Original Article

The Process of Professional Ethics Development in Midwifery Students: A Grounded Theory Study

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Abstract

Background: Midwives are faced with important ethical issues in their professional lives; therefore, becoming a midwife is not only the acquisition of knowledge and skills but also includes acquiring moral values that cause fundamental changes in their attitudes toward their professional responsibilities. The aim of this study was to explore the process of professional ethics development in midwifery students. **Materials and Methods:** This grounded theory study was conducted from 2020 to 2022 at Mashhad University of Medical Sciences, Mashhad, Iran. The participants included 17 midwifery students and 14 key informants. They were selected through purposeful and theoretical sampling. Data were collected using semi-structured in-depth interviews, field notes, and theoretical notes until theoretical saturation was achieved. Data collection and data analysis were performed simultaneously. Data were analyzed based on the grounded theory presented by Corbin and Strauss (2014) using MAXQDA Analytics Pro 2020. **Results:** The core category was "interactive-cognitive learning in a two-way reasoning path" which addressed the participants' main issue of moral numbness. Moral distress, interactive-cognitive learning, moral reasoning, and moral hopelessness were the midwifery students' strategies that led to a spectrum of moral internalization to moral burnout. The improper context of moral development was the context theme of this study. **Conclusions:** The theory of "interactive-cognitive learning in the two-way path of reasoning" creates a deep understanding of the process of formation of professional ethics in midwifery students and it can be used in the effective training of students with the aim of promoting professional ethics in midwifery.

Keywords: *Education, ethics, grounded theory, midwifery, professional, qualitative research*

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Introduction

Midwives are responsible for high-quality and non-judgmental care without discrimination in women's health, respecting human rights, and treating individuals.[1] Midwives face important ethical issues in their professional activities and must work according to ethical principles.[2] The most common ethical issues in midwifery are confidentiality in cases of sexually transmitted diseases, conscientious refusal to help other health care professionals in abortion, dealing with abortion requests in conservative contexts in which it is legally prohibited and punishable by law, and conflicting notions of moral obligations in emergencies in which both the mother's and baby's life are in jeopardy.[3,4]

Considering the nature of the midwifery profession, one should accept that becoming a midwife is not only the acquisition of knowledge and skills but also includes the acquisition of certain professional and moral values.[5] However, evidence shows that midwifery students often experience a stressful learning environment that may affect their ability to make ethical decisions.[6]

Many researchers agree on the challenges in professional ethics education. Li *et al*.[7] (2023) introduced some challenges, like insufficient education in fundamental medical ethics, lack of effective guidance in clinical research, and absence of stricter ethical supervision in the medical education system in India. Furthermore, in a study with a qualitative approach in Brazil, medical students identified major deficiencies related to teaching medical ethics, pointing to the need to change the current medical education model.[8] In addition, the results of content analysis in Iran showed that the education of medical ethics is in crisis because the main purposes of medical education have been ignored,

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and this has led to unexpected outcomes that do not follow ethics-based education.[9] Another qualitative study in Iran reported that medical educators, in general, and medical ethics teachers, in particular, have not been efficient enough in the moral development of students.[10] However, these previous studies do not provide an in-depth understanding of professional ethics education and how professional ethics develops during student life.

The development of professional ethics is a multifaceted phenomenon, and it is rooted in the culture, religion, beliefs, and values of a nation.[11] By using grounded theory, we can deeply understand this phenomenon according to our social interactions and communication. Moreover, we can develop theories that are based on interviews and observations with real subjects in real situations. Therefore, in the current study, we aimed to explore the process of professional ethics development in midwifery students using grounded theory.

Materials and Methods

This grounded theory study was performed during December 2020 and March 2022 based on the structuralism paradigm because the evolution of professional ethics is a subjective reality. It is interpreted and experienced by individuals in interaction with each other and with the wider social system. It is rooted in mental beliefs and values, and people determine its meaning in specific social and cultural contexts. Moreover, the grounded theory presented by Corbin and Strauss, with the philosophical assumptions of symbolic interactionism and pragmatism, has been chosen as the most appropriate approach as Grounded Theory examines social phenomena and the social processes existing in human interactions.[12] Moral evolution occurs in the form and intellectual structure of each person and is influenced by the interactions of different people with each other in specific circumstances.[13]

In this study, the School of Nursing and Midwifery of Mashhad University of Medical Sciences, Mashhad, Iran, was considered as the research setting. The inclusion criteria were being Iranian, studying in the field of midwifery, attending a clinical internship for at least one academic semester. The participants were initially selected based on purposeful sampling, then entered into theoretical sampling based on the maximum diversity strategy.

Data were collected through semi-structured interviews, field notes, theoretical notes, and recording of non-verbal behaviors. The main data collection method was individualized, in-depth, face-to-face (n = 19) and online (n = 12) interviews. Interviews with students were started with a general and open-ended question (When you are in doubt between right and wrong in your professional work, how do you decide?). They were asked to share their experiences in this field and the next questions were asked based on the participants' explanations and the interview guide. All interviews were conducted in Persian, which is the participants' native language, and each interview lasted between 25 and 100 minutes, with the average duration being 67.3 minutes. All interviews were conducted by the first author and were audio-recorded and transcribed anonymously.

Data analysis was performed simultaneously with data collection. A constant comparison technique was employed throughout the analysis stage. Data were analyzed according to the method presented by Corbin and Strauss (2014),[12] which includes the following main steps: (1) open coding: identifying concepts; (2) developing concepts in terms of their properties and dimensions; (3) analyzing data for context; (4) bringing the process into the analysis; and (5) integrating categories. MAXQDA Analytics Pro 2020 software (version 20.4; VERBI Software GmbH, Berlin, Germany) was used to manage and organize the data.

In this study, the criteria of Lincoln and Guba[14] were used to evaluate the trustworthiness of data. Credibility was assured via member checking, prolonged engagement, comprehensive field notes, audio recording, verbatim transcription, saturation of data, transcription rigor, Intercoder Reliability (ICR) checks, negative case analysis, peer review, and reflexivity. Dependability was assured through careful documentation and member checking. Confirmability of the data was maintained by audit trail, ICR checks, and peer review. Transferability was assured through data saturation, thick description, and comprehensive field notes, and authenticity was assured through reflexivity, prolonged engagement, audio recording, and verbatim transcription.

Ethical considerations

The study was approved by the ethics committee of Mashhad University of Medical Sciences with the ethical license number R.MUMS.NURSE.REC.1398.025. All methods were conducted in accordance with the ethical standards of the Declaration of Helsinki. The researcher explained the purpose of the study and the anonymity and confidentiality of the collected data to all participants. All participants were informed that they were free to withdraw from the study at any time. All participants signed the informed consent forms.

Results

The participants were 17 midwifery students in different educational stages and 14 key informants (midwifery teachers, specialists in medical ethics, people with experience as educational assistants, cultural-student assistants, and members of the ethics committee of the university, midwives with experience working in hospitals and health centers, educational supervisors of the hospital, and teachers of public ethics. A summary of the demographic information of the participants is presented in Table 1.

In the data analysis process, 2284 open codes were obtained, from which 84 concepts, 14 subcategories, and five main categories emerged after the data reduction process. From our data, five main categories [Table 2] were extracted, enabling us to develop a conceptual map [Figure 1] utilizing

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the "interactive-cognitive learning in the two-way path of reasoning" theory to explain the process of professional ethics development in midwifery students.

Moral numbness

Moral numbness was extracted as the main issue of the participants. Moral numbness was caused when most of the students experienced low moral sensitivity among professionals and low organizational sensitivity to professional ethics learning. Moral numbness emerged because most students understood that medical ethics education is taken lightly. Although much importance is given to the education of students' specialized topics, the development of their moral character is not given much attention. Moreover, from the point of view of students, moral sensitivity is not high among professionals, there is a low level of understanding of professional ethics concepts, and they do not pay much attention to compliance or non-compliance with professional ethics standards in practice. Furthermore, failure to demand compliance with professional ethics standards and neglect of professional ethics violations by organizations also caused the emergence of the concept of low organizational sensitivity to the promotion of professional ethics in the analysis process. One midwifery student said: *"For example, the charter of patient's rights is only like a catalog on the walls, we read that a mother has a series of rights, but it has no importance in practice, neither for midwives nor for the officials"* (sixth-semester midwifery student/BSc).

Interactive-cognitive learning in the two-way path of reasoning

This category includes strategies that midwifery students use in response to the main concern of "moral numbness."

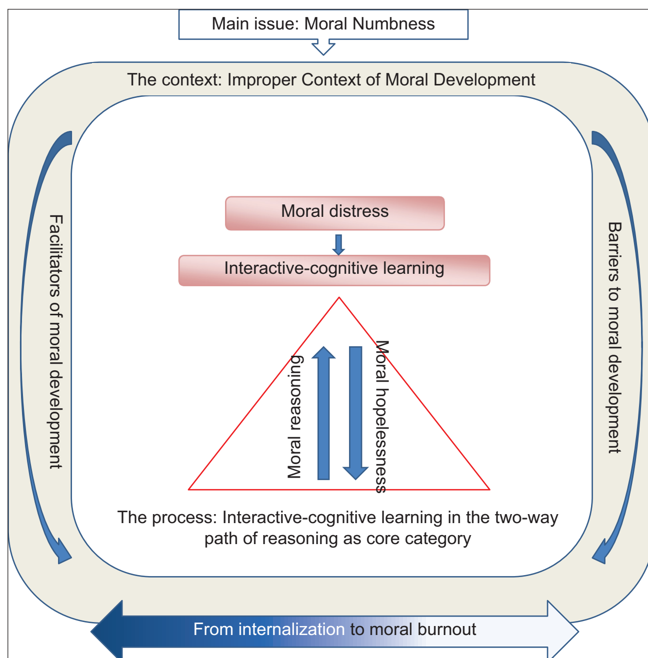

Figure 1: The theory of "interactive-cognitive learning in the two-way path of reasoning"

The process of "interactive-cognitive learning in the two-way path of reasoning" includes the four subcategories of moral distress, interactive-cognitive learning, moral reasoning, and moral hopelessness.

Moral distress

Moral distress is the first emotional action that students express in response to moral numbness. They experience a set of negative emotions and suffer from the inability to act morally. One midwifery student said: *"When I go to the hospital and see that the patient is not treated properly, I feel upset. I feel sorry. They do not explain what they want to do for her. Even privacy, which is the most common human right, is not respected"* (sixth-semester midwifery student/BSc).

Interactive-cognitive learning

Interactive-cognitive learning has two subcategories: interactive learning and activation of the cognitive process. In the interactive learning stage, the students are influenced by the learning environment and learn from the social interactions within it. "Interactive learning" is composed of two stages: passive compliance and modeling. Some students stated that at the beginning of their internship, they only followed the behavior of midwives in the learning environment without having full knowledge of its rightness or wrongness (passive compliance). Little by little, with the passage of time, the students began to look for the right behavioral models to follow and model the behavior of these models (modeling). In the cognitive learning stage, the student's cognitive processes are activated. This means that students do not imitate blindly but pay attention to professional behaviors, think about the rightness or wrongness, compare the results of behaviors, and finally, acquire the ability to make moral decisions. A medical ethics specialist said: *"The professional environment plays a very important role. A midwifery student first looks around and acts based on what she receives, regardless of whether it is right or wrong, bit by bit she compares and notices the wrongs and tries to find the right actions"* (University professor/medical ethics specialist).

In the beginning, the students are under the influence of the learning environment, but, by activation of cognitive processes or cognitive learning, they make the decision by themselves whether to enter the path of moral reasoning or moral hopelessness; so, it was called as two-way reasoning path students of moral reasoning or moral hopelessness.

Moral reasoning

Some students use the moral reasoning strategy in the process of developing professional ethics. Some of them show more moral sensitivity against moral insensitivity (in the path of moral reasoning), while some others (those in the path of moral hopelessness) have little sensitivity (do not care). They strive for moral self-empowerment. They earn more moral courage and more ability in moral decision-making.

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Table 1: The demographic profile of participants

Students group				
Interview number	**Age (year)**	**Academic level**	**Marital status**	**Interest in studying midwifery (Likert scale of 1-10)**
1	21	BSc, sixth semester	Married	5
2	22	BSc, eighth semester	Married	8
3	37	MSc	Married	8
4	31	PhD	Single	7
5	26	BSc (New graduate in midwifery)	Married	10
6	49	PhD	Married	10
8	24	MSc	Single	6
9	30	BSc, sixth semester	Married	10
10	27	PhD	Married	9
11	22	BSc, sixth semester	Single	9
12	22	BSc, eighth semester	Single	7
13	23	BSc, eighth semester	Single	7
14	31	BSc, sixth semester	Married	5
17	30	PhD	Married	8
23	30	BSc (new graduate in midwifery)	Married	8
24	22	BSc, sixth semester (withdrawing from midwifery education)	Single	2
29	19	BSc, fourth semester	Single	5-6
Key informants' group				
Interview number	**Age (year)**	**Employment**	**Field of study**	**Work experience (year)**
7	53	Midwife working in the maternity hospital	BSc in Midwifery	26
15	41	The head of the maternity hospital	BSc in Midwifery	17
16	51	Working in the Ministry of Health and Medical Education	Specialist in medical ethics	23
18	39	Educational supervisor of the hospital	MSc in Community Health	17
19	48	Faculty member with the experience of being an educational assistant	PhD in Nursing	20
20	47	Faculty member with the experience of being a student-cultural assistant	PhD in Nursing	22
21	60	The head of the hospital and member of the ethics committees	Gynecologist	28
22	62	Retired from the faculty of midwifery	MSc in Midwifery	31
25	50	Lecturer of the public ethics course	MSc in Religion	27
26	60	Director of Student Affairs of the university	Epidemiologist	Over 30
27	58	Member of the midwifery board	PhD in Reproductive Health	29
28	65	Faculty member and member of the ethics committees	PhD in theology/author of books on medical ethics	Over 30
30	30	Member of the student disciplinary committee	MSc in clinical psychology	7
31	48	Director of midwifery	MSc in Midwifery	27

One midwife said: *"Maybe during my bachelor's degree, I would hide the non-sterilization of the urinary catheter out of fear of my superiors or out of fear of a bad grade, and would use it for the patient. Now, I try to find the correct way, and if I make a moral mistake, I definitely tell my superiors or the supervisor so that they can correct it if possible"* (second-semester midwifery student/MSc).

Moral hopelessness

Some students use the moral hopelessness strategy in the process of developing professional ethics. Students who choose the moral hopelessness strategy have low moral sensitivity. They do not have enough motivation to comply with ethical standards. In cases where they violate the standards of professional ethics, they do not accept their mistake but try to justify their professional mistake. Finally, these students' moral nature changes and the observance of moral standards becomes symbolic and dramatic to them. One student said: "*I myself used to take care of my patients much more before. one important reason is that I am tired.*

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Table 2: Summary of categories and subcategories of "interactive-cognitive learning in the two-way path of reasoning"

Core category	Categories	Subcategories
Interactive-cognitive learning in the two-way path of reasoning	Moral numbness (main issue)	Low moral sensitivity among professionals
		Low organizational sensitivity for professional ethics learning
	Interactive-cognitive learning in the two-way path of reasoning (process category)	Moral distress
		Interactive-cognitive learning
		Moral reasoning
		Moral hopelessness
	From internalization to moral burnout (outcome category)	Normalization of the dominant behaviors in the learning environment
		Internalization of moral values
		Moral burnout
	Improper context of moral development (context category)	Damaged socio-cultural-political context (macro level)
		Professional challenges in midwifery (meso-level)
		Inappropriate cognitive-motivational context (micro level)
	Barriers and facilitators of moral development	Barriers to moral development
		Facilitators of moral development

I do not have the patience to resist the immoral norms formed in the environment. I do not get anything for the good work I am doing. it is not visible at all. so why should I do it?" (PhD student of reproductive health/27 years old).

Internalization of moral burnout

The data analysis showed that the strategies used by students have resulted in the spectrum of "from internalization to moral burnout." This category has three subcategories: (1) normalization of the dominant behaviors in the learning environment, (2) internalization of moral values, and (3) moral burnout.

Normalization of the dominant behaviors in the learning environment

Normalization is placed at the center of the spectrum and is a consequence of the process of professional ethics evolution, following the influence of the environment. The normalization of the dominant behaviors in the learning environment means that, over time, the behaviors of the environment become normal for students. Normalization is usually experienced following modeling and frequent observations, and the tendency to be like ones' peers. Normalization will include both ethical and unethical behaviors; that is, if a student observes professional ethics standards in the work environment, ethical behaviors become normal for her, and if she is placed in an environment in which she does not observe professional ethics standards, unethical behaviors become normal for her. One Ph.D. student said: *"When I was a student, whenever I would see an unethical behavior in the clinical setting. I would say to myself: "I will not behave like that. It is not possible for me to become like that.". Now that I have come to this work environment, it has become normal for me. I did not realize when., but I became just like them."* (Ph.D. student of reproductive health).

Internalization of moral values

From this point on, if normalization continues in the process of moral reasoning, it leads the student to the internalization of moral values. Internalization happens when ethical values are maintained. They stay in the mind and become a part of one's inner values. One midwifery student said: *"Unknowingly, many behaviors become valuable. We have repeated the behavior many times, and so, the behavior stays with us. when a teacher does something that is valuable to him, I then realize that it must be a valuable event… of course, and I think this happens automatically in our mind."* (eighth-semester midwifery student/BSc/22 years old).

Moral burnout

If normalization continues in the process of moral hopelessness, the result will be moral burnout. In other words, the students forget their moral findings, and thus, lose moral sensitivity. Their moral values become weak, and they do not feel good about their moral character. A retired midwifery faculty member said: *"She was our student, and she followed everything very well when she was a student, but now that she has entered work, she has become a completely different person. She does not have the previous sensitivities. She behaves badly. She is non-committal and she has forgotten everything we taught her."* (MSc in Midwifery/Retired from the faculty of midwifery/62 years old).

Improper context of moral development

The concept of "improper context of moral development," as a context category in this grounded theory, includes damaged socio-cultural-political context (macro level), professional challenges in the midwifery profession (meso level), and inappropriate cognitive and motivational context (micro level). One midwife said: *"In poor economic conditions, people are trapped… and in a hospital where the rights of patients are not respected and there are so many challenges between midwives and gynecologists, the observance of ethical standards is no longer given much importance. Now, if there is no interest in midwifery, the circumstances are even worse"* (Midwife/38 years old).

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Barriers and facilitators of moral development

The barriers to moral development were the weakness of the educational system. These barriers include failure to implement the rules of professional ethics, and the lack of facilities to comply with the standards of professional ethics. The facilitators of moral evolution were access to a moral-oriented model, moral-oriented education, and advancement of educational level from bachelor's degree to master's degree or PhD. One midwifery professor said: *"Sometimes, a student wants to observe moral standards, but she has not received training or there are no facilities for her to do so. so if the conditions are prepared for her and the right behavioral models are available to her, she may observe them better than us."* (Midwifery professor/17 years of experience)

Discussion

This study investigated the development of professional ethics in midwifery students and proposed the "Interactive-cognitive learning in the two-way path of reasoning" theory.

Moral numbness as the main concern in this theory is formed in the "improper context of moral development" that is influenced by political, social, cultural, organizational, and personal factors. The strategies that students use to deal with moral numbness include moral distress, interactive-cognitive learning, moral reasoning, and moral hopelessness, which cause a wide range of consequences ranging from moral internalization to moral burnout.

"Interactive-cognitive learning in the two-way path of reasoning" has some conceptual similarities with Piaget's theory of moral development. According to Piaget[15] (2011), the development of ethics in children occurs in two stages: heteronomous morality and autonomous morality. Similarly, in interactive-cognitive learning, the students first experience imitation and modeling and then make moral decisions based on the cognitive processes in their own mind.

The study findings also have conceptual parallels with some levels of Kohlberg's Theory of Moral Development. "Pre-conventional morality" is the first level of this theory; children act at this level to avoid punishment or receive a reward.[13] In this study, students pretended to follow ethical standards while suffering from moral hopelessness, and this pretense was not for the sake of moral values but to gain privileges or due to fear of losing personal interests.

Kohlberg also argues that those who have reached the third stage of moral development, which is based on the internalization of ethical standards, make decisions based on their principles and uphold them under all circumstances.[13] In this regard, the results of the present study show that during their progression toward moral reasoning, students reach a stage in moral development that has the internalization of moral principles as its outcome. In other words, students develop a heartfelt sense of their own righteousness, establish moral behavior, and realize that they are always obligated to render devoted services.

Despite some similarities, distinguishing between the levels of moral development stages and placing people in a certain level forever in Kohlberg's theory[16] is not supported by the data resulting from our study. This is because students actively and based on the conditions decide to move in the direction of moral reasoning or use passive solutions in the direction of moral despair. This issue explains the differences in the moral development of students in a common learning environment and even the differences in the moral decision-making of a student in different decision-making situations.

The theory proposed in this study and James Rost's model share the concept of moral sensitivity. In fact, moral sensitivity is the cognitive dimension of James Rost's model and one of the influential components in moral behavior.[17] Based on the "interactive-cognitive learning in the two-way path of reasoning" theory, moral sensitivity is one of the factors contributing to the development of professional ethics. Accordingly, moral sensitivity is promoted in the learning environment when students follow the path of moral reasoning, but it is lost when students follow the path of moral despair.

Based on the theory proposed in this study, the development of professional ethics in midwifery students is considered a type of interactive-cognitive learning; therefore, it is consistent with Bandura's theory, which contends that moral development is a result of a combination of social and cognitive factors.[18] Both these theories share the concept of modeling. According to Bandura's theory, almost all behaviors can be learned through observation of other people's behavior and its effects rather than through direct experience.[19] The theory proposed in this study also indicates that students emulate and follow the behaviors of professionals around them in comparable circumstances. The role of modeling in moral learning is so important that the Exemplarist Moral Theory of Zagzebski vigorously corroborates the claim that moral exemplars are essential to moral theory and practice.[20]

Considering the importance of modeling in the process of developing students' professional ethics, attention should be paid to the availability of correct behavioral models in the students' education system. Moreover, professors, midwives, and gynecologists in educational environments should be aware of their exemplary role and be familiar with the concept of indirect education or hidden curriculum.

Cognitive learning is another concept discussed in this study that refers to the important role of cognitive processes and students' understanding of what they observe in the environment. In this regard, Levin believes that situations do not necessarily consist of objective and tangible environmental factors and elements, but the individual's

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understanding and perception of that situation is decisive and should be taken into account.[21] Furthermore, according to the professional ethics model of Bartels, social interactions are the domain in which moral judgment occurs.[19] According to these findings, in addition to providing a suitable educational environment, students' moral recognition skills and moral thinking should be strengthened.

There are some limitations in this research. The coincidence of sampling in this study with the COVID-19 pandemic caused us to use the online method in 12 interviews and made it impossible for us to observe the participants in the natural fields of educational settings. In addition, the participants in our study were students, and they were asked to share their experiences of professional ethics in their educational environment; thus, sometimes, the researcher was forced to use direct questions due to the students' low understanding of the concepts and provide them with examples of moral concepts.

Furthermore, observing the principle of maximum diversity in the selection of participants, carefully conducting the analysis process, and using a team of specialists for analysis were the strengths of the present study.

Conclusion

The theory of "interactive-cognitive learning in the two-way path of reasoning" explains the process of professional ethics development in midwifery students with the main concern of "moral numbness." Moral distress, interactive-cognitive learning, moral reasoning, and moral hopelessness were the midwifery students' strategies to address their main concern that led to the spectrum of moral internalization to moral burnout.

Paying attention to the concepts of this theory can create a deep understanding of the process of formation of professional ethics in students, and it can be used in the direction of the effective training of students with the aim of promoting professional ethics in midwifery.

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Conflicts of interest

Nothing to declare.

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