the challenges associated with professional ethics. They emphasized the need for greater attention to both theoretical and practical aspects of professional ethics [39, 40].

Standards

Five categories were identified in the area of standards: "educational justice," "competency promotion in cultural,

spiritual, and technical aspects,” “academic competencies of faculty members and students,” “commitment and accountability,” and “internal and external controls.” To contribute to a global future nursing workforce equipped with professional competence in providing safe and high-quality care, it is important to measure and evaluate nursing students’ progress and achievements towards professional competence goals and requirements [41]. Recognizing its significance, nurse managers face the primary challenge of enhancing the level of professional competence among both nurses and nursing students [42].

Based on the participants’ experiences in these studies, educational justice emerged as a key aspect that underscored ethical values in nursing education. Justice serves as the fundamental principle for ethics education in nursing and it can consider one of the core values of nursing because the nurses and the nursing students identified it as one of the most important values. Moreover, this value is associated with patient care and the nurse-patient relationships in clinical settings, which are the focus of the ethical codes for nurses [43].

Another significant category that emerged from this study was the promotion of competence. Competence is a multifaceted and ambiguous concept within the healthcare field [4]. One aspect of this category that participants emphasized greatly was the cultural-religious aspect [44]. Many students expressed their concern about being understood by their instructors and professors. They highlighted the significance of role models who exhibit positive personality traits and demonstrate effective methods of interacting with patients, particularly in light of culturally diverse backgrounds of students in universities [34]. The presence of foreign and minority students in Iran’s higher education system highlights the need for an intercultural perspective to address such cultural diversity, emphasizing the importance of religious competence alongside cultural competence [44]. Several studies [45] have highlighted the values of active listening, commitment to problem-solving, and effective curriculum implementation, which demonstrate a sense of commitment and accountability. It is crucial to note that professional commitment directly affects the manner and quality of nursing profession [46].

One interesting finding of this study is that the nursing students generally consider the instructors’ competence as interrelated. Therefore, promotion of professional ethical competence requires that nurse instructors possess necessary nursing knowledge [47]. Monroe et al. argue that while the model-centered role of instructors is important for creating ethical attitudes among nursing students, it is equally important for instructors to prepare students from a philosophical viewpoint and enhance their knowledge of ethics [48]. Also, it is

important to be aware that a person cannot be ethically competent without practical expertise [49]. Furthermore, nursing instructors play a vital role in shaping the ethical values of their students through their responsibilities. They have the ability to enhance students’ skills in different areas, such as ethical competence and the use of learning opportunities [13].

In this study, nursing students believed that both internal and external controls played a significant role in enhancing ethical sensitivity. External controls are referred to as laws, while internal controls are associated with one’s conscience [33]. As nursing involves the collaboration of numerous individuals, external controls hold great importance. However, an individual’s conscience, or internal control, can compensate for any shortcomings in external controls [50].

Experiences

The area of experiences included four categories: “establishment of humanistic and effective communications,” “interpersonal interaction,” “mutual understanding,” “experience of unethical behaviors or practices.” The effectiveness of clinical experiences in the healthcare settings significantly influences the success of ethical actions and decisions in nursing. In this research, participants identified the importance of proper human communication as one of the most crucial ethical values in nursing. They also stressed the need to establish a close relationship with patients and dedicate time to ethical care [51].

Mutual understanding emerged as another key finding in this study, leading to the development of various codes. According to the participants, establishing an ethical and efficient relationship between nurses and clients or patients requires understanding from both sides. Weaver and Morse (2006) emphasized the significance of mutual respect in fostering and sustaining ethical competence [52].

Interactions with peers, healthcare personnel, nurses, and patients are additional factors that influence the development of professional ethics in students. Studies have highlighted the crucial role of interpersonal relationships in ethical competence and development [53]. Weakness in interpersonal communication has been identified as an obstacle to the development of professional ethics in students [54].

The role and performance of teachers have been recognized as influential factors in fostering professional competence. Teachers should serve as role models and possess theoretical knowledge in the field of ethics and professionalism, which can aid in the development of professional ethics in students. Yeom et al. (2017) also suggested that modeling training was more effective in ethical education than theoretical methods and lectures [55].

Another important category in our results was the experience of unethical behaviors or practices. Nursing aims to help vulnerable people, and caring is seen as an entirely moral action [56]. Engaging in immoral acts would impose additional harm on vulnerable individuals. Since immoral acts cause distress for nurses, they try to avoid such actions [57].

Goli et al. (2020) observed that in the absence of sufficient education and information, experience played a significant role in cultivating ethical and professional competence [58]. It is important to recognize that experiences come at a high cost to patients, nurses, and healthcare systems. Therefore, they should undoubtedly be considered as key factors in the development of ethical competence and sensitivity. All aspects of experience should be thoroughly examined and understood [59].

Attitudes

The area of attitudes included five categories: “personal characteristics and beliefs,” “ability to think critically and make decisions,” “interest,” “human dignity,” and “wisdom.” The impact of professional attitudes on job satisfaction and the improvement of professional performance is highly noticeable among nursing students and nurses. These values give meaning to life, and possessing such characteristics aligns well with Iranian culture [12]. Nursing experts also assert that ethical performance is closely linked to individuals’ personality traits [33]. Considering the significant role of belief and religion in Iranian society, this research also took into account students’ adherence to religious principles. Many of the chosen articles suggested that students who had a stronger inclination towards spirituality tended to demonstrate more spiritual aspects in their work [4, 18, 33].

The ability to think critically and make decisions is crucial in fostering creativity and ethical competence. In essence, it can be considered a central aspect of ethics and professional competence [33]. The appropriate performance of nurses, tailored to specific contexts and circumstances, primarily relies on their ethical reasoning abilities. Ethical reasoning is a significant criterion for professional competence [58]. White et al. (2021) argued that students frequently encountered patients with complex problems and challenges, necessitating the ability to analyze situations and make well-reasoned judgments [60]. Studies have shown that students recognize the importance of reasoning and decision-making not only in ethical issues but also across various aspects of nursing profession. Every decision made by a student in different situations carries a unique ethical nature [61, 62].

The students in this research expressed interest in two main areas: the patient and the nursing profession. They believed that these factors shaped the sensitivity and professional competence of nurses. Showing interest in the

patient prevents nurses from easily overlooking their problems and encourages them to address all concerns and problems holistically to find solutions [33]. This finding aligns with a study (2018) that explored the correlation between nurses’ internal beliefs and their corresponding actions [63].

The participants highlighted the significance of human dignity as a crucial ethical value. According to Combrinck et al. (2020), human dignity is a complex and multifaceted concept. The first aspect pertains to the dignity of patients, which is considered an inherent value in healthcare and is particularly relevant to the work of nurses. The second aspect, known as professional dignity of nursing, is less defined and remains uncertain [64].

Based on the participants’ experiences, wisdom emerged as one of the categories associated with ethical competence in nursing. Wisdom is considered a goal of intellectual development, achievable through knowledge, critical thinking skills, creative problem-solving, and philanthropy [60]. Promoting wisdom and incorporating it as a core value in nursing education can offer a unique perspective in curriculum development and address the challenges faced by nurses in the 21st century [65].

One limitation of this study was the scarcity and the scattered nature of studies on ethical codes of nursing students in our healthcare system. It is important to note that becoming a nurse involves more than just acquiring knowledge and practical skills; it also entails specific professional and ethical values that bring about fundamental changes in the attitudes and professional position of nurses [29].

Conclusions

A guide for development of codes of ethics in Iranian nursing students was found. It can assist to improve ethical competency of nursing students in the clinical and educational settings. Our results showed this is a multi-dimensional concept with four major areas: Knowledge, Experiences, Standards, and Attitudes. Further exploration involving diverse groups can yield practical applications for educational departments, management, and clinical environments, ultimately enhancing the moral competence of nurses. This systematic review and meta-synthesis were conducted to provide an updated and objective guide for nursing policy- and decision-makers in clinical settings, nursing schools and the Ministry of Health and Medical Education. The results can play a significant role in enhancing the professional ethics of nursing students and provide valuable insights for those responsible for the nursing education system. The application of this guide in collaborative programs between nursing schools can be beneficial, and it is the responsibility of the nursing schools together with the Ministry of Health and Medical Education to approve, develop, and

implement this guide for codes of ethics. Additionally, these guide for codes can serve as the basis for creating an effective evaluation tool to assess the ethical competencies of nursing students in Iran and/or other countries with similar education and healthcare systems.

Abbreviations

PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-analyses
KSEA	Knowledge, Standards, Experiences, Attitudes
CASP	Critical Appraisal Skills Program

Supplementary Information

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Supplementary Material 1

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Author contributions

ISH, ZKH, AH, CR and JF contributed to conceiving and designing the research. The data were collected, analyzed, and interpreted by ISH, ZKH, AH, CR and JF. ISH, ZKH, AH, CR and JF contributed equally to writing and revising the manuscript and approved the final manuscript.

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Data availability

The data supporting the findings of this study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the ethics committee of the university (IR.KMU.REC.1402.347). Throughout the research process, the ethical principle of trustworthiness was followed, ensuring proper citation of sources and the use of their results.

Consent for publication

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Competing interests

The authors declare no competing interests.

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References

1. Organization WH. Regional Competency Assessment Tool for Nurse Educators. 2022;<https://iris.who.int/handle/10665/361934>
2. Snelling PC. The metaethics of nursing codes of ethics and conduct. *Nurs Philos*. 2016;17(4):229–49.
3. Sanagoo A. Title: ethical challenges in the Clinical and Educational Environment of the University: experiences of nursing and midwifery students. *Educ Ethics Nurs*. 2018;7(1):383–90.
4. Boozaripour M, Abbaszadeh A, Shahriari M, Borhani F. Ethical values in nurse education perceived by students and educators. *Nurs Ethics*. 2018;25(2):253–63.
5. Borhani F, Alhani F, Mohammadi I, Abbaszadeh A. Perception of nursing teachers about nursing students professional ethical competency: a qualitative study. *Forensic Med*. 2011;16(3):165.
6. Enes SP, de Vries K. A survey of ethical issues experienced by nurses caring for terminally ill elderly people. *Nurs Ethics*. 2004;11(2):150–64.
7. Fazljoo SE, Nasiriani K, Zamani N, Azimpour S. Nurses' perceptions of ethical climate, ethical reasoning, and Moral Courage in the hospital. *Iran J Nurs*. 2022;34(133):28–39.
8. Sanjari M, Zahedi F, Aalaa M, Peimani M, Parsapoor A, Aramesh k, baghermaddah s, Cheraghi MA, Mirzabeigi G, Larijani B. Code of ethics for Iranian nurses. *Iran J Med Ethics History Med*. 2011;5(1):17–28.
9. Johnstone M-J. Ethics in nursing. *Contexts Nursing: Introduction* 2017:143.
10. Abbasinia M, Ahmadi F, Kazemnejad A. Patient advocacy in nursing: a concept analysis. *Nurs Ethics*. 2020;27(1):141–51.
11. Poorchangizi B, Borhani F, Abbaszadeh A, Mirzaee M, Farokhzadian J. Professional values of nurses and nursing students: a comparative study. *BMC Med Educ*. 2019;19:1–7.
12. Borhani F, Alhani F, Mohammadi E, Abbaszadeh A. Professional ethical competence in nursing: the role of nursing instructors. *J Med Ethics Hist Med*. 2010;3:3.
13. Numminen O, Leino-Kilpi H, van der Arend A, Katajisto J. Comparison of nurse educators' and nursing students' descriptions of teaching codes of ethics. *Nurs Ethics*. 2011;18(5):710–24.
14. Kim WJ, Park JH. The effects of debate-based ethics education on the moral sensitivity and judgment of nursing students: a quasi-experimental study. *Nurse Educ Today*. 2019;83:104200.
15. Schmidt BJ, McArthur EC. Professional nursing values: a concept analysis. *Nursing forum*: 2018. Wiley Online Library; 2018. pp. 69–75.
16. Chamboredon P, Lecointre B. [Promoting the code of ethics for nurses]. *Soins*. 2017;62(818):37–8.
17. Trolliet J. [Student nurses and the code of ethics]. *Soins*. 2017;62(818):47–9.
18. Dehghani A. Factors affecting professional ethics development in students: a qualitative study. *Nurs Ethics*. 2020;27(2):461–9.
19. Herber OR, Barroso J. Lessons learned from applying Sandelowski and Barroso's approach for synthesising qualitative research. *Qualitative Res*. 2020;20(4):414–31.
20. Borenstein M. Comprehensive meta-analysis software. *Syst Reviews Health Research: meta-analysis Context*. 2022;535:548.
21. Mehdipour Rabori R, Dehghan M, Nematollahi M. Nursing students' ethical challenges in the clinical settings: a mixed-methods study. *Nurs Ethics*. 2019;26(7–8):1983–91.
22. Moher D, Liberati A, Tetzlaff J, Altman DG, Group P. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Int J Surg*. 2010;8(5):336–41.
23. Casp U. CASP qualitative review checklist. In. Oxford: CASP UK; 2018.
24. Behzadifar M, Bragazzi NL, Arab-Zozani M, Bakhtiari A, Behzadifar M, Beyranvand T, Yousefzadeh N, Azari S, Sajadi HS, Saki M. The challenges of implementation of clinical governance in Iran: a meta-synthesis of qualitative studies. *Health Res Policy Syst*. 2019;17:1–14.
25. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol*. 2008;8(1):45.
26. Nye E, Melendez-Torres G, Bonell C. Origins, methods and advances in qualitative meta-synthesis. *Rev Educ*. 2016;4(1):57–79.
27. Campbell R, Pound P, Pope C, Britten N, Pill R, Morgan M, Donovan J. Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Soc Sci Med*. 2003;56(4):671–84.

28. Pope C, Mays N. Qualitative research in health care. Wiley Online Library; 2020.
29. Mohammadpour Y, Kazemi N, Abbasi M, Shams E. The survey of ethical among nursing student in Urmia University of Medical Sciences. *J Urmia Nurs Midwifery*. 2013;11(5):398.
30. Sadeghi R, Ashktorab T. Ethical problems observed by nurse students: Qualification Approach. *J Med Ethics*. 2011;5(15):43–62.
31. Borhani F, Abbaszadeh A, Mohsenpour M. Nursing students' understanding of factors influencing ethical sensitivity: a qualitative study. *Iran J Nurs Midwifery Res*. 2013;18(4):310–5.
32. Borhani F, Abbaszadeh A, Mohsenpour M. Illumination meaning of ethical sensitivity in nursing students: a qualitative study. *J Med Ethics*. 2013;6(22):93–115.
33. Borhani F, Abbaszadeh A, Mohsenpour M. Barrier to acquiring ethical sensitivity: perceptions of nursing students. *J Med Ethics*. 2011;5(15):83–104.
34. Amini M, Bakhshi F, Alizadeh N, Saadati M, Amini H. Assessment of nursing students' attitude toward professionalism. *Iran J Nurs Res*. 2020;15(2):58–66.
35. Shakour M, Yamani N, Yousefi A. The factors affecting teaching and learning professionalism among medical teachers. *Health Care Manag*. 2018;37(2):164–74.
36. Zanjani SE, Gofar NS, Gooshki ZKMASM. Introduction to codes of ethics for nursing students in Iran. *J Med Ethics*. 2014;7(26):11.
37. Tsuruwaka M. Consulted ethical problems of clinical nursing practice: perspective of faculty members in Japan. *BMC Nurs*. 2017;16:1–9.
38. Mohamadkhani Shahri L, Havaei M, Haji Rafiei E, Bagherinia M, Tajvidi M. Correlation between professional commitment and awareness and compliance with the charter of patients' rights in nursing and midwifery staff. *J Mod Med Inform Sci*. 2020;6(4):21–30.
39. Saberi A, Nemati S, Fakhrieh Asl S, Heydarzadeh A, Fahimi A. Education of Medical Professionalism and the role of educators of Guilan University of Medical Sciences Iran according to its residents. *Strides Dev Med Educ*. 2013;10(2):218–24.
40. Allami A, Shirazi M. Faculty members experience about teaching of medical professionalism in Qazvin university of medical sciences. *Res Med Educ*. 2015;7(2):1–11.
41. Forsman H, Jansson I, Leksell J, Lepp M, Sundin Andersson C, Engström M, Nilsson J. Clusters of competence: relationship between self-reported professional competence and achievement on a national examination among graduating nursing students. *J Adv Nurs*. 2020;76(1):199–208.
42. Ranjbar H, Joolaee S, Vedadhir A, Abbaszadeh A, Bernstein C. An Evolutionary Route for the Moral development of nursing students: a Constructivist grounded theory. *J Nurs Res*. 2018;26(3):158–67.
43. Kuehnert P, Fawcett J, DePriest K, Chinn P, Cousin L, Ervin N, Flanagan J, Fry-Bowers E, Killion C, Maliski S, et al. Defining the social determinants of health for nursing action to achieve health equity: a consensus paper from the American Academy of Nursing. *Nurs Outlook*. 2022;70(1):10–27.
44. Young S, Guo KL. Cultural Diversity Training: the necessity of Cultural competence for Health Care providers and in nursing practice. *Health Care Manag (Frederick)*. 2020;39(2):100–8.
45. Tosun B, Group B. Addressing the effects of transcultural nursing education on nursing students' cultural competence: a systematic review. *Nurse Educ Pract*. 2021;55:103171.
46. Sadeghi A, Purfarzad Z, Homaie Safir T, Tapak L. The relationship of Organizational Justice with Professional Commitment and Resilience of Nurses Working in Medical-Education Centers of Hamedan University of Medical Sciences in 2020–2021. *Nurs Midwifery J*. 2023;21(4):277–88.
47. Frilund ML. Awareness of Ethical Challenges and Nursing Intensity in Care of Older People. 2018.
48. Monroe HA. Nurses' professional values: influences of experience and ethics education. *J Clin Nurs*. 2019;28(9–10):2009–19.
49. Benner P, Tanner CA, Chesla CA. Expertise in nursing practice: Caring, clinical judgment, and ethics. Springer Publishing Company; 2009.
50. Alzeyadi S, Mohammed SH. Measures self-esteem among undergraduate nursing students. *Medico-Legal Update* 2020, 20(1).
51. Sitzman K, Watson J. Caring science, mindful practice: Implementing Watson's human caring theory. Springer Publishing Company; 2018.
52. Weaver K, Morse JM. Pragmatic utility: using analytical questions to explore the concept of ethical sensitivity. *Res Theory Nurs Pract*. 2006;20(3):191–214.
53. Milliken A. Nurse ethical sensitivity: an integrative review. *Nurs Ethics*. 2018;25(3):278–303.
54. Skela-Savič B, Kiger A. Self-assessment of clinical nurse mentors as dimensions of professional development and the capability of developing ethical values at nursing students: a correlational research study. *Nurse Educ Today*. 2015;35(10):1044–51.
55. Yeom HA, Ahn SH, Kim SJ. Effects of ethics education on moral sensitivity of nursing students. *Nurs Ethics*. 2017;24(6):644–52.
56. Esmaelzadeh F, Abbaszadeh A, Borhani F, Peyrovi H. Ethical sensitivity in nursing ethical Leadership: a content analysis of Iranian nurses experiences. *Open Nurs J*. 2017;11:1–13.
57. Basar Z, Cilingir D. Evaluating ethical sensitivity in surgical intensive care nurses. *Nurs Ethics*. 2019;26(7–8):2384–97.
58. Goli R, jaseemi M, Esmaeili R. Khalkhali h: nursing codes of ethical education based on lectures on Moral performance of nursing student: a quasi-experimental study. *Nurs Midwifery J*. 2020;18(5):369–78.
59. Foroughi S, Alhani F, Kazemnejad A, Zareiyan A. The ethical values in professional nursing ethics: a thematic analysis. *Yafteh*. 2016;18(1):56–64.
60. White S, Tait D, Scammell J. Nursing students' evolving professional values: capturing their journey through co-operative inquiry. *Nurse Educ Pract*. 2021;54:103117.
61. Rahmani P, Behshid M, Seif-Farshad M, Mousavi S, Molaei Tavani F. Moral awareness and its relationship with moral sensitivity among Iranian nursing students: a basis for nursing ethics education. *Nurs Open*. 2023;10(2):773–80.
62. Snelling P. Am I my students' nurse? Reflections on the nursing ethics of nursing education. *Nurs Ethics* 2023:9697330231193858.
63. Shafakhah M, Molazem Z, Khademi M, Sharif F. Facilitators and inhibitors in developing professional values in nursing students. *Nurs Ethics*. 2018;25(2):153–64.
64. Combrinck Y, van Wyk NC, Mogale RS. Nurses' professional dignity in private health care: a descriptive phenomenological study. *Int Nurs Rev*. 2020;67(3):395–402.
65. Robichaux C, Grace P, Bartlett J, Stokes F, Saulo Lewis M, Turner M. Ethics education for nurses: foundations for an integrated curriculum. *J Nurs Educ*. 2022;61(3):123–30.

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