# Evaluating different types of malpractices in midwifery that were referred to the forensic medicine commission and the medical council between 2006 and 2011 in Isfahan province, 2013

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# **A**BSTRACT

**Background:** Medical malpractices in obstetrics are one of the main health concerns since in addition to the mortalities and morbidities caused for the two susceptible groups of mothers and neonates, they may lead to difficulties for the accused gynecologists and midwives in returning to their routine medical career and giving services to the patients. Hence, this study was conducted to evaluate different types of malpractices in midwifery that were referred to the legal medical commission and medical council in Isfahan province. **Materials and Methods:** In this cross-sectional descriptive study, we evaluated the data from all midwifery cases referred to the forensic medicine commission and medical council in Isfahan province between 2006 and 2011, with at least one lawsuit confirmed by the jury. **Results:** The results showed that in a total of 206 investigated cases at the medical council and forensic medicine commission in Isfahan, 66 cases of medical error sentences including 38 cases in medical council and 28 cases in forensic medicine commission were proved, which revealed 32% of malpractice in midwifery services in 2006–2011 in Isfahan. Negligence (39.2%), imprudence (23.5%), and disobedience of governmental regulations (19.6%) stood among the most commonly reported malpractices. Our findings also suggest that the most common malpractices happened in the postpartum period with a frequency of 44.7%; in addition, governmental hospitals were shown to have the most frequent malpractices with a frequency of 50%. **Conclusions:** Our results reveal that malpractices in midwifery services during and after delivery are so common, leading to irreversible complications to the mothers' and neonates' health in the society. On the other hand, considering the fact that most of these malpractices are preventable, related education, pertinent plans, and proper supervision sys.

Key words: Complaint, malpractices, medical council, midwifery, tems to prevent repetition of these malpractices are highly recommended

# INTRODUCTION

The subject of complaints due to medical malpractices is one of the most important occupational tensions for any physician or midwife in their profession. Unfortunately, most of the personnel working in the field of

treatment believe that as they take all needed precautions and care during their professional activity, it is impossible to have a malpractice and they have no unpleasant feeling about such an event, although nobody is out of error.

The importance of medical malpractices prevention is so high nowadays that the quality of health services refers to provision of malpractice-free health services given at the appropriate time by a qualified person and through use of the least resources. Health system has its own sophistications, and the patients play a pivotal role in it. No body or system

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Submitted: 08-Apr-14; Accepted: 21-Oct-14

Access this article online

Quick Response Code:

Website:
www.ijnmrjournal.net

DOI:
10.4103/1735-9066.161012

is safe against a malpractice and no profession can be thoroughly out of error. Occurrence of a malpractice in medical care systems, like in other systems, is inevitable. Therefore, there is always a chance for such errors and malpractices despite the best functioning of the physicians and the medical care personnel. Medical malpractices refer to an outlaw action, some out-of-routine procedures, an action beneath the professional value, a treatment, or a negligence, and are categorized as imprudence, negligence, lack of related skills, and disobedience of governmental regulations (in medicine and midwifery). Imprudence refers to a condition which leads to a complication for the patients due to carelessness. Negligence refers to ignoring one's duty (when a necessary action is ignored due to carelessness).

Lack of skills, as a term of law, refers to lack of needed scientific and technical qualifications in a physician to manage an activity and disobedience of governmental protocols. It is taking an action out of medical professional and related courses job description. [3] In most of the cases, the physicians experience anxiety, tension, depression, and social isolation after their medical malpractice due to a feeling of insecurity, and it makes the condition difficult for them to return to their usual professional activity and give services to other clients. In some cases, they show a defensive function, which includes making a change in their screening projects of the patients, giving less services to high-risk patients, consideration of specific criteria to admit patients, having numerous counseling sessions with the cooperation of other physicians, and finally, imposing high costs to the system. [4] Therefore, the complications due to complaints that result from a medical malpractice influence both the clients and the health providers, and change the whole health system in this way. The issue of pregnant women has more susceptibility due to the process of pregnancy and their undeniable role in public health. Medical malpractice and errors in this group of population can change the social health status. The importance of midwifery profession lies in the influencing role played by midwives in women's health.

The specific position of midwifery results from its great responsibility that if administered thoroughly, it deserves a reward. On the contrary, in case of disregarding patients' rights and practicing the profession illegally, a malpractice occurs and results in legal complaint by the patient, [5] although the reason behind a huge number of complaints is not a malpractice.

In recent years, the number of individuals under coverage of medical care companies has increased; the increase in individuals' awareness of their legal rights and inefficient efforts of the physicians and midwives to make proper communication with the patients are among the major causes for increased legal complaints and their ascending trend.[6] International reports concerning a high number of complaints against the physicians in different countries reveal that despite notable scientific advancements and the use of new technology in the field of diagnostic and treatment services, the number of complaints sent to medical council has shown an ascending trend. About one-fourth to one-fifth of malpractice cases are, in fact, a type of medical malpractice. The study of Johnson in Australia showed that midwives and gynecologists pay a high amount of malpractice insurance (about 18%), while the midwives and gynecologists make only 2% of the physicians and paramedical staff.[7] Unfortunately, Iran is also involved in malpractice complaints. Based on the report of Forensic Medicine Organization (FMO), the number of medical malpractice complaints in Iran was 413 cases out of all complaints received in the FMO in Tehran in 1995, 299 cases in 1999, 823 cases in 2004, and 1270 cases in 2005.[8] Another study in Isfahan shows an increasing trend of complaints. The number of the complaints received by FMO in Isfahan province was 62 cases in 2005 that increased to 108 cases in 2009. The highest number of complaints was on general physicians, anesthesiologists, gynecologists, general surgeons, orthopedic surgeons, and nurses in the present study. Midwives ranked 18 (5.8% of the complaints among health care providers) and gynecologists ranked 2 (8.3% of the complaints).<sup>[6]</sup> However, medical malpractices and their associated complaints, and patients' plea to the court and their requests for atonement have put the medical society and health care personnel in a progressive crisis. [2] In most of the cases, a legal complaint on the gynecologists and the midwives is a notable concern as the gynecology cases are associated with the highest amount of atonement for the patients in the history of medicine. [9] With regard to the ascending trend of malpractice cases in the field of gynecology in Iran, which can change the health system, an investigation on the types of malpractices in the gynecology field and prenatal care, delivery, and postpartum care seems essential. Investigation in this field and presentation of the results obtained from such an investigation can draw the attention of all health care providers, especially physicians and midwives, to the mothers and prevention of emergency problems that result from the simplest medical malpractice. This issue not only can reduce mortality, complications, and mothers' medical interventions, but also diminish the tension and occupational stress among midwifery professionals and yield more efficient health services in the two vulnerable groups of mothers and neonates. This study aimed to investigate the types of malpractice in midwifery services and determine the reasons for such malpractices.

# **MATERIALS AND METHODS**

This is a descriptive cross-sectional study. Data were collected from all midwifery cases referred to the Iranian Forensic Medicine Organization (IFMO) and FMO in Isfahan which contained at least one court decision or one lawsuit confirmed by the jury. Researcher reviewed the cases related to midwifery services that were referred to these two organizations from April 2006 to April 2011 using a researcher- made demographic questionnaire and a checklist to collect data. The researcher then categorized the midwives' and gynecologists' malpractices in the domains of prenatal care, delivery, and postpartum period care and investigated the association between these malpractices and the research variables with the help of a research counselor who was an expert of forensic medicine and a member of forensic medicine commission. The researcher reviewed 355 cases related to obstetrics and gynecology during 2006-2011 in the medical commission and FMO and deleted 145 cases as they did not meet the inclusion criteria. Then, she investigated 207 cases in the two above-mentioned organizations. Data were qualitative and quantitative and were measured by nominal, ordinal, interval, and ratio scales. Descriptive statistical tests (mean, max, min, SD and frequency distribution table) were used to describe the data. After description of data, they were analyzed by one-way analysis of variance (ANOVA) and analysis of covariance (ANCOVA). P values of 0.05 or less considered as significant.

### **R**ESULTS

The results showed that in a total of 206 investigated cases in the medical council and the forensic medicine commission in Isfahan, 66 cases of medical error sentences including 38 cases in the medical council and 28 cases in the forensic medicine commission were proved, which revealed 32% of malpractice in midwifery services in 2006–2011 in Isfahan.

Among the different types of investigated malpractices, 24.7% of the cases were associated with negligence, 10.6% with disobedience of government regulations, 9.7% with imprudence, and 8.2% of the cases were associated with lack of skills [Table 1]. Investigation of midwifery cases that were referred to the medical council and the Isfahan forensic medicine commission showed that medical malpractices were proved for 33% of the midwives and 23.5% of the gynecologists. Among midwives, the highest number of malpractice was for disobedience of governmental regulations and among gynecologists, negligence had the highest frequency.

Table 1: Frequency distribution of types of malpractices (due to combined cases of malpractice, the calculated percentages are over 100%)

Type of malpractice	malpractice Frequency	
Lack of malpractice	140	67.9
Negligence	51	24.7
Imprudence	20	9.7
Lack of obedience of governmental regulations	22	10.6
Lack of skills	17	8.2
Total	250	121.1

Mean age of service providers and patients were 45.48 and 28.01 years, respectively. The education degrees of service providers in the investigated midwifery services cases were bachelor's degree of midwifery and specialty of gynecology. Gynecologists had the highest frequency of malpractice with 60.3%.

Also, 53% and 47% of the patients were living in urban and rural areas, respectively. The findings showed that 32.5% of malpractices occurred among the health providers aged equal to or less than 40 years, 30.9% were aged 40–50 years, and 17.6% occurred among those over 50 years of age. About 44.7% and 19% of malpractices occurred among those living in rural and urban areas, respectively.

Investigation of the malpractices in different working shifts leading to complaints showed the highest frequency in night shift (38%) followed by evening shift (24.8%) and morning shift (26%). So, in this study, about 26.5% of malpractices were in vaginal delivery and 37% in cesarean section (CS).

#### **DISCUSSION**

The results showed that 28 cases out of 51 in the forensic medicine commission and 38 out of 151 in the medical council were sentenced guilty, while other cases were not found guilty. Among the investigated malpractices, the cases of negligence were the maximum (24.7%) and lack of skills the minimum (8.2%). The researcher believes that the reason for high levels for negligence compared to other types of malpractices is lack of physician's attendance in hospitals and a delay in timely administration of all emergency interventions.

About 53% and 47% of the subjects lived in urban and rural areas, respectively. The findings showed that malpractice among the health care service providers was 32.5% in the age group of less than or equal to 40 years, 30.9% in the age group of 40–50 years, and 17.6% in staff over 50 years of age. foundAbout 44.7% and 19% of the malpractices belonged to the staff living in rural and urban areas, respectively. Our results showed that a high number of

complaints were associated with medical malpractices in the rural areas, but in urban areas, a high number of complaints were not found guilty. This issue shows that more realistic complaints arise in rural areas. In this regard, Azab et al., [9] in a study on complaints of malpractices that were referred to committee of medical ethics in Egypt, concluded that the percentage of malpractices was 89% in urban areas while it was only 11% in rural areas. The results of Azab et al. are not in line with the present study, which can be due to dissimilarity between the complaints and service giving methods in different parts of the world. Among the medical service providers, the lowest rate of malpractices occurred among the staff over 50 years of age (17.6%), while in staff less than 40 years of age, it was 32.5% and among those of 40–50 years of age, it was 30.9% (P < 0.04). It seems that the staff with higher age has fewer clients (patients), compared to the younger staff. They also had better experience and clinical skills in treatment and screening of the patients and, consequently, a lower rate of malpractice.

The findings showed that among the cases of a proved malpractice, 33% were of midwives and 23.5% were of gynecologists. Among the midwives, the highest number of malpractices was for disobedience of governmental regulations (26.6%) and the lowest for imprudence and lack of skills (0%). Among the gynecologists, negligence (17.6%) had the highest frequency and disobedience of governmental regulations had the lowest frequency (3.6%) [Table 2].

With regard to data analysis, it can be concluded that midwives face more medical malpractice due to taking physicians' oral orders and absence of gynecologists in some hospitals, as well as due to the staff not having enough authority to call the gynecologists to patients' bed. Another reason for malpractice among the midwives in the form of disobedience of government regulations during pregnancy refers to illegal abortions or administration of the procedures out of midwives' job description. Bagherian et al., [6] in a study in this context, concluded that the highest malpractice among the midwives was for disobedience of governmental regulations and negligence with 44.4% and 38.9%, respectively. Among the gynecologists, lack of skills

and negligence had the highest frequencies, i.e. 39.1% and 26.2%, respectively.

The findings showed that the highest number of malpractices was for night shifts, evening shifts, and morning shifts with 37.3%, 31.2%, and 28.1%, respectively. The findings showed a significant association between medical malpractice and working shift (P < 0.03). The highest frequency for malpractice at a night shift can be due to inefficient management and tiredness of health care staff, as well as lack of a proper supervising system on staff's function and inadequate facilities at night shifts. On the other hand, the lowest number of malpractices and complaints was for morning shifts, which can be associated with adequate staff, the lowest level of tiredness and error in the morning shift, existence of supervision on staff's function, cooperation of skilled and expert staff, and presence of adequate facilities [Table 2].

With regard to the association between the types of malpractice and the type of delivery, 26.5% of malpractices were in vaginal delivery and 37% in CS. The reason for a higher number of malpractices and complaints among the patients with CS can be the higher number of complications such as fetal respiration distress, postpartum atony, postpartum infection, abnormally adherent placenta, hemorrhage during delivery and exposure to transfusion, and embolism in CS.

Esperanz, [10] in a study in Spain, concluded that 12.7% of the complaints of midwifery and gynecology services were for CS and its complications.

# **CONCLUSION**

The results showed a high rate of medical malpractices in the domain of midwifery services, especially in the postpartum stage, high number of malpractices in CS, and association of some of the patients' and staff's demographic characteristics with the type of malpractice. Other findings showed a high frequency of disobedience of governmental regulations

Table 2: Frequency distribution of types of malpractices based on health care provider's job

Type of malpractice	Midwives		Gynecologists		Midwives and gynecologists	
	Frequency	%	Frequency	%	Frequency	%
Lack of malpractice	10	66.7	104	76.5	24	45.3
Negligence	2	13.3	24	17.6	25	47.1
Imprudence	0	0	7	5.1	13	24.5
Lack of obedience of governmental regulations	4	26.6	5	3.6	13	24.5
Lack of skills	0	0	10	7.3	7	13.2
Total	15	106.6	46	110.1	58	130.1

among the midwives and the gynecologists' negligence, which can be due to lack of gynecologists' attendance in hospitals and poor management in supervision and evaluation of their function. The medical errors, made by midwives and gynecologists, can cause irreversible complications for the mothers and their neonates and influence the health indexes of these two vulnerable groups. With regard to the fact that the major causes for medical error in the domain of midwifery and gynecology can be prevented, it is suggested to provide education, planning, and modification of care system, in order to prevent any type of malpractice.

#### **A**CKNOWLEDGMENT

This article was derived from a master thesis of Leila Asadi with project number 392257, Nursing and Midwifery Isfahan University of Medical Sciences, Isfahan, Iran. The authors gratefully acknowledge support from the Department of Midwifery and Nursing and the health care providers of Isfahan clinics.

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**How to cite:** Beigi M, Asadi L, Valiani M, Mardani F. Evaluating different types of malpractices in midwifery that were referred to the forensic medicine commission and the medical council between 2006 and 2011 in Isfahan province, 2013. Iranian J Nursing Midwifery Res 2015;20:426-30.

**Source of Support:** Department of Midwifery in Isfahan University of Medical Sciences, **Conflict of Interest:** None declared.