

## Original research

## Investigating professional behavior in midwives during covid-19 pandemic

Mehrnaz Geranmayeh<sup>1</sup>, Akram Tabasi,<sup>2</sup> Farahnaz Azizi,<sup>\*3</sup> Zohre Momeni Movahhed<sup>4</sup>**Abstract:**

**Introduction:** Covid-19 disease has led to high workload and challenges to moral values in midwives. This study aimed investigating professional behavior in midwives, who work in the comprehensive urban health centers and hospitals under the auspices of Tehran University of Medical Sciences, during the pandemic of covid-19.

**Research Method:** This cross-sectional descriptive study was performed on 400 midwives working in comprehensive urban health centers and hospitals under the auspices of Tehran University of Medical Sciences. The samples were entered into the study by a multi-stage method with proportional allocation. Data collection tools were a self-report questionnaire including two sections of demographic information and a professional midwifery behavior questionnaire. Data were analyzed by SPSS/25 using descriptive statistics and inferential.

**Results:** According to the results, the rate of professional behavior in midwives working in comprehensive urban health centers and hospitals was 85.50%. The rate of professional behavior in each dimension was: dignity-based behavior dimension (86.81%), evidence-based performance dimension (83.39%), professional ethics dimension (87.88%), dimension Effective communication (81.23%), professional commitment dimension (87.51%). There was no difference between the professional behavior of hospital midwives and comprehensive urban centers midwives during the pandemic of covid-19 ( $P > 0.05$ ).

**Conclusion:** Despite the high professional behavior of midwives as an active group of health and treatment staff in the covid-19 pandemic, some aspects of professional behavior, such as effective communication, have changed during Covid 19 Pandemic. So, there is a need to empower midwives in this area.

**Keywords:** Covid-19 Pandemic, Midwife, Midwifery care, Professional Behavior

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**Introduction:**

Midwifery is one of the branches of medical sciences that is responsible for the physical, psychological, and social care of women during pregnancy, childbirth, and postpartum. Professional behavior is one of the factors that affect the quality of midwifery care. Professional behavior is a combination of self-control, self-organization, responsibility, and independence in the profession. Individuals are committed to their profession and perform their professional duties in the best possible way without any supervision system, and strive to improve their profession. Midwives are responsible for the safety of women and support their empowerment. Therefore, they face many ethical issues throughout their professional activities. In order to become a competent midwife, strong knowledge in their field, special practical skills, professional commitment, adherence to ethical principles, and ultimately professional behavior are required. Various factors can influence midwives' professional behavior. Studies show that stressful and threatening conditions in midwifery profession are more prevalent for various reasons, including facing special conditions of pregnant women and fetuses, non-recoverable errors, legal complaints, inappropriate psychological environment in the profession, and lack of acceptance of their independent performance in the healthcare system. These stressful conditions can sometimes significantly affect the performance of midwives. Another factor is the outbreaks of infectious diseases such as the COVID-19 pandemic. The consequences of the COVID-19 pandemic for healthcare professionals include ethical distress and challenges to ethical values, which have affected some dimensions of professional behavior such as professional ethics and effective communication. Among them, midwives, as one of the key healthcare and care providers with a crucial role in women's health, are also under physical and psychological pressure. Numerous studies have emphasized the importance of ethical principles and professional behavior, ethical problems among healthcare personnel, and the negative consequences of these issues, as well as the impact of outbreaks on the professional behavior of healthcare providers. However, there has been no study examining professional behavior in practicing midwives during the COVID-19 pandemic. Given the current crisis in the country's healthcare system, the need for applied research on the consequences of the coronavirus and the professional behavior and commitment of midwives in relation to service recipients during the COVID-19 pandemic is more important than ever. Therefore, this study was conducted with the aim of investigating professional behavior in practicing midwives in comprehensive health centers and hospitals affiliated with Tehran University of Medical Sciences during the COVID-19 pandemic.

**Research Method:**

This descriptive cross-sectional study aimed to determine the professional behavior of employed midwives in comprehensive urban health centers and hospitals affiliated with Tehran University of Medical Sciences during the COVID-19 pandemic in 2021. The minimum sample size required to estimate the professional behavior of employed midwives with a 95% confidence level, 2.5% estimation accuracy, and a standard deviation of 25 was estimated to be 385 individuals. The sampling method was multistage proportional allocation. In this method, hospitals (Ziaian,

Baharloo, Imam Khomeini, Yas, Shariati, and Arash) and urban health centers (Riyadh, Islamshahr, and South Tehran) were considered as strata. Then, based on the number of employed midwives in the research environment, the share of each was determined proportionally (240 midwives in urban health centers and 145 midwives in hospitals). Subsequently, midwives who had been employed in the research environment for at least 6 months during the COVID-19 pandemic were continuously enrolled in the study. The criteria for entry into the study included midwives who had been employed for at least 6 months during the COVID-19 pandemic in the research environment. Withdrawal from the study and incomplete questionnaire completion were considered as exit criteria. The data collection tool was a self-report questionnaire consisting of two sections. The first section included demographic information, and the second section included the Midwives' Professional Behavior Questionnaire, which had been designed and psychometrically validated through an exploratory mixed-methods study. This tool consisted of 22 items in 5 dimensions, including dignity-oriented behavior (5 items), evidence-based practice (4 items), professional ethics (5 items), effective communication (4 items), and professional commitment (4 items). The items were scored on a Likert scale, ranging from never (score of 0) to rarely (score of 1), sometimes (score of 2), often (score of 3), and always (score of 4). The score range was between 0-88. A score of 0 indicated a lack of professional behavior, scores between 1-10 indicated average behavior, and scores between 11-88 indicated high and desirable professional behavior. For the psychometric validation of the questionnaire, they used formal and content validity, as well as structural validity. For sampling, after obtaining permission from the ethics committee of the Faculty of Nursing and Midwifery and Rehabilitation of Tehran University of Medical Sciences and obtaining the ethics approval code IR.TUMS.MEDICINE.REC.1400.273, the researcher provided the questionnaire to eligible midwives in the research environment. The participants were assured of the confidentiality of their information, the anonymity of their names, and the non-influence of their responses on the work environment, so that they would complete the questionnaire honestly. After completing the sampling, the completed questionnaires were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (independent t-test and analysis of variance) with SPSS software version 25. A significance level of  $p < 0.05$  was considered.

### **Results:**

In this study, 385 employed midwives participated, with 243 working in comprehensive urban health centers and 157 working in hospitals affiliated with Tehran University of Medical Sciences. The majority of the research participants (42%) were in the age group of 30 to 39 years (mean age 34.48 with a standard deviation of 7.48). Most of the research participants (79.8%) had a bachelor's degree. The majority (70.8%) were married (none of the research participants were widowed). More than half of them (63.5%) were employed on a contractual basis in comprehensive urban health centers. In terms of residence, the majority of the research participants were native (79%). The highest percentage of research participants (38.7%) had less than 5 years of work experience (mean work experience 8.5 years with a standard deviation of 6.03). Most of the research

participants had been working for more than 12 months during the COVID-19 pandemic (84.3%). More than half of the research participants (57.5%) had a fixed shift and most of them were not members of professional associations (66.3%). The overall mean professional behavior score among employed midwives in comprehensive urban health centers and hospitals affiliated with Tehran University of Medical Sciences during the COVID-19 pandemic was 75.24, indicating a high level of professional behavior. Furthermore, according to the independent t-test results, there was no statistically significant difference in the mean total professional behavior score and any of its dimensions between midwives working in hospitals and those working in comprehensive urban health centers affiliated with Tehran University of Medical Sciences during the COVID-19 pandemic ( $p>0.05$ ). Based on the results of the analysis of variance (ANOVA) and independent t-test, it was found that the professional behavior of employed midwives in hospitals and comprehensive urban health centers affiliated with Tehran University of Medical Sciences during the COVID-19 pandemic did not have a statistically significant relationship with any of the demographic characteristics ( $p>0.05$ ).

### **Conclusion:**

In the present study, there was no statistically significant difference in the overall professional behavior score and its dimensions among midwives working in hospitals and comprehensive urban health centers during the COVID-19 pandemic. The professional behavior of midwives working in hospitals and comprehensive urban health centers under the coverage of Tehran University of Medical Sciences during the COVID-19 pandemic did not have a significant correlation with any of the demographic characteristics ( $P<0.05$ ). Additionally, the overall score of professional behavior in midwives working in comprehensive urban health centers and hospitals under the coverage of Tehran University of Medical Sciences during the COVID-19 pandemic was 85.50%, with the highest score in the dimension of ethical professionalism and the lowest score in the dimension of effective communication. Although establishing a proper and ethical relationship between midwives and service recipients is considered one of the most important dimensions of professional behavior, in this study, the lowest mean score in the dimension of effective communication may be due to being in a crisis situation of COVID-19, rapid transmission of the virus, and fear of contracting the disease. In the present study, midwives demonstrated a high level of professional behavior and performed well in all dimensions of professional behavior. The results of the present study indicate that midwives manage the ethical challenges they face during the pandemic in order to exhibit appropriate and desirable professional behavior. Fighting COVID-19 is a serious challenge for healthcare team members, including midwives, as they simultaneously experience stressful work, heavy responsibility for caring for pregnant mothers during the COVID-19 pandemic, and face more environmental, mental, and physical stressors, leading to psychological burden and emotional problems. However, despite experiencing significant personal risk and emotional burden, they have a strong commitment to continue caring for patients and carriers and do not regret working in the midwifery profession. Nevertheless, they have sought a supportive space for their needs and ethical concerns. Midwives, as one of the active healthcare

groups during the COVID-19 pandemic, have demonstrated a high level of professional behavior. However, since some dimensions of professional behavior, such as effective communication, have changed during the COVID-19 pandemic, there is a need to empower midwives in this area. It is recommended that managers and officials, who play an important role in creating and developing professional behavior, especially during the COVID-19 pandemic, provide a space for knowledge-based and ethics-based care along with effective communication. In addition, educational programs should be developed for working midwives on the importance of professional behavior and its dimensions during the COVID-19 pandemic. Considering the position and effective role of midwives in reproductive health services and the wide range of midwifery duties, it is suggested to assess the level of adherence to professional behavior and the associated reasons for undesirable professional behavior, followed by the implementation of executive policies and strategies at the macro level to promote professional behavior in all clinical services, from healthcare centers to hospitals. The results of this study can be a starting point for further research on professional behavior and its dimensions, especially during crises such as pandemics. For example, to improve the quality of reproductive health and midwifery services, the level of adherence to professional behavior by midwives can be examined and compared from the perspective of service recipients during pandemics, and the existing gaps in this area can be addressed.

### References:

1. Nasiriani L, Rahimparvar SFV, Farajkhoda T, Bahrani N. The related factors of compliance to professional codes of ethics from midwives' perspective working in healthcare centers of Tehran-Iran. *The Pan African Medical Journal*. 2018; 30 (1). doi:10.11604/pamj.2018.30.40.14436
2. Elderhorst E, Ahmed RJ, Hutton EK, Darling EK. Birth Outcomes for Midwifery Clients Who Begin Postdates Induction of Labour Under Midwifery Care Compared With Those Who Are Transferred to Obstetrical Care. *J Obstet Gynaecol Can*. 2019 Oct;41(10):1444-1452. doi: 10.1016/j.jogc.2018.11.024. Epub 2019 Feb 1. PMID: 30712906.
3. Salehi M, Hoseini Dronkolaei S, Mohammadi S. Human resource strategies regarding professional ethics staff of mazandaran university of medical sciences. *Bioethics Journal*. 2017; 7(24):37-45. <https://www.sid.ir/filesserver/jf/4014713962403>
4. Wagner P, Hendrich J, Moseley G, Hudson V. Defining medical professionalism: a qualitative study. *Medical education*, 2007; 41(3):288-94. <https://doi.org/10.1111/j.1365-2929.2006.02695.x>
5. Hafferty FW. Definitions of professionalism: a search for meaning and identity. *Clinical Orthopedics and Related Research*®. 2006; 449:193-204. DOI:10.1097/01.blo.0000229273.20829.d0
6. Swick HM. Toward a normative definition of medical professionalism. *Academic medicine*. 2000; 75(6):612-6. DOI:10.1097/00001888-200006000-00010
7. Turale S, Meechamnan C, Kunaviktikul W. Challenging times: ethics, nursing and the COVID-19 pandemic. *International nursing review*. 2020; 67(2):164-7. <https://doi.org/10.1111/inr.12598>
8. Masumi SZZ, Bibalan FG, Roshanaei G. Observance of midwifery Code of Ethics among midwifery students and its related factors. *Medical Ethics Journal*. 2016; 10(35):11-30. <https://doi.org/10.5812/semj.99707>
9. Khakbazan Z., Ebadi A., Geranmayeh M Momenimovahed Z. Midwifery Professionalism: An Integrative Review. *Journal of Clinical and Diagnostic Research*. 2019; 13(3): LE01-LE08. DOI: 10.7860/JCDR/2019/38209.12654

10. SHahlai S., Seddighinia S., Mohazzab A. Assessment of Observance of Ethics Codes in Midwifery and Underlying Factors Among a Group of Midwives Participated in Continuing Education Programs at Avicenna Fertility Center. *Iranian journal of biomedical law and ethics*. 2019; 1(1): 72-80. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=696974>
11. Yazdanpanahi Z, Nematollahi A, Foghaha H, Haghpanah S. Continuous evaluation of midwives as to professional standards. *Journal of Advances in Medical Education & Professionalism*, 2013; 1(3):100-3. [https://jamp.sums.ac.ir/article\\_40856.html](https://jamp.sums.ac.ir/article_40856.html)
12. ShahAli M, Shahriari M, AbdiShahshahani M. Examining the level of adherence to midwifery professional codes of ethics by midwives working in gynecology departments and maternity hospitals and some related factors in hospitals affiliated to Isfahan University of Medical Sciences in 2016. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2018;21(3):54-63. <https://dx.doi.org/10.22038/ijogi.2018.11063> [persian]
13. Mestdagh E., Timmermans O., Fontein-Kuipers Y., Van Rompaey B.. Proactive behavior in midwifery practice: A qualitative overview based on midwives' perspectives. *Sexual & Reproductive Healthcare*, 2019; 20: 87-92. <https://doi.org/10.1016/j.srhc.2019.04.002>
14. Creedy D, Sidebotham M, Gamble J, Pallant J, Fenwick J. Prevalence of burnout, depression, anxiety and stress in Australian midwives: a cross-sectional survey. *BMC pregnancy and childbirth*, 2017; 17(1): 1-8. <https://doi.org/10.1186/s12884-016-1212-5>
15. Aksoy YE, Koçak V. Psychological effects of nurses and midwives due to COVID-19 outbreak: The case of Turkey. *Archives of psychiatric nursing*. 2020; 34(5):427-33. <https://doi.org/10.1016/j.apnu.2020.07.011>
16. Hatami H. A closer look at the Emergence, Persistence and Disappearance of Emerging Diseases, Epidemics and Pandemics and the destiny of COVID-19. *Journal of Health in the Field*. 2020; 7(4):1-15. DOI: <https://doi.org/10.22037/jhf.v7i4.30193>
17. Jardine J, Relph S, Magee LA, von Dadelszen P, Morris E, Ross-Davie M, et al. Maternity services in the UK during the coronavirus disease 2019 pandemic: a national survey of modifications to standard care. *BJOG: An International Journal of Obstetrics & Gynecology*. 2021; 128(5):880-9. <https://doi.org/10.1111/1471-0528.16547>
18. Davoodi M, Heidari A. Ethical challenges experienced by nurses providing care to patients with Covid -19. *Ethic*. 2021; 10(1): 43-53. [Persian] [article\\_700709\\_7e0c572efdb929f8d84f626708220599.pdf](https://doi.org/10.22037/jhf.v7i4.30193)
19. Duran, S., Celik, I., Ertugrul, B., Ok, S., & Albayrak, S. Factors affecting nurses' professional commitment during the COVID-19 pandemic: a cross-sectional study. *Journal of Nursing Management*. 2021; 29(7), 1906-1915. <https://doi.org/10.1111/jonm.13327>
20. Choi J-S, Kim J-S. Factors influencing emergency nurses' ethical problems during the outbreak of MERS-CoV. *Nursing ethics*. 2018; 25(3):335-45. DOI:[10.1177/0969733016648205](https://doi.org/10.1177/0969733016648205)
21. Asadi N, Salmani F, Pourkhajooiyi S, Mahdavifar M, Royani Z, Salmani M. Investigating the Relationship Between Corona Anxiety and Nursing Care Behaviors Working in Corona's Referral Hospitals. *Iranian Journal of Psychiatry and Clinical Psychology*. 2020; 26(3):306-19. URL: <http://ijpcp.iums.ac.ir/article-1-3271-en.html>
22. Sperling D. Ethical dilemmas, perceived risk, and motivation among nurses during the COVID-19 pandemic. *Nursing ethics*. 2021; 28(1): 9-22. <https://doi.org/10.1177/0969733020956376>