



## Original Article

## Prevalence and factors associated with pregnancy loss among physicians in King Abdul-Aziz University Hospital, Saudi Arabia

Weam Bashier I. Alshora<sup>a, \*</sup>, Bakr Mohammad Kalo<sup>b</sup><sup>a</sup> Department of Family Medicine, King Abdulaziz University Hospital, PO Box 55096, Jeddah, 21534, Saudi Arabia<sup>b</sup> Ministry of Health, Public Health Administration, P.O. Box 8364, Zip Code 21955, Makkah A-Mokarramah, Awali Avenue, Abdul-Aziz Al-Refae Street, Awali PHC, Saudi Arabia

## ARTICLE INFO

## Article history:

Accepted 8 November 2017

## Keywords:

Physicians  
Pregnancy loss  
Prevalence  
Work hour

## ABSTRACT

**Objective:** Medical profession is a stressful occupation as it carries potential risk for pregnancy outcome. There is lack of researches regarding the pregnancy loss among physicians working in hospitals in Saudi Arabia. The current study aims at estimating the prevalence and factors associated with pregnancy loss among female physicians working at King Abdul-Aziz University Hospital in Jeddah, September, 2015.

**Materials and methods:** A cross sectional study has been conducted, which included all the female physicians working at King Abdul-Aziz University Hospital in Jeddah by filling a self-administered online questionnaire.

**Results:** Out of all responding physicians (n = 92), the majority were Saudis (93.5%), who were mostly married (89.1%) and rest were either divorced (8.7%) or widowed (2.2%). Seventeen female physicians had pregnancy loss before (18.5%) with a total of 25 losses, which were mostly occurred during first trimester, especially while working as residents (40%), the average monthly working hours in the first pregnancy loss was (median; IQR, 160, 110–198 h). No statistically significant difference could be detected regarding the variation in pregnancy losses according to nationality marital status nor speciality.

**Conclusion:** Most of the pregnancy losses in physicians occurred in first trimester during residency with a relatively longer monthly working hours. Further researches are needed on a larger sample and wider scale with inclusion of other pertinent factors to enable judging on the independent relationship of pregnancy loss and medical profession.

© 2018 Taiwan Association of Obstetrics & Gynecology. Publishing services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

Spontaneous pregnancy loss is surprisingly common worldwide, where approximately 15% of all clinically recognized pregnancies end by spontaneous loss. Spontaneous pregnancy loss may be emotionally and physically demanding for couples particularly when recurrent losses are faced. The habitual pregnancy loss is also referred as the recurrent pregnancy loss and defined as three consecutive pregnancy losses prior to twenty weeks from last menstrual period [1]. Out of this percentage, 12% were recurrent with more than two consecutive pregnancy losses [2]. Lok et al. [3] reported that almost 50% of women, who experience pregnancy loss suffer from some sort of psychological morbidity following

weeks or months of loss. Mostly, elevated anxiety, depressive symptoms, and even major depressive disorder had been reported in 10–50% after pregnancy loss. These psychological symptoms may last up to 6 months or 1 year after pregnancy loss [3]. Moreover, pregnancy loss can be physically and emotionally distressing for couples, especially when faced with recurrent losses [1]. Although, the etiological factors of pregnancy loss recognized, included uterine malformations and parental balanced chromosomal rearrangements. There have been many other factors suggested to be the possible risk factors [4]. Among these possible factors, life stress and insufficient social support during pregnancy were claimed to be related with spontaneous pregnancy loss [5].

In this respect, work stress had been identified as a remarkable risk factor that may affect pregnancy outcome [6]. There is a trend that female doctors usually carry on working during pregnancy, even though their profession puts a significant physical and emotional burden on them [7]. To explore the relationship between medical profession and pregnancy outcome in female physicians,

\* Corresponding author.

E-mail addresses: [weamalshora@gmail.com](mailto:weamalshora@gmail.com) (W.B.I. Alshora), [bbkalo@live.com](mailto:bbkalo@live.com) (B. Mohammad Kalo).

reviewed literature revealed controversial results. For example, Phelan involved 2000 female doctors in the US and observed that there was no difference between reproductive disorders of female doctors and those of the general female population [8]. Cole et al. found a higher rate of preterm births among female physicians compared with the general female population [9].

In Saudi Arabia, although risk factors of spontaneous pregnancy loss had been studied among Saudi females in general population [10], but there is a lack of studies about it among female physicians. Therefore, the current study attempted to find out the possible impact of the medical profession on pregnancy loss in female physicians.

### *Rationale*

The researcher decided to carry out this research due to personal pregnancy loss experience and it was repeated twice in the same year during the usual working hours. Up to the researcher's knowledge, such great loss had no explanation and exact answers were not well established or reached by professional physicians in Saudi Arabia, particularly in Jeddah. This triggered the researcher to look for clear answers regarding pregnancy loss and its associated factors among working female physicians.

### *Objectives of the study*

This research aims at reducing pregnancy loss and its consequences in female physicians by analyzing the following objectives:

- To estimate the prevalence of pregnancy loss among female physicians working at King Abdul-Aziz University Hospital in Jeddah, 2015.
- To determine factors associated with pregnancy loss among female physicians working at King Abdul-Aziz University Hospital in Jeddah, 2015.

### *Contribution of the study*

This research is expected to provide an evidence for the extent of pregnancy loss among female physicians. Also, it explores possible demographic and professional factors associated with pregnancy loss duties for female physicians.

### **Literature review**

Female physicians are believed to be at higher risk due to factors related to the nature of their profession such as working for long hours in a stressful job, despite of its possible importance, there is no enough evidence from researches about the impact of medical profession on pregnancy outcome [11]. In USA, a study was carried out to explore pregnancy outcome among residents in obstetrics and gynecology departments in 2003. It has been observed that although female house officers continued to work for more than 80 h weekly during pregnancy, still they had good pregnancy outcome. It can be attributed to the institutional policies, which allow paid maternity leave usually 4–8 weeks, in addition to planned time off before delivery [12].

In USA, a qualitative study was conducted in 2009, where five otolaryngology residents, who gave birth during residency were interviewed, out of them one had pregnancy loss. As a whole, work load and altered schedule were acknowledged as main source of stress. It has also been claimed that maternity leave and flexible shifts could help in avoiding such adverse event [9].

Earlier in USA, a study was carried out in 1991, where the prevalence of pregnancy loss among the female physicians was

compared with the female partners of male physicians. Only the induced pregnancy loss was higher among the female physicians, but there was no statistically significant difference in the prevalence of spontaneous pregnancy loss. It was found that medical profession has no adverse impact on pregnancy outcome [13]. In Hungary, it has been evaluated through a nationwide study conducted in 2014 that the causality between medical profession and the development of reproductive disorders is mediated by burnout, which is an important risk factor for high-risk pregnancies and pregnancy loss. It has been suggested that the improvements in working conditions and prevention of burnout in female doctors are essential for reducing the likelihood of pregnancy loss among physicians [7].

Behbehani et al. used a web-based questionnaire, which was sent to 190 residents in both medical and surgical departments in North America, the results were compared with 3767 pregnant women of similar age. The prevalence of pregnancy loss was higher among residents (11.8%) compared to the control group (4.2%). Higher number of on-calls per month had significant influence on pregnancy and increased the pregnancy complications including pregnancy loss. Also, complications were significantly higher in female surgical residents, who worked for more than 8 h per week in the operation room as compared to female residents, who worked less than 8 h per week [14]. However, this study is criticized by depending on web based non-random selection of respondents.

In Saudi Arabia, the review of published literature revealed that only one case control study was carried out in Riyadh in 1994 about risk factors for spontaneous pregnancy loss at King Khalid University Hospital. The identified risks for spontaneous pregnancy loss included older age of menarche, husband's age older than 50 years, blood-related husbands, family history and previous pregnancy loss, increased consumption of daily caffeine, abdominal trauma, and fever during pregnancy [10]. Nevertheless, no previous study was carried out in Saudi Arabia to explore other potential factors related to medical profession that could possibly be related to pregnancy loss in female physicians.

### **Material and methods**

A cross-sectional descriptive study design has been implemented. The study was conducted in King Abdul-Aziz University Hospital, which is a teaching hospital with a total capacity of more than 1000 beds. It covers major specialties such as general surgery, internal medicine, obstetrics & gynecology and pediatrics. Almost 30% of the female physicians are working in the hospital, who have duties and responsibilities equivalent to their male counterparts.

### *Study population*

All female physicians working at King Abdul-Aziz University Hospital during the study period were considered eligible for inclusion in the study. According to the data obtained from the human resources administration, the total number of working female physicians was 186. Female physicians in the reproductive age, who were either currently married, divorced or widowed and had personal emails registered with their respective departments were included in the study. The female physicians, who were single and married but had no pregnancy ever, were excluded. The minimum sample size to achieve the study objective was 126 female physicians, excluding the menopausal women from the survey to justify the biasness in the study about early pregnancy or pregnancy loss. The list of recruited female physicians was obtained from the human resource manager, and online questionnaires were given to female physicians only through HR. This procedure was adopted to ensure that the recruited cases were female physicians only.

Download English Version:

<https://daneshyari.com/en/article/8784396>

Download Persian Version:

<https://daneshyari.com/article/8784396>

[Daneshyari.com](https://daneshyari.com)