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Correlation between Moral Sensitivity of Physicians and Interprofessional Collaboration

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Abstract

Background and Aim: Interprofessional collaboration and moral sensitivity are effective variables for improving care and services to patients. The aim of this study was to investigate the correlation between physicians' moral sensitivity and interprofessional collaboration at educational hospitals affiliated with Tehran Branch of Islamic Azad University of Medical Sciences in 2023.

Materials and methods: The subjects of this correlational study included 130 physicians randomly selected by simple random sampling method. Data were collected with Moral Sensitivity Questionnaire (Lotzen et al. 1994) and Interprofessional Collaboration Questionnaire (Jefferson, 2001) and analyzed with different parameters and tests such as Pearson correlation test and linear regression.

Results: Findings showed that all physicians had high moral sensitivity and low interprofessional collaboration. There was also no significant correlation between physicians' moral sensitivity score and interprofessional collaboration (p=0.725).

Conclusion: Since moral sensitivity and interprofessional collaboration are important factors in service quality of physicians, proper educational programs are suggested for improving them in medical centers.

Keywords: Moral sensitivity, Interprofessional collaboration, Physicians.

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Introduction

Generally, health care professions including physicians, nurses, paramedics, and others, despite the importance of teamwork, operate as separate units. The members of each are rarely trained together because they come from different disciplines with different educational programs, and they are generally less able to work as a team [1]. This is because of poor understanding of other professions. As we know, teamwork is very important for patient safety, especially when team members know their responsibilities well, leading to make fewer mistakes. The essence of patient care is team-based, and there is an increasing need to improve communication among members of this team.

Many researchers have emphasized on the importance of teamwork and interprofessional collaboration of health team [2]. Establishing cooperation with other health professions is one of important duties of physicians, which improves their efficiency [3] reduces hospital stay as well as medical costs and increases mutual awareness in physicians' and nurses' roles. It reinforces trust between them [4] and prevents unrealistic expectations from each other (5). On the other hand, lack of proper professional relationships can cause burnout and turnover [6], distort professional boundaries and violate employees' rights [7].

Moral behaviors in taking care of patients have an effective role in improving and restoring their health; that is why medical profession is based on ethics [8]. Ethical sensitivity as the first component for observing ethics is, in fact, person's awareness of a combination of ethical dimensions such as tolerance, calmness, responsibility and giving importance to ethical issues [9]. Moral sensitivity is one of the characteristics that makes a person sensitive to moral phenomena, which is reported 46% in a study [8]. Ethical sensitivity has different dimensions including the degree of respect to client's independence, the degree of awareness of how to communicate with the patient, the level of professional knowledge, and the experience in ethical problems as well as conflicts [10].

Since today, the goal of health and health professions is to ensure health and well-being of people in need of medical management and nursing care; therefore, these professions have been described and introduced as ethical professions [11]. Compliance with ethical standards is an effective factor in improving their performance to provide quality care [12]. Many people face with ethical problems at work; however, they do not take action to solve them. Promoting the standards of professional practice by teaching moral principles is the only way to strengthen people's trust [13]. For having effective moral sensitivity, one should develop the skills of reasoning, and understanding as well as analysis of ethics. Evidence indicates that moral sensitivity often plays an important role in taking professional responsibility and making ethical decisions [14].

Professional collaboration and moral sensitivity are effective variables in improving care and providing better services to patients. However, there is lack of evidence regarding the relationship between interprofessional collaboration

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and moral sensitivity of physicians. This study was conducted to explore the correlation between moral sensitivity of physicians and interprofessional collaboration at educational hospitals affiliated with Tehran Islamic Azad University of Medical Sciences in 2023.

Methods

In this descriptive-correlational study with ethics code IR.IAU.PS.REC.1402.207, sample size was first calculated[1] in a pilot study (confidence interval 95%, statistical power 80%, and correlation coefficient 35%). The size was increased by approximately 2.5 times. Finally, 130 physicians were randomly enrolled and their written consent to participate in the study was taken. Inclusion criteria were speaking Farsi, having mental health, lacking stressful and traumatic events such as divorce or death of beloved ones in the last six months, and willing to participate in the study. Exclusion criterium was dissatisfaction of the participants at each stage of the research.

$$n = \left(\frac{z_{1-\frac{\alpha}{2}} + z_{1-\beta}}{0.5 \ln(\frac{1+r}{1-r})} \right)^2 + 3$$

The data collection tools consisted of a demographic part (age, gender, educational level, number of working hours, work experience and overtime hours); Moral Sensitivity Questionnaire (MSQ) by Lutzen et al. 1994 and the Jefferson,2001 questionnaire. MSQ initially had 30 questions which were reduced to 25 in the latest version. It measures the state of ethical decision-making during clinical services. The answers are in Likert scale as completely agree (4), somewhat agree (3), relatively disagree (2), completely disagree (1), and have no opinion (0). The highest score is 100 and the lowest score is zero. Therefore, if the total score of each sample is between 0 and 50, it is considered as low, 51-75 as medium, and 76-100 as high moral sensitivity [15].

The questionnaire has 6 dimensions: level of respect for client's independence; level of awareness of how to communicate with the patient; level of professional knowledge as well as experience in moral problems and conflicts; application of moral concepts in moral decisions; honesty; and benevolence. In various Iranian studies, its validity and reliability have been confirmed. Its validity was verified by Hassanpoor et al. and its reliability was 0.81 [16]. Izadi et al. also checked reliability of it and its internal consistency was calculated 0.80 with Cronbach's alpha [17].

As stated before, for interprofessional collaboration, Jefferson questionnaire was used, which was developed in Philadelphia and Pennsylvania in 2001 [18]. It has 15 questions based on a four-point Likert scale (completely agree, agree, disagree, and completely disagree). Its scores are classified to three levels: weak (15-30), moderate (31-45) and good (46-60). Its validity and reliability have been examined and confirmed in several studies [19].

Face and content validities were examined for both questionnaires. A team consisting of 12 medical and psychology professors assessed and evaluated them and their comments were applied. Reliability of the questionnaires was determined by

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Cronbach's alpha after conducting a pilot study on 20 physicians. The results were 0.91 and 0.94 for MSQ and Jefferson questionnaire respectively. Necessary permissions were obtained from different authorities and departments at the university and hospitals. The subjects were first informed about the purpose of the study and, following their written consent, they were assured about anonymity of the tools and confidentiality of data. Data were analyzed with different statistical tests including Kolmogorov-Smirnov for normality, mean and standard deviation, Pearson's correlation.

Results

Findings showed that mean age of physicians was 56.97±7.59. Average working hours per month was 66.3 ± 0.43. Other demographic characteristics are given in Table 1.

The scores showed high moral sensitivity and low interprofessional collaboration in most physicians (Table 2).

Pearson's coefficient did not show a significant correlation between the scores of moral sensitivities and interprofessional collaboration (r=0.05, P=0.725). In other

words, by increasing or decreasing moral sensitivity, no change was observed in interprofessional collaboration.

Table 1: Demographic variables of physicians

Variable	Groups	Frequency	Percent
Sex	Man	62	47.7
	Female	68	52.3
Level of Education	Specialist	100	77
	Subspecialist	30	23
Work Department	Emergency	29	22.3
	Internal	27	20.7
	Surgery	23	17.7
	Pediatrics	26	20
	ICU	25	19.3
Work Experience	5-10 years	30	23
	More than 10 years	100	77

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Table 2: Scores of moral sensitivities and interprofessional collaboration

	Frequency	Percent
Moral sensitivity		
low (0-50)	0	0
average (51-75)	0	0
high (76-100)	130	100
Interprofessional collaboration		
low (15-30)	130	100
average (31-45)	0	0
high (46-60)	0	0

Discussion

The results showed that physicians had weak interprofessional collaboration. Other studies have confirmed our findings. For example, results of a study showed weak teamwork and interprofessional collaboration between physicians and nurses, causing high risk for patients [20]. In another study, physicians had low interest in interprofessional collaboration, preferred no interaction and avoided team conflicts [21]. A review study showed that 37% of the errors leading to harm to patients were caused by weak communication and collaboration between physicians and nurses [22]. These results may be attributed to different perception of physicians toward teamwork and professional communication.

Our results showed that physicians had high moral sensitivity. Another study has indicated that moral sensitivity of most physicians was at moderate level [23]. By summarizing various studies, Patenaude et al. have concluded that moral skills of medical students in America and other countries were in a negative trend [24]. To justify these differences, it can be stated that physicians show their moral sensitivity in different ways, and, most importantly, it is this issue that moral sensitivity is a complex phenomenon in which several factors play a role. In addition, our results did not show a significant correlation between moral sensitivity and interprofessional collaboration in physicians. In fact, no study was found to examine these two variables together. However, moral sensitivity is one of the

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factors, which can affect care. Thus, the more moral sensitivity is, the better care is provided. On the other hand, interprofessional collaboration is one of the key strategies in communication, minimizing medical errors.

One of the limitations of the present study was the small sample size; therefore, it is suggested to conduct similar studies with a larger sample size. Also, our data was based on self-reporting of physicians, but it is possible to use other assessment methods such as behavior observation or checklists. Satisfying multiple and complex needs of patients requires moral sensitivity and teamwork in different health professions and the quality of interprofessional collaboration is a determining factor in patient safety and quality care. Therefore, it is necessary to promote moral sensitivity and interprofessional collaboration to improve outcomes by adopting appropriate approaches and solutions.

Conclusion

The results showed that all physicians had high moral sensitivity and low interprofessional collaboration. There was also no significant correlation between physicians' moral sensitivity and interprofessional collaboration. Moral sensitivity is one of the pillars of care. Therefore, physicians with higher moral sensitivity provide better care. Additionally, interprofessional collaboration is considered a key strategy in communication, minimizing medical errors. Therefore, it has an important role in decision-making of physicians and reducing the discomfort of patients. When team collaboration is moderate or weak, some obstacles exist, which should be removed.

Satisfying various and complex needs of patients depends on a dynamic care system in which all professions and elements be involved as a team with moral sensitivity. Since the quality of collaboration between health professions is a determining factor in safety and quality of patient care, adopting appropriate solutions including continuous training, ethical counseling, practical workshops, and motivating mechanisms to improve moral sensitivity and collaboration is critical.

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Conflict of interest disclosures

There is no conflict of interest in this study.

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[DOI: 10.61186/knjournal.1.2.156]

References

1. Khazaee-Pool M, Zarghani M. The Position of Interdisciplinary Studies in Medical Sciences and Health System in Iran; Where Are We and Where Will We Go? A Policy Brief. J Mazandaran Univ Med Sci 2023;33(221):179-187. [Persian]

2. Jafaei Dalooei R, Karimi Moonaghi H, Yamani N, Irajpoor A R, Saadatyar F S. Interprofessional Education: the Strategy to Improve Health Care. Research Medical Education .2015; 7 (1) :54-62. [Persian]

3. Nickelsen NCM, Elkjaer B. Shifting boundaries in telecare–the nurse-doctor relationship. Journal of Workplace Learning. 2017;29(7/8):588-600.

4. Chua WL, Legido-Quigley H, Jones D, Hassan NB ,Tee A, Liaw SY. A Call for Better Doctor–Nurse Collaboration: A Qualitative Study of the Experiences of Junior Physicians and Nurses in Escalating Care for Deteriorating Ward Patients. Aust Crit Care. 2020;33(1):54-61.

5. Lee Y-J, Hwang J-I. Relationships of Nurse-Nurse Collaboration and Nurse-Physician Collaboration with the Occurrence of Medical Errors. J Korean Acad Nurs Adm. 2019;25(2):73-82.

6. House S, Havens D. Nurses' and Physicians' Perceptions of Nurse-Physician Collaboration: a Systematic Review. JONA. 2017;47(3):165-71.

7. Xue Y, Ye Z, Brewer C, Spetz J. Impact of State Nurse Practitioner Scope-of-Practice Regulation on Health Care Delivery: Systematic Review. Nursing Outlook. 2016;64(1):71-85.

8. Farasatkish R, Shokrollahi N, Zahednezhad H. Critical Care Nurses' Moral Sensitivity in Shahid Rajaee Heart Center Hospital. Iranian Journal of Cardiovascular Nursing. 2015;4(3):36-45. [Persian]

9. Nazan Kilic Akca R, Simsek N, Dilek Efe Arslan R, Senturk S, Akca D. Moral Sensitivity mong Senior Nursing Students in Turkey. International Journal of Caring Sciences. 2017;10(2):1031-1039.

10. Dalvand S, Khodadadi B, Niksima SH, Ghanei Gheshlagh R, Shirzadegan R. Moral of Nurses in Shahid Madani Hospital of Khorramabad in 2017. Scientific Journal of Nursing, Midwifery and Paramedical Faculty. 2017;3(2):38-48. [Persian]

11. Yeom H-A, Ahn S-H, Kim S-J. Effects of Ethics Education on Moral Sensitivity of Nursing Students. Nursing Ethics. 2017;24(6):644-52.

12. Milliken A. Nurse Ethical Sensitivity: An Integrative Review. Nursing Ethics. 2018;25(3):278-303.

13. Lee HL, Huang S-H, Huang C-M. Evaluating the Effect of Three Teaching Strategies on Student Nurses' Moral Sensitivity. Nursing Ethics. 2017;24(6):732-743.

14. Maddineshat M, Yousefzadeh MR, Mohseni M, Maghsoudi Z, Ghaffari ME. Teaching Ethics Using Games: Impact on Iranian Nursing Students' Moral Sensitivity. Indian Journal of Medical Ethics. 2019;4(1):14-20.

15. Lützén K, Nordin C, Brolin G. Conceptualization and Instrumentation of Nurses' Moral Sensitivity in Psychiatric Practice. Int J Methods Psychiatr Re. 1994;4(4):241-48.

16. Hassanpoor M, Hosseini M, Fallahi Khoshknab M, Abbaszadeh A. Evaluation of the Impact of Teaching Nursing Ethics on Nurses' Decision Making in Kerman Social Welfare Hospitals in 2010. Iranian Journal of Medical Ethics and History of Medicine. 2011;4(5):58-64. [Persian]

17. Izadi A, Imani H, Noughabi F, Hajizadeh N, Naghizadeh F. Moral Sensitivity of Critical Care Nurses in Clinical Decision Making and its Correlation with their Caring Behavior in Teaching Hospitals of Bandar Abbas in 2012. Iran J Med Ethics Hist Med. 2013;6(2):43-56. [Persian]

18. Hojat M, Nasca TJ, Cohen MJ, Fields SK, Rattner SL, Griffiths M, et al. Attitudes toward Physician-Nurse Collaboration: a Cross-Cultural Study of Male and Female Physicians and Nurses in

[Downloaded from mail.knjournal.ir on 2026-09-18]

[DOI: 10.61186/knjournal.1.2.156]

the United States and Mexico. Nurs Res. 2001; 50(2): 123-8.
19. Hojat M, Mangione S, Kane GC, Gonnella JS. Relationships between Scores of the Jefferson Scale of Physician Empathy (JSPE) and the Interpersonal Reactivity Index (IRI). Medical Teacher. 2005;27(7):625-8.
20. O'connor P, O'dea A, Lydon S, Offiah g, Scott J, Flannery A, et al. A Mixed-Methods Study of the Causes and Impact of Poor Teamwork between Junior Physicians and Nurses. Int J Qual Health Care. 2016;28(3):339-45.
21. Jasemi M, Rahmani A, Aghakhani N, Hosseini F, Eghtedar S. Nurses and Physicians' Viewpoint toward Interprofessional Collaboration. Iran Journal of Nursing. 2013;26(81):1-10. [Persian]
22. DeKeyser Ganz F, Engelberg R, Torres N, Curtis JR. Development of a Model of Interprofessional Shared Clinical Decision Making in the ICU: A Mixed-Methods Study. Crit Care Med. 2016;44(4):680-9.
23. Majnooni A, Hosseinzadeh Davarzani M, Afshar L. Comparing the Ethical Sensitivity of Medical Residents with Surgical Residents of SBMU in 2016-17. Iranian Journal of Medical Education. 2020;20:418-24. [Persian]
24. Patenaude J, Niyonsenga T, Fafard D. Changes in Students' Moral Development During Medical School: a Cohort Study. Canadian Medical Association Journal. 2013;168(7):840-4.

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