

Original Article

Moral Sensitivity among Nursing and Midwifery Students and Practitioners: A Comparative Report from IranBibi Leila Hoseini¹, Nematullah Shomoossi², Mohammad Hassan Rakhshani³, Zahra Beheshti Norouzi^{4*}¹Department of Midwifery, Nursing and midwifery School, Sabzevar University of Medical Sciences, Sabzevar, Iran.²Department of General Courses, School of Medicine, Sabzevar University of Medical Sciences, Iran.³Iranian Research Center on Health Aging, School of Public Health, Sabzevar University of Medical Sciences, Sabzevar, Iran.⁴Midwife, Student Research Committee of Sabzevar University of Medical Sciences, Sabzevar, Iran.

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ABSTRACT

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Background: Ethical sensitivity refers to knowledge and practice of ethical issues in a contradictory situation highlighted with self-awareness of one's role and duty in those particular situations. According to ethics of care, the caregiver is committed to continuous learning and practicing the right options. The present study aimed to compare the moral sensitivity of midwifery and nursing students with that of nurses and midwives in Sabzevar University of Medical Sciences, Iran.

Materials and methods: In this descriptive cross-sectional study, participants were nursing students (n=60), midwifery students (n=50), nurses (n=100) and midwives (n=38), who were selected by convenience sampling. A validated Persian version of Han's (2010) Moral Sensitivity Questionnaire (0-100) was used for data collection ($\alpha=0.97$). Descriptive and analytic statistics were applied for data analysis.

Results: The participants' mean scores of ethical sensitivity were as follows: midwifery students (90.82±1.47), nursing students (93.06±1.12), midwives (89.76±1.21), and nurses (89.67±1.47). Based on four regression models, significant differences were observed (level of confidence: 95%): midwifery students' mean moral sensitivity score was 6.16 less than that of nursing students; midwifery students' mean score was 4.58 higher than that of midwives; midwives' mean score was 1.83 less than that of nurses; and nurses' mean score was 3.01 less than that of nursing students.

Conclusion: The participants' moral sensitivity can be conceived as desirable. The significance of differences may be accounted for by factors such as their role and specialty. Taking measures to sustain and strengthen the moral sensitivity in all medical and healthcare groups are recommended.

Introduction

Moral sensitivity involves the knowledge and consideration of moral values in a contradictory situation highlighted with self-awareness toward one's role and duty in those particular situations (1). It urges individuals to diagnose ethical conflicts in a critical condition and understand the consequences of decision-making on behalf of the patient (2). Despite current emphases on the professional competency of medical students and practitioners, apparently scarce attention is

given to their ethical empowerment. However, moral sensitivity often precedes professional competency since ongoing stress on medical ethics entails caregivers' lifelong learning and appropriate practice (3). In addition, moral sensitivity brings about a promotion in ethical performance, professionalism and improvement in patients' care (2).

Principles such as patient education, informing the patients, assigning an active role to patients in decision making, and confidentiality shape the patients' rights, which rightly stand among

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the most important principles of professional ethics (4, 5). Care-providers' practice is expected to adhere to these principles and patients' satisfaction (5). Understanding and respecting patients' rights by nurses and midwives prepare the ground for promoting quality of care and enhancing patients' confidence and satisfaction (6). Evidence indicates that despite ample medical resources and efforts, dissatisfaction among patients is on the rise, showing an association with failure to effectively communicate with patients, and ignorance of professional ethics (4, 7).

As regards the students, the untrained ones will enter hospital wards with insufficient prior training on ethical appropriacy; the result will be ignorance of patients' rights, and desensitization to immoral practice in the workplace, leading to endangered community health (8). In fact, students of nursing and midwifery are among the most important groups requiring moral education and ethical training because all decisions they will make in future workplaces are intertwined with an ethical dimension, which not only affects a patient's life and death but also influences the entire routine practice (9).

Nurses and midwives mostly experience ethical problems in practice. To manage these situations, they need to be equipped with moral sensitivity (10). This sensitivity should be formed during academic education at university, which can motivate and strengthen their moral sensitivity (11). However, before planning moral education for nursing and midwifery students, a careful examination of their moral sensitivity is required (9, 11) since the results will contribute to desirable planning (12). Therefore, the present study aimed to investigate the ethical sensitivity of nursing and midwifery students and practitioners in a major medical university in Iran.

Materials and methods

In this descriptive cross-sectional study, the participants were nursing students (n=60), midwifery students (n=50), nurses (n=100) and midwives (n=38) who were selected by convenience sampling from among the university students and practicing nurses and midwives in hospitals affiliated to Sabzevar University of Medical Sciences, Iran. Inclusion criteria were the participants' informed consent, university students at clinical training, and employment as nurses and midwives in different wards of hospitals affiliated to

Sabzevar University of Medical Sciences, Iran. Sampling from each ward was conducted in proportional to size. The allocated size for working midwives and nurses in hospital were further divided between the wards in proportion to the number of midwives and nurses in each ward, if necessary. Exclusion criteria included lack of interest in joining the study and completing the questionnaire.

After the approval of the proposal and ethics committee, we started recruiting the participants according to the inclusion criteria; they were provided with relevant information about the procedure and aims of the study to ensure them of the confidentiality of their personal information.

The data collection instrument included a biographical and background questions about the participants including age, semester and Grade point average (GPA) (for students), as well as age, degree, years of experience and employment details (for practitioners). There was also a question about the history of workshop attendance in relation to ethics. The second part of the questionnaire as a validated Persian version of Han's (2010) Moral Sensitivity Questionnaire (13), which has been translated, back-translated and validated in Iran (1), and checked for face validity, and validated by Cronbach alpha ($\alpha=0.76$). It consists of two parts; the first part contains the participants' demographic information; the second part contains 25 statements measuring their moral sensitivity. It is scored by Likert scaling from 0 (Strongly Disagree) to 4 (Strongly Agree). The mean score obtained by the participants indicates their moral sensitivity.

The questionnaires were completed by the participants. After completing the data collection and coding, statistical analysis was conducted using descriptive (such as frequency, mean and standard deviation) and analytic statistics (such as t-test and linear regression). Stepwise-backward regression is a method of fitting regression models; the overall fitting of the four models was confirmed by ANOVA ($p<0.05$) and residual plot. All analyses are conducted in SPSS 16.

Results

ANOVA was applied to compare mean age of the participants, showing that age mean varied across groups ($p<0.05$). Gabriel's method of multiple comparisons showed no significant differences between the mean age of 60 nursing students (mean age 21.6 ± 1.38), and 50

midwifery students (mean age 21.5 ± 1.22); as well as 100 nurses (mean age 30.63 ± 6.58) and 38 midwives (mean age 33.16 ± 6.73) (p -value > 0.05). Mean years of working experience between midwives (9.50 ± 6.47) and nurses (6.67 ± 6.02) were significantly different ($p = 0.008$). The grade point average (GPA) of midwifery (16.78 ± 1.06) and nursing students (16.40 ± 1.39) showed no significant differences ($p = 0.264$).

As the table 1 indicates, significant differences are observed in the marital status and attendance in ethics workshops across the four

groups, but as expected, the two groups (employed practitioners and students of nursing and midwifery) had a significant difference in their marital status ($p = 0.021$ & $p = 0.03$, respectively). The difference between the two groups (employed practitioners and students of nursing and midwifery) as regards their attendance in workshops on medical ethics was not statistically significant ($p = 0.932$ & $p = 0.486$, respectively). The students' semester showed a significant difference ($p < 0.001$), while their residential area showed no such a difference.

Table 1 – Demographic information of participants

		Midwifery students	Nursing students	Midwives	Nurses	p-value
Gender	Female	51(100%)	44(73.3%)	38(100%)	76((78.4%)	<0.001
	Male	0(0%)	16(26.7)	0(0%)	21(21.6%)	
marital status	single	39(78%)	33(56.9%)	4(10.5%)	29(29.3%)	<0.001
	married	11(22%)	25(43.1%)	34(89.5%)	70(70.7%)	
attendance in ethics workshop	No	5(10.6%)	3(6.2%)	12(33.3%)	28(34.1%)	<0.001
	Yes	42(89.4%)	45(93.8%)	24(66.7%)	54(65.9%)	

The results of the questionnaire showed that the mean scores of moral sensitivity were as follows: nursing students (93.06 ± 1.12), midwifery students (90.82 ± 1.47), nurses (89.67 ± 1.00) and midwives (89.76 ± 1.21). Considering the variables affecting moral sensitivity (i.e. age, gender, marital status, residential area, major, semester, GPA, years of experience, ward and workshops attended), we started regression analysis, by statistical modeling, for estimating the relationships between the dependent variable and independent variables. The following analyses appeared accordingly.

Based on regression models, we found significant differences in the moral sensitivity scores of different groups. In other words, midwifery students' moral sensitivity scores were found to be 6.16 points less than that of nursing students; midwifery students 4.85 points higher than midwives; midwives 1.83 points less than nurses, and nurses 3.01 points

less than nursing students (all in 95% confidence level) (Table 2). Differences between other variables are similarly interpreted based on Table 2. For instance, based on model 1, an increase in moral sensitivity scores is predicted in females (5.96 points), attendance in workshops (6.14 points), and one-point improvement in GPA (1.68 points). However, one-semester increase in one's education has reduced moral sensitivity scores by 0.47 points. Also, being single has decreased moral sensitivity scores by 4.36 points. In all models except for model 3, being single has negatively affected moral sensitivity scores. In model 2, becoming one year older has increased moral sensitivity scores by 0.125 points; however, the same variable has led to 0.55 reduction in moral sensitivity scores in model 4. As in model 2, female gender in model 4 has negatively contributed to moral sensitivity scores reduction by 0.87 points (see Table 2).

Table 2 – Effect of variables on moral sensitivity across groups based on regression models

Model	Group and Variables	Coefficient	Standard Error	CI: 95%	p-value	Adjusted R square
1	Students of nursing and Students of midwifery	-6.16	0.33	-6.81- -0.15	<0.001	0.46
	Gender	5.96	0.44	5.07- 6.76	<0.001	
	Workshop	6.14	0.48	7.08- 5.21	<0.001	
	Semester	-0.47	0.09	-0.65- -0.29	<0.001	
	GPA	1.68	0.14	1.96- 1.44	<0.001	
	Marital status	-4.36	0.24	-4.83- -3.89	<0.001	
2	Midwives and Students of Midwifery	4.85	0.39	3.81- 5.35	<0.001	0.43
	Age	0.125	0.03	0.18- 0.07	<0.001	
	Marital status	-6.03	0.38	-6.78- -5.28	<0.001	
3	Nurses and Midwives	-1.83	0.31	-2.43- -1.23	<0.001	0.35
	Marital status	1.49	0.28	2.04- 0.93	<0.001	
4	Nurses and Students of Nursing	3.01	0.25	2.52- 3.49	<0.001	0.44
	Age	-0.05	0.02	-0.09- 0.43	<0.001	
	Gender	0.87	0.22	1.31- 0.43	<0.001	
	Marital status	-4.17	0.36	-4.89- -3.45	<0.001	

Discussion

The present study aimed at comparing the moral sensitivity of midwifery and nursing

students with that of nurses and midwives in Sabzevar University of Medical Sciences, Iran. The results suggested significant differences in moral sensitivity across groups with variables affecting the scores. In general, the findings indicate that transition into the workplace is associated with considerable lowered moral sensitivity as compared with scores obtained from students. Midwifery students and practitioners showed lesser moral sensitivity in comparison with their nursing counterparts; this bears concerns and implications for midwifery education due to their simultaneous interaction with mother and newborn.

Three regression models reflect the higher rate of moral sensitivity in married participants; however, the same variable showed a negative impact in nursing and midwifery practitioners in comparison with students, which might have originated from other variables such as longer years of experience and multiple and personal life involvements. Female participants showed higher rates of moral sensitivity than males; also, educational achievement superiority (expressed in GPA), in particular and general forms, has led to enhanced moral sensitivity. However, senior students showed less moral sensitivity than juniors did. Earlier studies have not investigated moral sensitivity in midwives and midwifery students; however, studies on nursing students and practitioners are not few. For instance, Abbaszadeh et al. (9) and Karimi et al. (11) did not find significant differences in nursing students' and practitioners' moral sensitivity. In addition, the relationship between variables and moral sensitivity was not significant (11). These are indeed contradictory to the findings of the present study; the difference may be attributable to the list of variables and application of regression analysis since the cumulative effect of variables on moral sensitivity are taken into account in the present study.

Overall, moral sensitivity scores were desirable across groups, which is of utmost importance for the healthcare and treatment systems since moral sensitivity shapes the first step in ethical decision-making. Hoseini et al. showed that mean scores of ethical sensitivity was 60.60 ± 10.34 and 59.65 ± 14.83 (out of 100) among nurses in Mashhad hospitals (14). The finding is in line with Karimi et al. who also reported optimal levels of moral sensitivity in nurses and students of nursing (11). Moreover, it is congruent with the findings of Abbaszadeh

et al. as regards the moral sensitivity of nurses and students of nursing (9).

In a study in the western Iran (58.92 ± 10.18) (out of 100) (15), a similar study in the southeastern Iran (3.05 ± 0.68) (range 0-4) (16), and a study in Tehran, Iran, on ICU nurses (53.21 ± 13.69) (out of 100) (17), obtained mean scores of moral sensitivity were average rather than high, which are different from the findings of the present study. In another study in central Iran (i.e. Qazwin) which used the same questionnaire as the present study, nurses' moral sensitivity scores appeared to be 53.21 ± 13.69 (18). Although the data collection instrument was the same, different results were obtained, which can be attributable to variables such as age, gender, culture, educational level, and years of experience (19). In addition, the hospital ward nurses provide care to patients can influence the degree of moral sensitivity they develop (20).

Another study among nursing students showed the average score of nursing students in two groups were 67.83 ± 7.17 and 65.20 ± 10.44 ; these were lower than the present study (21).

Conclusion

In order to promote medical ethics, which is a core concept in care giving (22), instructional plans are recommended, since it brings about a basic attitudinal development from the beginning (21). Therefore, further studies may dwell on teaching principles in medical ethics to promote moral sensitivity among various target groups of healthcare providers. The present cross-sectional study reflects an optima level of moral sensitivity among students and practitioners of nursing and midwifery. The differences are statistically significant across groups, with regard to variables such as major, role, age and marital status. As higher moral sensitivity scores are observed among students (as compared with employed practitioners) and junior students (as compared with seniors), and the positive effect of attending workshops is shown hereby, the researchers wish to recommend institutionalizing principles of moral sensitivity in educational curricula, and integrating moral concepts and practice from the bottom (i.e. students) to the top (i.e. practitioners); the same is recommended for in-service trainings before and after employing nurses and midwives.

Conflict of interest:

The authors declare that there was no conflict of interest.

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