

Knowledge and Attitude of Midwifery Students towards Observing the Ethical and Legal Standards of Patients' Rights

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ABSTRACT

Background & aim: In the midwifery profession, observing legal and ethical issues in professional practices should be emphasized. Legal and ethical advancements in the realm of midwifery have raised the need for midwives' awareness as to patient rights. This study was performed to evaluate midwifery students' knowledge and attitude towards observing the ethical and legal standards of patient rights in 2015.

Methods: This descriptive study was conducted on 85 midwifery students in the 5th and 7th semesters of Bachelor of Midwifery program, the 1st and 3rd semesters of Master of Midwifery program, and 1st and 3rd semesters of Counselling in Midwifery master's program at Mashhad University of Medical Sciences. Data collection tool was a researcher-made questionnaire consisting of three domains of demographics, knowledge (30 questions), and attitude (35 items) towards observing the legal and ethical standards of patient rights. To analyze the data, descriptive statistics, analysis of variance, Student's t-test, and correlation coefficient tests were used in SPSS, version 16.

Results: The means of overall knowledge and attitude towards ethical and legal standards were 17.55 ± 3.15 (moderate knowledge) and 145.40 ± 12.33 (good attitude), respectively. No significant association was found between knowledge score of the subjects and observing the patient rights and midwifery ethical codes ($P < 0.05$).

Conclusion: Most students had good attitude, but moderate knowledge about ethical and legal standards of patient rights. Given the importance of observing these principles in providing obstetric care, we recommend holding workshops on this issue.

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Introduction

Maintaining and restoring health have been the clear responsibility of the healthcare providers throughout history. Thus, different aspects of patient rights means observing the standards related to the health of the involved individuals (1). Currently in Iran, we follow the movement launched more than half a century ago and still continue to achieve noble objectives. The ethics is considered in the health system and its services, and those involved in the system tend to stay loyal to the principles

globally accepted in this regard since they are based on humanity (2).

The ethics indeed refers to both undesirable and desirable attributes, actions, and habits. The holy prophet stated that his goal was to consummate morality (3). Of the most important ethical principles and human rights in the realm of medical practice is observance of patient rights. Accordingly, Medical Sciences students must have sufficient knowledge and

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the necessary skills to respect the rights of their patients (4).

Respecting patient rights is mandatory for all members of medical team. In this regard, training students should be considered due to their substantial role in patient care. Direct and close contact with patients on the one hand, and application of the content learned in the profession on the other, reveal the importance of addressing patient rights observance in medical programs (5). This is especially necessary in the profession of midwifery, as midwives deal with two individuals at the same time, each having specific rights (6, 7). While educating midwifery-related human forces, in addition to the essential knowledge and skills, the development and strengthening of values, attitudes, moral norms, social skills, and other attributes contributing to midwives' behaviors or the professional ethics should be addressed (8).

With the advancements in medical information and technology, the ethical problems associated with it are accruing (6, 7). Koh et al. (2001) in their study showed that medical advances have undermined physician-patient relationship. A former study reported that 77% and 44% of medical residents faced complex ethical issues at least once and twice a year, respectively (9). Therefore, scientific advances supported by morality are beneficial for humankind (10).

Observing the ethical standards guarantees retaining patient rights (11), despite this, several studies revealed that the level of knowledge regarding these standards and observing them are not in a good condition. Azimi et al. (2007) in their study reported that the mean score of students' level of knowledge about medical ethics was moderate (12). In a study by Yousef-Zadeh et al. (2007), the level of knowledge as to the code of professional ethics in most midwives (67.6%) was moderate (13). In a study by Madhivanan et al. (2014), the findings showed violation of privacy, performing the HIV testing often without consent, confidentiality breaches, and depriving the patients from treatment by care providers (14).

Appropriate observance of ethics by healthcare team while dealing with patients entails building a good health-care provider-

patient relationship, keeping dignity and privacy of patients, respecting informed choices of patients, and notifying them of their condition and the treatment process. In general, considering the norms of professional ethics and patient rights require knowledge of the general concept of medical ethics (15). Although knowledge does not implicate behavioral change, it can be a determining factor in an individual's behaviors (12). Therefore, the first step in respecting patient rights is being aware of it (16). In several studies, lack of awareness of medical staff and students regarding these rights was one of the important factors associated with waiving patient rights (17).

Today, policy-makers, health managers, and medical professionals demand and encourage observing ethics in care provision, lack of attention to the legal context of the health system may lead to immoralities with legal origin (2). Patients suffering from physical and mental illnesses who refer to medical centers have certain legal rights (18). These rights include addressing the physical, mental, spiritual, and social needs of the patients, and medical staff is obliged to respect them (19). The results of a study entitled as "awareness of patient rights and observing them in Lithuania" showed that 85% of health care workers and 56% of patients had either heard or read about patient rights law (20).

One of the problems midwives face in the workplace is legal issues. Due to the advances in various fields of the midwifery science, including abortion, contraception, and infertility, legal and ethical issues have expanded (15). In many cases, midwives are the real decision-makers and being unaware of legal and ethical aspects of the decision does not exempt them from law (21). Therefore, the first step in preventing entanglement in legal issues is awareness of the law (22). University is the suitable environment to promote the awareness of students about legal issues of medical profession and improve their knowledge before entering the job. Therefore, knowledge of criminal laws and forensics ordinances associated with obstetrics and gynecology is more important for student of these fields, because they deal with the life and health of two persons at the same time (15).

In a study entitled as "knowledge of gynecologists and midwives from the laws and regulations of therapeutic abortion (legal) and criminal abortion (intentional) in Yazd", Ghadipasha et al. found that knowledge of midwives and gynecologists was in an undesirable level (23). Gundogmus et al. studied the legal claims that midwives and nurses raised for their medical errors in court. According to the results of their study, 59% of health workers had no legitimate defense and were convicted; among them, midwives had the highest rate of conviction, followed by doctors and nurses (24). Awareness of legal issues and criminal law and its application at the time of providing service prevent errors in many cases and this will reduce medical errors and complications, as well as patient complaints (15).

Retaining patient rights is a multi-section issue and to achieve this goal, all-round effort must be made (25). Determining patient rights is the first research priority from the perspective of educators, researchers, and policy-makers in the realm of medical ethics at the national scale (26). In doing so, the level of knowledge and attitude of midwifery students should be determined to identify the current status. Given the scarcity of studies on attitudes and knowledge regarding ethical and legal standards of patient rights, we aimed to evaluate the knowledge and attitude of midwifery students of Mashhad University of Medical Sciences towards ethical and legal standards of patient rights.

Materials and Methods

This descriptive study assessed the knowledge and attitude of midwifery students in Mashhad University of Medical Sciences towards respecting the ethical and legal standards of patient rights in 2015. Sampling was performed through census sampling method. Of the 120 samples, 35 cases did not complete the questionnaire and a total of 85 midwifery students in the first semester of 2015-2016 academic year who met the inclusion criteria were enrolled.

The inclusion criteria were willingness to participate in the study, being in the fifth or seventh semester of Bachelor of Midwifery program, first or third semester of Master of Midwifery program, or first or third semester of

Counseling in Midwifery studying at Mashhad University of Medical Sciences, as well as experience of presence in hospitals and health centers during training. Students who did not complete the questionnaire or concurrently participated in a workshop with the theme of observing the ethical standards of patient rights were excluded from the study.

A questionnaire was designed based on the studies related to this field, which comprised of three parts of demographic characteristics, knowledge, and attitude. The questionnaire consisted of 7, 30, and 35 items on demographics, knowledge, attitudes towards observing ethical codes (based on some Midwifery ethical codes, medical ethics principles, and ethical aspects of patient rights), respectively, which included questions in areas such as patient privacy, respect for patient's autonomy, confidentiality, and respecting patient's dignity and legal (questions about the most important duty of midwives approved by the Supreme Council of Health. They also comprised legal aspects of patient rights (some Islamic penal laws approved by the Supreme Council health about the professions of medical sciences). These questions were coded through studying the latest books and articles about the study subject under the supervision of professors.

The knowledge questions were designed in two parts of ethical (12 questions) and legal (18 questions) standards with one correct answer; one score was given to the correct answers and zero score to other options. Thus, the maximum possible scores for this domain in the first and second sections, as well as in total were 12, 18, and 30, respectively, and the minimum score was zero. Based on the scores, the students' knowledge was categorized into three levels of weak (0-10), medium (10-20), and good (20-30).

The attitude questions were designed in two parts of ethical (128 questions) and legal (17 questions) standards; based on consistency with their characteristics the respondents rated the items using a five-point Likert scale (strongly agree [score 5], agree [score 4], no idea [score 3], disagree [score 2], and completely disagree [score 1]). Thus, the maximum score obtained from this domain in the first and second sections, as well as in total were 90, 85, and 175, respectively, while the minimum scores were

18, 17, and 35, respectively. Based on the scoring of the questionnaire, the students' attitude was classified into three levels of weak (35-81), medium (81-128), and good (128-175). To determine the content and face validities of the questionnaire, it was given to 12 experts and faculty members of the Mashhad University of Medical Sciences and the corrections were applied based on their views.

Cronbach's alpha coefficient was used to establish the reliability of the questionnaire ($\alpha=0.841$ for knowledge and $\alpha=0.882$ for attitude). Before conducting the study, approval of the Deputy of Research of Faculty of Nursing and Midwifery as well as the Ethics Committee of the university was obtained; the researcher explained the study objectives to the students and obtained their written consent. The participants were assured of confidentiality of the data.

To describe the data, descriptive statistics (frequency, mean, and standard deviation) were used. To evaluate the association between demographic variables and level of knowledge and attitude (quantitatively), Spearman's rank correlation coefficient was employed. To assess mean score of attitude towards moral rights of the patients in terms of the studied variables, t-test, Mann-Whitney, Kruskal-Wallis, and One-way analysis of variance were run in SPSS, version 16. P-value less than 0.05 was considered statistically significant.

Results

In this study, we evaluated the knowledge and attitudes of 85 students of Mashhad School of Nursing and Midwifery towards observing the ethical and legal aspects of patient rights in the first semester of 2015-2016 academic year. The mean age of the participants was 24.35 ± 5.28 years and the majority of them (70.6%) were Bachelor of Midwifery students. No student had participated in workshops with the same theme; 37.6% of the students had not studied the contents of patient rights and 62.2% of the students had not studied the midwifery ethics codes. Furthermore, 62.2% of the students had passed the course of midwifery ethics and regulations, and 43.5% of the participants had high interest in midwifery. The results of the

Table 1. Distribution of midwifery students in Mashhad School of Nursing and Midwifery based on total score of knowledge and attitude towards ethical and legal standards of patient rights

Level	Frequency (%)
Knowledge	
Weak	4 (4.7)
Moderate	66 (77.6)
Good	15 (17.6)
Attitude	
Weak	0 (0.0)
Moderate	8 (9.4)
Good	77 (90.6)
Total	85 (100.0)

study showed that the mean score of students' knowledge of ethical and legal standards of patient rights was 17.55 ± 3.15 , reflecting moderate knowledge level. In addition, the total mean score of students' attitude towards observing the moral and legal rights of patients was 145.40 ± 12.33 , indicating good attitude based on the criteria listed in the survey tool (Table 1).

Table 2. Distribution of midwifery students in Mashhad School of Nursing and Midwifery based on levels of knowledge and attitude towards ethical and legal standards of patient rights

Level	Frequency
Knowledge of ethical standards	
Weak (0-4)	4(4.7)
Moderate (4-8)	49(57.6)
Good (8-12)	32(37.6)
Knowledge of legal standards	
Weak (0-6)	10 (11.8)
Moderate (6-12)	69(81.2)
Good (12-18)	6(7.1)
Total	85(100.0)
Attitude towards ethical standards	
Weak (0-5)	0(0.0)
Moderate (5-11)	7(8.2)
Good (11-17)	78(91.8)
Attitude towards legal standards	
Weak (0-7)	0(0.0)
Moderate (6-12)	14(16.5)
Good (12-18)	71(83.5)
Total	85(100.0)

In this study, the majority of the students had moderate knowledge, but good attitude towards

Table 3. The relationship between demographic variables and knowledge and attitude of midwifery students in Mashhad School of Nursing and Midwifery towards ethical and legal standards of patient rights in 2015

Variable	N (%)	Mean±SD of Knowledge attitude	Test results (knowledge)	Test results (attitude)
Educational level				
BSc	60 (70.6)	02.58±3.17 66.00±11.149	Whitney-Mann 0.116= -Z	Whitney-Mann 1.096= -Z
MSc	25 (29.4)	48.48±3.17 39.9±12.143	0.907= P	0.273=P
BSc semester				
Five	29 (34.1)	03.72±3.16 51.72±11.45	Whitney-Mann 1.468= -Z	Whitney-Mann 1.104= -Z
Seven	31 (36.5)	18.38±2.83 142.19±13.12	0.142= P	0.270= P
MSc semester				
One	10 (11.8)	19.00±2.10 149.40±11.26	Whitney-Mann 1.823= -Z	Whitney-Mann 0.816= -Z
Three	15 (17.6)	16.46±3.90 148.73±12.30	0.068= P	0.414= P
Age				
20-25	66 (77.6)	17.51±3.13 17.48±3.48		
25-30	5 (9.5)	15.40±1.94 143.80±6.05	0.054= P Df=3	0.613=P Df= 3
30-35	8 (4.9)	17.50±4.47 146.75±10.60	$\chi^2=7.644$	$\chi^2=1.810$
>35	6 (1.7)	19.83±2.04 148.83±15.30		
Marital status				
Single	52 (4.62)	17.75±3.13 145.00±13.17	Whitney-Mann 0.726= -Z	Whitney-Mann 0.838= -Z
Married	32 (6.37)	17.24±3.20 146.03±11.05	0.468= P	0.402= P
Passing ethics course				
Yes	52 (4.62)	18.05±3.23 145.42±12.23	Whitney-Mann 1.747= -Z	Whitney-Mann 0.753= -Z
No	32 (6.37)	16.71±2.86 145.38±12.70	0.081= P	0.451= P
Studying midwifery ethical codes				
Yes	33 (2.62)	18.48±3.30 147.09±13.58	Whitney-Mann 2.149= -Z	Whitney-Mann 0.677= -Z
No	52 (8.38)	16.96±2.92 144.33±11.48	0.032= P	0.498= P
Studying the patient rights				
Yes	52 (8.38)	18.63±2.61 144.81±12.12	Whitney-Mann 3.600= -Z	Whitney-Mann 0.080= -Z
No	33 (2.62)	15.84±3.20 146.33±12.79	0.0001= P	0.936= P
Interest in midwifery				
Never	1 (2.1)	17.00±0.00 137.00±0.00		
Low	3 (5.3)	17.33±0.57 144.00±13.00		
Moderate	32 (6.37)	16.81±3.55 144.09±12.93	0.541=P Df= 4	0.721= P Df= 4
High	37 (5.43)	18.32±2.51 145.54±12.61	$\chi^2=3.103$	$\chi^2=2.080$
Very high	12 (1.14)	25.95±17.3 149.50±10.44		

observing the ethical and legal aspects of patient rights (Table 2). No significant relationship was noted between knowledge score and age, interest in midwifery, semester and level of education, marital status, and passing the theoretical course on ethics and regulations of midwifery ($P>0.05$ in all the cases). However, the results of the study

presented a significant association between totalscore of knowledge and studying patient rights and midwifery ethical codes. Moreover, no significant link was observed between demographic characteristics and total score of attitude towards observing the moral and legal rights of patients ($P>0.05$ in all the cases; Table 3).

Table 4. Results of linear regression analysis about the relationship between demographic variables and knowledge level of midwifery students in Mashhad School of Nursing and Midwifery towards ethical and legal standards of patient rights in 2015

Variable	Mean±SD	β	df	R	F	Test results
Educational level						
BSc	17.58±3.02					
MSc	17.48±3.48	-0.013	1	0.013	0.015	0.903
three	16.46±3.90					
Age						
20-25	17.51±3.13					
25-30	15.40±1.94	0.013	1	0.027	0.059	0.809
30-35	17.50±4.47					
>35	19.83±2.04					
Marital status						
Single	17.75±3.13					
Married	17.24±3.20	-0.212	1	0.227	4.497	0.037
Passing ethics cours						
Yes	18.05±3.23					
No	16.71±2.86	-0.308	1	0.328	10.001	0.002
Studying midwifery ethical codes						
Yes	18.48±3.30					
No	16.96±2.92	-0.333	1	0.357	0.142	0.001
Studying the patient rights						
Yes	18.63±2.61					
No	15.84±3.20	-0.410	1	0.439	19.821	0.000
Interest in midwifery						
Never	17.00±0.00					
Low	17.33±0.57					
Moderate	16.81±3.55	0.032	1	0.056	0.264	0.609
High	18.32±2.51					
Very high	17.25±3.95					
Knowledge						
17.55±3.15		-		-	-	-

According to general linear regression model, marital status, passing an ethics course, as well as studying the midwifery ethical codes and patient rights had a significance level of less than 0.05 and were considered as predictor variables of knowledge of ethical and legal standards of patient rights (Table 4).

Discussion

Midwives, as the providers of a wide range of services such as counseling, family planning, delivery, maternal and neonatal care, and treatment of gynecological problems, should be aware of their legal and ethical obligations (27). In this study, the knowledge of 66 (77.6%), 15 (17.6%), and 4 (4.7%) students was moderate, good, and weak, respectively. Total mean score of students' knowledge of ethical and legal

standards of patient rights was 17.55 ± 3 , which indicates moderate knowledge.

In a study by Banaian et al., which aimed to assess the knowledge of midwives regarding midwifery legal and religious obligations in 151 midwives working in health centers, 110 cases (72.8%) had moderate and 22 (14.5%) had poor knowledge (28), which is consistent with our results. Ranjbar et al. in a study in 2009 showed that more than half of the internship students were aware of patient rights (29). Most subjects in the study of Vahedian Azimi et al. had high level of knowledge as to patient rights (30). This discrepancy is probably due to the fact that the study of Vahedian Azimi was conducted on working nurses. In the present study, 57.6% of the students had moderate knowledge of ethical standards and 81.2% had moderate knowledge of legal standards.

The study of Azimi et al. in 2014 demonstrated that the students had moderate knowledge about medical ethics (12). In the study of Bohrani et al. (2012) on 97 dentists in Shiraz, knowledge of dentists about principles of professional ethics was evaluated. In that study, more than half of the dentists were aware of observing the patient rights (31). Negarandeh et al. also performed a study to assess the knowledge and attitudes of nurses and midwives in Zanjan hospitals towards ethical issues. They reported that 57.7% of the respondents had good knowledge (32); this difference may be due to the study population, as the subjects in the study of Negarandeh et al. were working nurses and midwives and work experience can affect knowledge and experience.

This study showed moderate knowledge of the majority of the students (81.2%) about patient rights. Azimi et al. (2013) in a study entitled as "knowledge of medical students about midwifery criminal law in the area of forensic medicine in Ahwaz Jundishapour University of Medical Sciences in 2013" reported that 48.89% of the midwives had moderate knowledge of midwifery criminal law (15), which is relatively congruent with the present results. Ghadipasha et al. in a study entitled as "knowledge of gynecologists and midwives in Yazd about laws and regulations of therapeutic abortion (legal) and criminal abortion (intentional)" stated that the knowledge of midwives and gynecologists about the subject was moderate (23).

The study of Shafiee et al. showed moderate knowledge of nurses regarding the regulations of dealing with professional and occupational violations in the employees of the professions related to Medical Sciences (33). Shah-Hosseini et al. in a study aimed to evaluate midwives' knowledge of legal rules and drug use in midwifery reported good knowledge of midwives in this regard (27). This lack of consistency can be justified as the midwives participating in the study of Shah-Hosseini were familiar with these rules and perhaps they obtained information in their retraining courses that are annually held in the country, but midwifery students due to the lack of direct involvement in patient problems and lack of responsibility in this regard have not yet felt the need for further training.

In the present study, most students (90.6%) had good attitude towards observing the ethical and legal standards of patient rights. The study of Amiri et al. (2008) revealed that the attitude score of health care providers towards patient rights was 76.9 out of 90, which was consistent with the present results (34). Parsapour et al. in a study aimed to evaluate the attitude of patients, physicians, and nurses towards the need to respect patient rights. In their study, all the study groups acknowledged the need to respect patient rights (35).

In addition, the majority of students (91.8%) in the present study had good attitude towards observing the ethical standards. Motamed-Jahromi et al. (2014) demonstrated that total attitude of students in Kerman University of Medical Sciences towards medical ethics was positive (36). The study of Karamporian also reported positive attitude of dentists towards professional ethics; 63.14% and 27.31% of the faculty members of Hamadan Faculty of Dentistry had good and very good attitudes towards observing the professional ethics (37). Yusef-Zadeh et al. (2014) showed that the majority of midwives (85.3%) maintained a good attitude towards professional ethical codes, such that mean score of midwives' attitude was 84.0 ± 8.1 (range: 51.7-95.8) (13). In the study of Mokhtari et al. (2014), the mean score of midwives' attitude towards nursing ethical codes in nursing students was 62 ± 9.9 . Moreover, women had more positive attitude towards nursing ethical codes than men (38).

In the current study, attitude of the majority of students (83.5%) towards observing legal standards was favorable. Jahanpour et al. (2012) in their study reported moderate attitude of nurses towards professional rules and regulations and stated that holding practical training courses by nursing managers is required (22). In a study performed in Mexico on the attitudes of physicians towards patient rights, among 75 medical assistants, only 40% had a favorable attitude towards the aspects of medical law (39).

The findings of this study showed statistically significant differences between total score of knowledge and studying the patient rights and midwifery ethical codes. In the study of Ghadipasha et al., the midwives and gynecologists who had studied abortion had higher level of knowledge about abortion laws (23); this result addresses the need to teach the ethical and legal standards of patient rights.

According to the results of this study, it is recommended to implement the educational curriculum as training sessions, workshops or conferences to promote knowledge and attitude of midwifery students towards the ethical and legal standards of patient rights, improve health of women, especially pregnant women, and resolve students' legal problems as future personnel.

What distinguishes this study from other studies is the presence of BSc and MSc midwifery students and evaluation of their knowledge and attitude towards ethical and legal standards of patient rights. In addition, the proposed questions consisted of a set of midwifery ethical codes, the principles of medical ethics and the ethical guidelines of patient rights, and in the legal section included the important duty of midwives approved by the Supreme Council of Health, the legal aspects of patient rights, and some Islamic penal laws passed by Islamic Council Parliament and Medical Council in relation to the medical professions. In the similar previous studies, the knowledge and attitude of midwifery students were assessed from ethical and legal aspects.

One of the limitations of this study was that the study population was limited to midwifery students in Mashhad University of Medical Sciences doing BSc and MSc degrees. Future studies are recommended to perform this study

with larger sample sizes including midwifery students of various universities doing different degrees.

Conclusion

Most students had favorable attitude, but moderate knowledge about the ethical and legal standards of patient rights. Given the importance of ethical and legal care for patients and their companions, improving the knowledge and attitudes towards ethical and legal issues is of great significance in providing professional care. Therefore, it is required to plan for teaching these principles to midwifery students to enable them to provide ethical and legal care. Accordingly, it is suggested to hold workshops with the theme of ethical and legal standards of patient rights in universities, and consider it as part of the midwifery ethics and regulation course in order to raise the knowledge and attitude of students and promote their performance. In so doing, satisfaction of health service recipients will be enhanced and consequently legal problems in the midwifery profession will be decreased.

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Conflicts of Interest

The authors declare no conflicts of interest.

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