### **Review Article**

## Midwives' Educational Needs in Iran: A Narrative Review

### Abstract

**Background:** Midwives have a major role in the improvement of health indicators in every country. In order for midwives to be able to play their role well, they must have sufficient updated knowledge. For this purpose, it is necessary to review their educational needs. The aim of the present research was to review Iranian studies that have investigated midwives' educational needs. Materials and Methods: In this narrative review, PubMed, Scopus, Web of Science, Google Scholar, ProQuest, Ovid, SID, and Magiran databases were searched for the full texts of Iranian studies published in Persian and English languages in the period of 2000-2018. Review, descriptive, and interventional articles consistent with the research aim were included in this study. **Results:** Of the 53 found articles, 23 articles that were relevant to midwives' educational needs in Iran were investigated. The findings of the studies showed that the educational needs of the midwives can be categorized into the four groups of knowledge and performance, communication skills, occupational rules/regulations, and religious rules. Conclusions: The results showed that midwives in Iran have different educational needs. Because the midwifery practice leads to the promotion of public health, it is imperative that midwives have comprehensive knowledge and the skills necessary for providing optimal care. In order to achieve this, short-term and long-term training programs tailored to the needs of midwives are recommended.

Keywords: Education, Iran, midwife, narrative review, needs assessment

### Introduction

One of the important recommendations of the World Health Organization (WHO) for medical groups is the identification of the needs that are relevant to their profession.<sup>[11]</sup> The needs of a profession are usually identified through need assessment. Need assessment is a method of investigating society's health problems and is the first step for upgrading the skills of personnel.<sup>[2,3]</sup> Moreover, the data obtained from needs assessment are utilized by efficient planners to facilitate planning and set priorities.<sup>[4]</sup>

Assessing midwives' educational needs, and then, planning and executing educational plans based on those needs can be a positive step towards knowledge transfer and upgrading caregivers' information. In general, promotion of the knowledge and skills of medical personnel along with optimization of healthcare services and achievement of standards corresponding to the society's needs are the goals of medical education programs.<sup>[3,5,6]</sup> In order to achieve

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms. these goals, the educational needs should be reviewed. Educational needs assessment is the process of regular data collection.<sup>[3,6,7]</sup> Since midwives play an important role in the improvement of health and enhancement of human development indicators in the society, it seems that determining and prioritizing the needs of this group and providing education for them in order to keep them up to date with the continuous scientific advances in medicine is of great importance.<sup>[8,9]</sup>

In a study in 2006, in Indonesia, the importance of assessment of the educational needs of midwives based on their professional duties was pointed out.<sup>[10]</sup> In recent years, the assessment of midwives' educational needs has attracted the attention of many researchers around the world.<sup>[9,11]</sup> Moreover, in Iran, various studies have been performed on midwives' general needs and this issue has been investigated from different aspects. Some of these studies have focused on midwives' knowledge and awareness<sup>[12-15]</sup> and some others have investigated the communication

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### Mahboubeh Hajifoghaha<sup>1</sup>, Fatemeh Nahidi<sup>2</sup>, Shiva Alizadeh<sup>3</sup>, Samira Golezar<sup>4</sup>, Fatemeh Dabiri<sup>5</sup>, Seyedeh-Samira Mokhlesi<sup>6</sup>, Amirhossein Babaei<sup>7</sup>

<sup>1</sup>Student Research Committee. Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Islamic Republic of Iran, <sup>2</sup>Midwifery and Reproductive Health Research Center, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Islamic Republic of Iran, 3Scientific Member of Midwifery, Department of Nursing and Midwifery, Rasht Branch, Islamic Azad University, Rasht, Islamic Republic of Iran, <sup>4</sup>Department of Midwifery, Tuyserkan Branch, Islamic Azad University, Tuyserkan, Islamic Republic of Iran, <sup>5</sup>Mother and Child Welfare Research Center; Hormozgan University of Medical Sciences, Bandar Abbas, Islamic Republic of Iran. 6Department of Midwifery, Medical Science Faculty, Qom Branch, Islamic Azad University, Islamic Republic of Iran, 7Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Islamic Republic of Iran

Address for correspondence: Dr. Amirhossein Babaei, Student Research Committee, Neshat Street, Shiraz, Iran. E-mail: babaei93@yahoo.com

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skills of midwives in their interaction with pregnant women.<sup>[16,17]</sup> Some researchers have focused on midwives' knowledge of religious rules<sup>[18,19]</sup> and some others have investigated midwives' awareness of professional rules and regulations.<sup>[16,18,20-22]</sup>

Regarding the different studies on midwives' educational needs in Iran, each of the researches have been focused on a specific field of the needs and the studies have been performed in a special geographic region; thus, the viewpoints of a certain group of midwives have been reviewed in each study. Therefore, in order to have a comprehensive research on midwives' educational needs in Iran and to gain a general understanding of this subject, all the available studies should be integrated into an article. Therefore, considering the importance of the issue and the lack of a review research in this regard, the researchers decided to review and summarize the studies relevant to midwives' educational needs in Iran.

#### **Materials and Methods**

The present review of the available literatures published in Persian and English journals investigated the midwives' educational needs in Iran. For data collection, first, library resources were reviewed. Then, by using Mesh in PubMed database, the relevant keywords for accessing the articles were selected. In the first stage, the keywords of need assessment, professional needs, educational needs, maternity care provider, pregnancy care provider, and midwife were searched separately in databases such as PubMed, Scopus, Web of Science, Google Scholar, ProQuest, Ovid, SID, and Magiran. Then, they were combined with "and" or "or" to make some new keywords or phrases. As a result, 53 Iranian articles that had the mentioned keywords in their title or abstract were extracted. The extracted articles included 4 articles from PubMed, 2 from Web of Science, 1 from Scopus, 3 from ProQuest, 6 from Ovid, 5 from SID, 6 from Magiran, and 26 from Google Scholar. The literature search was conducted from the 20th to the 30th of January 2019. The quality of the articles was assessed using standard checklists of qualitative and quantitative articles. The inclusion criteria of the study included full text Persian and English articles written by Iranian authors on midwives' educational needs and published within the period of 2000 to 2018. The exclusion criteria of the study included abstracts and articles published as case report and letter to editor.

By entering the articles found in scientific databases into Endnote software, 8 articles were recognized as repetitive and omitted. Out of the 45 remaining articles, 22 articles the full text of which were not available or were inconsistent with the research aim were omitted. From among all the studied articles that were relevant to midwives' educational needs in Iran, 23 quantitative and qualitative articles, which had the study inclusion criteria, were selected. These articles were studied several times by one author and reviewed by the other author to gain a deeper understanding. The process of selecting the articles is presented in Figure 1. Since the included studies were not homogeneous, data analysis was conducted through inclusive review of the articles, qualitative summarization, and writing a conclusion.

### **Ethical considerations**

In this review study, the collected data were only used for scientific purposes and intellectual property was respected in the reporting and publication of the results. The study was approved by the Ethics Committee of Shahid Beheshti University of Medical Sciences, Tehran, Iran, (IR.SBMU.REC.1397.106).

### Results

In this study, of the 53 articles found in the primary search, 23 were relevant to midwives' educational needs. They were conducted in different cities of Iran. Due to the importance of the topic and in order to provide practical results for planners, after investigating the issues related to midwives' educational needs in Iranian studies, similar needs were assigned to a similar group and they were investigated in the four categories of knowledge and practice, communication skills, professional rules/regulations, and religious principles. Most articles assessed the knowledge and practice of nurses.

# Educational needs related to midwives' knowledge and practice

It is a known fact that high level of knowledge of health care providers can influence their attitudes and practice

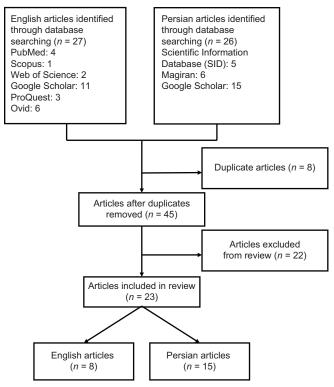


Figure 1: Flowchart of narrative review process

and lead to promotion of health and satisfaction of the health care recipients. The expressed educational needs were related to labor and childbirth.<sup>[23]</sup> evidence-based practice,<sup>[24]</sup> Sexually Transmitted Diseases (STDs),<sup>[25]</sup> infection control,<sup>[26]</sup> prenatal skills and care procedures for addicted pregnant women,<sup>[27]</sup> Cardiopulmonary Resuscitation (CPR), information technology, traditional medicine in midwifery, and hypertension in pregnancy,<sup>[9]</sup> medical history recording and pregnancy examinations,<sup>[5]</sup> pregnant women's oral and dental health,<sup>[12]</sup> HIV transmission prevention from mothers to children,<sup>[13]</sup> congenital cytomegalovirus infection,<sup>[14]</sup> maternal mortality prevention in natural disasters,<sup>[28]</sup> side effects of drugs and neonatal resuscitation,<sup>[29]</sup> non-medical treatments and sexual disorders during menopause,<sup>[30]</sup> female genital mutilation,<sup>[31]</sup> and pregnancy care.<sup>[32]</sup>

# Educational needs related to respecting the rights of pregnant women and communication skills

Respecting the dignity of the patients is the basis of high-quality midwifery care and a step towards increasing women's satisfaction with the provided services. In order to respect the patients' rights, health care providers should be aware of these rights, because observance of these rights can lead to patients' physical and mental health and security and strengthen the communication between healthcare service providers and patients. Midwives' educational needs in this regard were pregnant women's rights<sup>[22]</sup> and communication skills.<sup>[16]</sup>

# Educational needs related to occupational rules and regulations

Findings of the researches represented midwives' educational needs in the fields of Islamic punishment rules,<sup>[33]</sup> abortion rules,<sup>[34]</sup> professional rules,<sup>[21]</sup> and the process of judgment.<sup>[35]</sup>

### Educational needs related to religious principles

Since midwives are more in contact with women during pregnancy and women consult with them, having the most recent information is necessary for them. Midwives' educational needs related to religious principles in the present review were ethical and religious bases of gestational surrogacy<sup>[36]</sup> and professional Islamic rules.<sup>[19,34]</sup> A summary of the results is presented in Table 1.

### Discussion

This review study was conducted to obtain and investigate the studies performed on the educational needs of midwives in Iran. The findings have shown that midwives have various educational needs.

One of their educational needs is related to their knowledge and performance. This need has been evaluated and approved in some studies.<sup>[2,9,27]</sup> The findings of these studies were consistent with two other studies that reported midwives require training in order to provide better prenatal care and delivery.<sup>[5,32]</sup> In an Iranian study, midwives' knowledge of the methods of mother-child Human Immunodeficiency Virus (HIV) transmission was investigated. This finding was consistent with the suggestions of the Royal College of Obstetricians and Gynaecologists (RCOG) which stated that since midwives play a key role in prenatal care, they should have enough knowledge about mother to child Acquired Immunodeficiency Syndrome (AIDS) transmission to be able to provide more effective care.<sup>[13]</sup> Similarly, midwife's knowledge about prevention of AIDS transmission during pregnancy was investigated in Nigeria.[37] Since women refer to gynecologists and midwives to receive prenatal care, improving the knowledge of care providers about oral and dental health was necessary to achieve better results in pregnancy and prevent undesirable side effects.<sup>[27]</sup> The review of the literature revealed that in addition to the Iranian studies, some of the studies performed in other countries also evaluated the knowledge of prenatal care providers on ultrasound in midwifery.<sup>[38]</sup> genetic screening in pregnancy.<sup>[39]</sup> immunization in pregnancy.<sup>[40]</sup> and nutrition in pregnancy.<sup>[41]</sup> The above-mentioned studies concluded that because midwives provide health care services to patients, they should constantly try to learn new diagnostic, therapeutic, and care methods. In addition, midwives have an important training role: they must have the necessary scientific knowledge and skills for teaching people. The other educational need of midwives is communication skills and respecting the rights of pregnant women. In all the stages of midwifery care, the quality of communication is the main determinant of effective communication and satisfaction of the patient with the care provider.<sup>[16]</sup> Researchers who have investigated the communication between pregnant women and midwives have mentioned this communication as the right of pregnant women and considered the observance of this right necessary. They have reported that midwives' communication skills were poor and stated that they should be familiarized with communication skills and the rights of pregnant women from the beginning of their university education and try to observe them.<sup>[42]</sup> Although pregnant women may have no information about all their rights, performance of the treatment team in execution of the protocols, treatment interventions, and care should be consistent with ethical principles and standards.<sup>[43]</sup> These studies concluded that, in general, providing optimal health services is possible when midwives have learned the skills necessary for communicating with community members and continue to learn and improve them.

The results of the studies suggest that the promotion of knowledge of health providers regarding professional rules and regulations is necessary and it can play a significant role in decreasing medical professional errors and protecting

Number	Authors (Year)	Type of the study	Sample size	Population	Data collection tools	Results
1	Taghizadeh <i>et al.</i> $(2018)^{[28]}$	descriptive	361	Midwife	questionnaire	Midwives' skills and knowledge level regarding the prevention of maternal mortality in natural
2	Faraji-Khiavi <i>et al.</i> (2018) <sup>[29]</sup>	cross-sectional	82	Midwife	questionnaire	disasters was poor. Education of side effects of drugs and neonatal resuscitation were the main educational needs of midwives.
3	Malekmohammadi and Malekmohammadi (2017) <sup>[12]</sup>	descriptive-analytic	204	Midwives and gynecologists	questionnaire	There is the need to upgrade midwives' and gynecologists' skills and knowledge in order to achieve the best care for pregnancy period.
4	Azmoude <i>et al.</i> $(2017)^{[24]}$	cross-sectional	98	Midwife	questionnaire	Midwives need to promote their knowledge in the field of evidence-based practice.
5	Bostani <i>et al</i> . (2017) <sup>[31]</sup>	descriptive study	168	Midwife	questionnaire	About one fifth of the midwives had enough knowledge on female genital mutilation.
6	Pourmarzi and Sharami (2017) <sup>[25]</sup>	cross-sectional	144	Midwife	questionnaire	Some midwives were aware of the guideline of sexually transmitted diseases.
7	Peyman <i>et al</i> . (2019) <sup>[35]</sup>	qualitative	14	Midwife	semi-structured interviews	Midwives did not have enough awareness of professional rules and the judgment process.
8	Mirrafiei <i>et al.</i> (2017) <sup>[21]</sup>	cross-sectional	115	Midwife	questionnaire	Midwives' awareness of professional rules and regulations was low to medium.
9	Afhami <i>et al.</i> (2016) <sup>[34]</sup>	cross-sectional	189	Midwife	questionnaire	Awareness of most midwives on the rules of abortion was poor to medium.
10	Bahri <i>et al.</i> (2016) <sup>[13]</sup>	cross-sectional	133	Midwife	questionnaire	Most midwives' educational needs were related to mother-child HIV transmission methods.
11	Masoomi <i>et al.</i> (2016) <sup>[22]</sup>	quasi-experimental	176	Midwife	questionnaire	Education of pregnant women's rights was another educational need of midwives.
12	Mazaheri and Moghim (2015) <sup>[14]</sup>	cross-sectional	341	General practitioners and midwives	questionnaire	Midwives could not gain an acceptable score of awareness of congenital cytomegalovirus infection.
13	Abedian <i>et al</i> . (2014) <sup>[23]</sup>	cross-sectional	223	Midwife	questionnaire	The first educational need of midwives was to gain knowledge about labor and childbirth.
14	Shamaeian-Razavi et al. (2013) <sup>[36]</sup>	descriptive-analytic	175	Midwife	questionnaire	Midwives did not have enough information about the ethical, legal, and religious principles related to midwifery.
15	Sereshti <i>et al.</i> (2011) <sup>[9]</sup>	cross-sectional	280	Midwife	questionnaire	Midwives' awareness in different areas was at a medium level.
16	Lotfipur <i>et al.</i> $(2010)^{[5]}$	cross-sectional	97	Midwife	questionnaire	The educational needs of midwives were pregnancy history and examinations, risk factors for delivery, and postpartum nutrition.
17	Askarian <i>et al.</i> (2007) <sup>[26]</sup>	cross-sectional	273	Nurses, midwives, and students	questionnaire	Most of the midwives needed specific education on infection control.
18	Taghizadeh <i>et al.</i> (2007) <sup>[16]</sup>	correlational	50	Midwife	questionnaire	Midwives' verbal and non-verbal communication skills were at a low level.
19	Tork-Zahrani <i>et al.</i> $(2007)^{[30]}$	descriptive	97	Midwife	questionnaire	Most of the midwives' educational needs were non-medical treatments and sexual disorders during menopause.
20	Banaian and Sereshti (2007) <sup>[19]</sup>	descriptive	151	Midwife	questionnaire	Midwives' awareness of professional rules and regulations was low.
21	Hajifoghaha and Keshavarz (2008) <sup>[33]</sup>	cross-sectional	177	Midwife	questionnaire	Midwives' awareness of Islamic professional punishment rules was low.
22	Mojahed <i>et al.</i> $(2005)^{[27]}$	cross-sectional	100	Midwife	questionnaire	Midwives needed education regarding skills such as caring for addicted pregnant women, breech and twin pregnancies.
23	Khalili (2002) <sup>[32]</sup>	semi-experimental	34	Health centers' staff in prenatal care units	questionnaire	The educational needs of prenatal care providers were significant.

women's health.<sup>[21,44]</sup> Thus, midwives should be aware of the professional rules, because of their critical responsibility to any individual in the community. In addition, they must have sufficient information about the possible consequences of not obeying the rules. Some of the researchers claimed that midwives have little awareness of professional religious rules and regulations. Furthermore, regarding the religious culture of the Iranian people, education of ethical and religious matters related to medical sciences to maternity care providers is one of the main factors mentioned as promoting fertility status.<sup>[45]</sup> Since midwives have a close relationship with women in society, it seems necessary for them to know the religious issues of midwifery in order to respect the religious beliefs of the people and teach them to pregnant women when necessary.

It can also be noted that the results of these studies showed that the researchers focused on reviewing midwifes' educational needs, because through strengthening the abilities and meeting the needs of maternal care providers, the spiritual and material needs of pregnant women can be met. Researchers believed that the serving and control of midwifery care should be assigned to care providers who have inclusive capabilities.<sup>[46]</sup>

In their viewpoint, acquisition of these capabilities is subject to holding regular in-service retraining courses, and revising university courses and improving the education quality in all the educational levels in the universities.<sup>[34]</sup> Nevertheless, promotion of the knowledge of pregnancy care providers requires the special attention of the authorities and planners of every country.<sup>[47]</sup>

The authors hope that the results of this research help policy makers and planners recognize midwives' needs and adopt strategies to meet these needs and promote the quality of their services.

Lack of access to libraries and theses relevant to the research topic in universities all over the country and impossibility of reviewing their information are the limitations of this research.

### Conclusion

This literature review showed that midwives have different educational needs. Because midwives play a key role in the provision of community health, it is imperative that they have comprehensive knowledge and the skills necessary for providing optimal care. Therefore, in order to achieve this, short-term and long-term training programs tailored to the needs of midwives are recommended. Moreover, meeting the educational needs of midwifery students is emphasized.

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### **Conflicts of interest**

Nothing to declare.

#### References

- 1. Ehsanpour S. Achieving minimum learning requirements from the viewpoints of midwifery students in Isfahan school of nursing and midwifery. Iran J Med Educ 2006;6:17-25.
- Saidi M, Karimy M, Choobdaran KH, Khorram R, Baradaran H, Koohpayehzadeh J. Assessment of knowledge, attitude and practice educational needs of health care providers (Behvarzan) working toward maternal health in health networks in Saveh. Journal of Torbat Heydariyeh University of Medical Sciences 2014;1:62-7.
- Yaghobi Y, F Najafi. Need assessment of the continuous educational of nurses and midwives. J Guilan Univ Med Sci 2007:35-40.
- 4. Behrouzifar S, Mousavi G. Comparison of continuing medical education (CME) priorities of midwives employed at health facilities and treatment centers of Kashan and Aran & Bidgol-2010. J Med Educ Dev 2012;7:35-47.
- Lotfipur M, Torkzahrani SH, Ahmadi M, Alavimajd H. Assessing the educational inquiries of midwifes in before, during and post partum care 2009. J Coummunity Health 2010;5:25-31.
- Boroumdfar K, Yousefi A, Tabatabaei M. Knowledge of attitude and practice of health centers staff about nutritional counseling during pregnancy in Shiraz Health Center. Res Med Sci 2001;5:290-3.
- 7. Educational Needs Analysis Guidelines-Student in statutory out- of-home care- 6 ENA guidelines-August 2018.
- NCMS Department of Education Services. Needs Assessments: A Guide, north Carolina medical society. Ncmsdc\shared\CME INFO\Forms\customer forms\NCMS needs assessment.doc. 2009.
- 9. Sereshti M, Safdari F, Kazemian A, Delaram M, Banaean Sh, Sereshti M. Educational needs of midwife alumni work in health care centers. ESMS 2011;4:31-37.
- Hennessy D, Hicks C, Koesno H. The training and development needs of midwives in Indonesia: Paper 2 of 3. Hum Resour Health 2006;4:9.
- Ziari A, Rashidy-pour A, Ziaeifar E. A review on factors influenicng research performance in Iranian Universities of Medical Sciences during 2000-2016. Koomesh J 2017;19:721-34.
- Malekmohammadi T, Malekmohammadi M. Knowledge, attitude and practice of gynecologists and midwives toward oral health in pregnant women in Kerman (2016). Iran J Obstet Gynecol Infertil 2017;20:9-18.
- Bahri N, Bajdi A, Roodsari RL, Mirzaee K, Esmaeili H, Larki M. Perceived and real educational needs of midwives about prevention of mother-to-child transmission of HIV, Hospitals affiliated to Mashhad University of Medical Sciences- 2015. Iran J Obstet Gynecol Infertil 2016;19:12-21.
- Mazaheri M, Mokhtari M, Moghim Sh, Nasr-Esfahani B, Ghasemian-Safaei H. Awareness of congenital cytomegalovirus infection among general practitioners and midwives. J Isfahan Med Sch 2015;33:194-202.
- Jokar F, Ghiyasi N, Shidfar F. A survey on the knowledge and attitude of employees in health centers in Ilam about nutrition during pregnancy. Abstract of the 7<sup>th</sup> Iranian Nutrition Congress. 2001.

- Taghizadeh Z, Rezaiepour A, Mehran A, Alimoradi Z. Usage of communication skills by midwives and its relation to clients' satisfaction. Hayat 2007;12:47-55.
- Simbar M, Nahidi F, Dolatian M, Akbarzadeh A. Assessment of quality of prenatal care in Shahid Beheshti Medical Science University centers. Int J Health Care Qual Assur 2012;25:166-76.
- Azimi N, Tadayon M, Bakhshandeh M, Kayani M. Assessment of the knowledge of midwifery students of the religious and legal provisions related to the midwifery profession in Ahvaz Jundishapur University of Medical Sciences In 2013. Figh Med J 2014;5:71-89.
- Banaian S, Sereshti M. A survey on the knowledge of midwives in Chaharmahal va Bakhtiyari province regarding the legal and religious norms of midwifery and some related factors in 2006. J Shahrekord Univ Med Sci 2007;9:37-44.
- Hajifoghaha M, Keshavarz T, Akbarzadeh M. The knowledge of midwives working at the public and private sections towards some professional rules and regulation in shiraz. Dena 2007;2:24-31.
- 21. Mirrafiei F, Geranmayeh M, Ghadipasha M, Mehran A, Abedian Z. Awareness of midwifery laws and regulations among midwives working in Mashhad hospitals. Journal of Mashhad Medical Council 2017;20:100-3.
- 22. Masoomi, Z, Niazi Z, Bakht R, Roshanaei G. The effect of education of pregnant women's bill of rights to midwives, on satisfaction of the women referred to labor unit of Imam Reza hospital. Sci J Hamadan Nurs Midwifery Fac 2016;24:58-67.
- Abedian K, Charati JY, Samadaee K, Shahhosseini Z. A cross-sectional study of midwives' perspectives towards their professional educational needs. Mater Sociomed 2014;26:182-5.
- Azmoude E, Farkhondeh F, Ahour M, Kabirian M. Knowledge, practice and self-efficacy in evidence-based practice among midwives in East Iran. Sultan Qaboos Univ Med J 2017;17:e66-73.
- Pourmarzi D, Sharami SH. Midwives' educational needs and knowledge about sexually transmittable infections in the Islamic Republic of Iran. East Mediterr Health J 2017;23:611-8.
- Askarian M, Memish Z, Khan A. Knowledge, practice, and attitude among Iranian nurses, midwives, and students regarding standard isolation precautions. Infect Control Hosp Epidemiol 2007;28:241-4.
- Mojahed S, Nasirian KH, Dafei M, Vaezi AA. Karimi H. Assessment of continuing education needs of midwifery personnel. Iran J Med Educ 2005;5:Serial14:215.
- Taghizadeh Z, Khoshnam-Rad M, Kazemnejad A. Midwives' professional competencies for preventing maternal mortality in disasters: A cross-sectional study in Iran. Disaster Med Public Health Prep 2018;12:305-11.
- Farzad F-K, Saadi S, Amiri E. Educational needs assessment among midwives in obstetric and delivery wards for accreditation at educational hospitals affiliated with Ahvaz University of Medical Science. Depiction of Health 2018;9:81-91.
- Tork-Zahrani S, Lotfipur-Rafsanjani M, Ahmadi M, Alavi-Majd H. Study of educational needs in health education and care of menopause from the viewpoints of midwives in Rafsanjan. J Nurs Midwifery Shahid Beheshti Univ Med Sci 2007;16:26-31.
- Bostani-Khalesi Z, Beiranvand S, Ebtekar F. Iranian midwives' knowledge of and attitudes toward female genital mutilation/ cutting (FGM/C). Electron Physician 2017;9:3828-32.
- 32. Khalili M. Educational effects of pregnancy course care on the

health centers' staff knowledge in Ilam town. J Ilam Univ Med Sci 2002;10:44-7.

- Hajifoghaha M, Keshavarz T. The rate of midwives' awareness of working at midwifery offices, hospitals and clinics in Shiraz from Islamic punishment laws related to medical practitioners in 2007. IJFM 2008;14:18-21.
- 34. Afhami N, Bahadoran P, Taleghani HR, Nekuei N. The knowledge and attitudes of midwives regarding legal and religious commandments on induced abortion and their relationship with some demographic characteristics. Iranian J Nurs Midwifery Res 2016;21:177.
- Peyman A, Nayeri ND, Bandboni ME, Moghadam ZB. Legal complaints about midwives and the impact on the profession. Nurs Ethics 2019;26:148-60.
- Shamaeian-Razavi N, *et al.* A review of the viewpoints of physicians, nurses, and midwives on alternative uterine therapy in Torbat-Heydarieh. J Torbat Heydarieh Univ Med Sci 2013;1:31-8.
- Ndikom C, Onibokun A. Knowledge and behaviour of nurse/ midwives in the prevention of vertical transmission of HIV in Owerri, Imo State, Nigeria: A cross-sectional study. BMC Nurs 2007;6:9.
- Glazebrook R, Manahan D, Chater A. Educational needs of Australian rural and remote doctors for intermediate obstetric ultrasound and emergency medicine ultrasound. Can J Rural Med 2006;11:277-82.
- Bramwell R, Carter D. An exploration of midwives' and obstetricians' knowledge of genetic screening in pregnancy and their perception of appropriate counselling. Midwifery 2001;17:133-41.
- 40. Leddy M, Anderson BL, Power ML, Gall S, Gonik B, *et al.* Changes in and current status of obstetrician-gynecologists' knowledge, attitudes, and practice regarding immunization. Obstet Gynecol Surv 2009;64:823-9.
- 41. Arrish J, Yeatman H, Williamson M. Midwives and nutrition education during pregnancy: A literature review. Women Birth 2014;27:2-8.
- 42. Ahmari-Tehran H, Abedini Z, Eskandari N, Kachooie A, Alipour Z. Survey of midwifery students' knowledge of pregnant women's bill of rights in Qom University of Medical Sciences. Educ Ethics Nurs 2013;2:13-8.
- Khodakarami N, Jan-Nesari S. Evaluating mothers' awareness about pregnant women's rights. J Med Ethics Hist Med 2009;2:51-58.
- 44. Sereshti M, Nahidi F, Simbar, M, Ahmadi F, Bakhtiri M, Zaeri F. Perinatal loss is very tragic event for the parents and staff who are contact with the bereaved parents. Int J Fertil Steril 2015;9:69.
- 45. Shakour M, Yousefi Ar, Bazrafkan L, Jouhari Z, Taheri S, Omid A. The ethical aspects of abortion in medical education. J Med Ethics Hist Med 2013;6:24-34.
- 46. Hasandoost Farokhani M, Tabatabai Chahar M, Hasandoost Farokhani Z, Younesi Heravi M. A survey of maternal awareness of the rights charter of pregnant women: A review article. Abstracts of the First National Conference on Applied Research in Public Health and Sustainable Development 2012.
- 47. Mokhtari-Zanjani P, Emamgholi-Khoushechin T, Shiri Qhidari P. The viewpoints of midwives employed in Zanjan University of Medical Sciences towards continuing education programs. J Med Educ Dev 2011;3:42-8.