

Original Article

Female doctors are more emotionally exhausted than their male counterparts in Iraq

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Abstract

Background: The increasing number of women graduating from medical schools doubles the level of responsibility and increases competition with males. Therefore, the assessment of the emotional exhaustion impact on women has become necessary to avoid over-stress at work. This study aims to assess and discuss the gender differences in nine-item emotional exhaustion (EE) subscale of the validated Maslach Burnout Inventory (MBI) among a sample of Iraqi physicians.

Methods: A descriptive cross-sectional study conducted over the first half of 2014. Data was collected from 576 doctors using a self-administered questionnaire with a multistage sampling technique. An independent sample t-test used to compare the means.

Results: More than half of respondents (310, 53.8%) were females with a mean age (\pm SD) of 40.43 years (\pm 8.59). Female doctors are less affected than males in term of emotional draining from work ($p=0.008$) and strained by people ($p=0.009$) respectively. Male doctors are less affected than females in being used up at the end of the week ($p<0.001$), stressed by working with people ($p<0.001$), burned out from work ($p<0.001$) and frustrated by job ($p<0.001$). However, both male and female doctors are equal in feeling fatigue in the morning ($p=0.286$), feeling of working too hard (0.284) and of being unable to stand (0.358).

Conclusion: This study supports the results of previous studies that female doctors show more empathy when dealing with patients, however, they appeared more prone to burnout and stress.

Keywords: Female, Doctors, Emotional Exhaustion, Gender Differences, Iraq

Background

The gender difference in term of congenital and structure makes the interaction with events different. This difference is most evident when the workplace condition is as stressful as working in healthcare institutions. The female doctors are more prone to burnout, and workplace stress than males [1,2]. More women doctors exposed to workplace violence and sexual harassment than men [2,3]; however, they showed more empathy with the patients than their male colleagues [3,4]. The female doctors tend to listen longer and interact emotionally with patients. Roter et al. [5] found that female doctors exceeded males on average of two minutes more for each medical visit. Previous studies reported a marked improvement in patient outcome with "significant difference in practice patterns between male and female physicians" [6]. Tsugawa et al. [6] found that both

mortality and readmission rates reduced significantly among the old age patients cared for by female doctors compared with those seen by male partners. However, women tend to feel bad because of a sense of empathy [7]. Hunt et al. [8] indicated that the risk of burnout among nurses most likely multiplies with high levels of emotional empathy. Most health professionals who try to create an internal balance between their feeling of emotional exhaustion and their ability to provide high-quality health service ending up with what is called "compassion fatigue" or "less empathy for others" [9]. The increased prevalence rate of burnout among doctors negatively affects the doctor's health and patient care. Mental disorders such as depression and anxiety growingly emerged among female doctors compared to more attempts of suicide among the males [10]. The increased active participation of women in the field of health requires a thorough understanding of all aspects of the emotional exhaustion among women doctors. This study aimed to assess and discuss the gender differences among a sample of Iraqi medical doctors using the nine-item emotional exhaustion subscale of the validated Maslach Burnout Inventory (MBI).

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Methods

Study design and the Sampling technique

A cross-sectional descriptive study was conducted to test the gender differences in emotional exhaustion subscales among medical doctors. The present study is part of a larger research initiative [11], in which a multistage sampling technique was recruited to collect a random sample of 660 physicians from twenty major general hospitals and medical centers covering the main five geographical regions in Iraq (north, west, south, central, and the capital city). Briefly, the design, sampling and data collection have been reported in detail previously [2,11,12]. In the current analysis, responses were received from 576 physicians. At the time of the study, all Iraqi physicians working in the selected hospitals and centers received a copy of the self-administered questionnaire manually, with contact number and email of the data collector. The chief medical officers (CMO), hospital managers and their deputies have been excluded.

Dependent and independent variables

Dependent variable was the gender and defined as either male or female. The independent variable was the Emotional Exhaustion scale. The feelings of Emotional Exhaustion (EE) were measured with 9-items EE subscale of the validated Maslach Burnout Inventory (MBI) [13], in (seven-point Likert-type) scale ranging from 0 = "never" to 6 = "every day". The Cronbach's alpha coefficient of the EE subscale was 0.93.

Statistical analysis

The Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze data in this study. Data presented as mean (M) and standard deviation (SD). Student's *t*-test was used to compare the mean of emotional burnout scores across gender variable. The accepted level of significance was set below 0.05 ($P < 0.05$).

Results

Descriptive and general characteristics of related factors

Five hundred and seventy-six completed questionnaires were analyzed. Mean age (\pm SD) was 40.43 years (\pm 8.59). More than half of respondent (310, 53.8%) were females compared to (266, 46.2%) males. (Table 1).

An independent-sample *t*-test was run to determine if there were differences in Emotional Exhaustion (Burnout) scale between male and female doctors (Table 2). Male doctors are little more affected than female doctors in emotional draining from work ($p=0.008$) and strained by people ($p=0.009$). Both male and female doctors are equal in feeling fatigue in the morning ($p=0.286$), feeling of working too hard (0.284) and of being unable to stand (0.358). Male doctors are less affected than females in being used up at the end of week ($p<0.001$), stressed by working with people ($p<0.001$), burned out from work ($p<0.001$) and frustrated by job ($p<0.001$).

Discussion

To best our knowledge, this study was the first, which discussed the gender differences in the domains of emotional exhaustion among a sample of medical doctors in Iraq and Arab region using the validated MBI questionnaire.

Table 1: Descriptive statistics of the 9 items and overall emotional exhaustion scale(n=576)*

No.	Nine-items emotional exhaustion scale	Mean	SD	Min.	Max.
1	I feel emotionally drained from my work	3.18	1.63	0	6
2	I feel used up at the end of the workday	3.26	1.69	0	6
3	I feel fatigued when I get up in the morning and have to face another day on the job	3.10	1.71	0	6
4	Working with people all day is really a strain for me	3.12	1.66	0	6
5	I feel burned out from my work	3.07	1.70	0	6
6	I feel frustrated by my job	3.25	1.69	0	6
7	I feel I'm working too hard on my job	3.00	1.72	0	6
8	Working with people directly puts too much stress on me	3.43	1.72	0	6
9	I feel like I'm at the end of my rope	2.90	1.68	0	6
10	Overall scale emotional exhaustion	28.72	7.30	0	54

*Ali Jadoo et al. (2018)

This study investigated the indication of emotional exhaustion and its relationship with work-related factors among female and male Iraqi doctors, a group of professionals in a unique cultural setting less studied in the literature. Our findings show that female doctors in Iraq experienced significantly higher emotional exhaustion levels compared to their male counterparts. This result is one of the first to show high emotional exhaustion among Iraqi female doctors in terms of burnout. Additionally, the results of this study reveal that work-related factors best describe emotional exhaustion among Iraqi female doctors. There is increasing evidence that the prevalence of burnout has been rising globally among health care professionals, especially among doctors [14]. Findings of the previous study conducted by Ali Jadoo et al. [2] showed that the total burnout level among Iraqi doctors was found to be 28.72 on average (out of 54 in 9-items EE subscale of the validated MBI). The author also found that about 60% of the participants self-reported experiencing a high level of burnout. Emotional exhaustion or burnout results in this study are consistent with other international studies. Burnout is vastly widespread among healthcare professionals elsewhere in the Middle East region. High levels of burnout among multi-national health care professionals have been reported in both Tunisia and the Kingdom of Saudi Arabia [15,16]. In Egypt, almost 25% of health professionals experienced high levels of emotional burnout [17]. The lowest prevalence from the region was found in a study in Qatar that found around 13% of burnout rates among primary care physicians [18].

Table 2 Gender differences in emotional exhaustion scale (n=576)

No.	Emotional Exhaustion scale	male mean + SD	female mean + SD	Mean difference	t.	Sig.	95% CI Lowe-Upper
1	I feel emotionally drained from my work	3.37 (1.48)	3.01 (1.73)	0.36	2.683	0.008	0.10-0.62
2	I feel used up at the end of the workday	2.97 (1.55)	3.52 (1.76)	0.55	4.010	0.000	0.28-0.82
3	I feel fatigued when I get up in the morning and have to face another day on the job	3.18 (1.65)	3.03(1.76)	0.15	1.068	0.286	0.13-0.43
4	Working with people all day is really a strain for me	3.21(1.67)	2.95(1.64)	0.36	2.603	0.009	0.09-0.63
5	I feel burned out from my work	2.73(1.61)	3.36 (1.73)	0.62	4.485	0.000	0.35-0.90
6	I feel frustrated by my job	2.95(1.65)	3.51(1.69)	0.55	3.953	0.000	0.28-0.83
7	I feel I'm working too hard on my job	2.91(1.74)	3.07(1.70)	0.15	1.072	0.284	0.13-0.44
8	Working with people directly puts too much stress on me	3.08(1.60)	3.73(1.76)	0.65	4.634	0.000	0.37-0.92
9	I feel like I'm at the end of my rope	2.83(1.75)	2.96(1.61)	0.13	0.920	0.358	0.15-0.41
10	Overall emotional exhaustion	27.26(6.51)	29.23(7.81)	1.97	3.307	0.001	0.80-3.15

A significant amount of literature in the United States already demonstrated that there is a higher prevalence of burnout in female doctors. Dyrbye et al. [19] recruited a large sample size and logistic regressions to examine the differences in burnout and job satisfaction between male and female surgeons. The author found that females were significantly suffering from burnout more than males. Similarly, in a European study, female doctors experienced significantly higher levels of emotional exhaustion compared to male doctors [20]. The main finding of our study is that there are significant gender differences in the overall emotional exhaustion and across most of the nine domains of the emotional exhaustion scale. The female doctor was less able to continue to work daily, and the risk of exhaustion increased at the end of the week compared to men. Our findings are in line with many other international studies. International literature documented that although most female doctors enjoy better than average physical health and satisfying lives, they are more likely to suffer from depression, anxiety, and other mental disorders compared to male doctors [10,21,22]. In this study, burnout from work was prominent among female doctors. Similarly, several studies found out that work-related variables play an essential role in higher burnout levels, especially among female doctors [1,2, 23]. Moreover, there is a growing body of evidence in the literature on the relationship between work stressors and burnout. Linzer et al. [23] and Demerouti et al. [24] documented that workload, work demands, and lack of control on work schedule are significant determinants of burnout among health care professionals [23,24]. However, some studies conducted in Europe failed to find any relationship between gender and burnout rates [25]. The literature argues that the lack of gender differences in doctor burnout can be attributed to fewer work hours among female doctors in some European countries [26]. McMurray et al. [26] reported that the proportion of female doctors working part-time is more than male doctors in the Netherlands, England, Austria, Canada, and the United States [26]. In line with the literature, this study demonstrates that work-related factors best describe emotional exhaustion among Iraqi female doctors. The results of this study indicate that female doctors in Iraq are more likely to feel burned out from work, feel frustrated by the job, feel used up at the end of the workday, or

feel more stressed from working with people directly, than their male counterparts. The work-related factors are of interest and importance in the Iraqi context. The Iraqi healthcare system has faced a catastrophic collapse since 1991. Iraqi doctors have started to leave the country due to falling wages, worsening security, and workplace conditions since then [27]. Moreover, the health care system has been rapidly changing in recent years, which have increased responsibilities of the doctors and the demands of the patients. Therefore, doctors are working longer hours than before, taking less time to communicate with patients, and medical disputes often occur caused by patient dissatisfaction [11,28]. The results of this study may also relate to the balance between empathy and boundary setting in the doctor-patient relationship. It is well-documented in the literature that that doctor, especially females, may engage emphatically with their patients and henceforth suffer from stress and burnout [29,30]. An earlier version of the current study found that doctors who worked more than 40 hours per week or reported dissatisfaction with the doctor-patient relationship had significantly higher burnout rates [2]. The results of this study suggest that considering organizational interventions in new health care reforms such as reducing long working hours, especially for female doctors, may lead to decreases in their burnout levels. These interventions shall also ultimately help developing better doctor-patient relationships in Iraq. Besides, the implementation of several measures, such as malpractice insurance for doctors or improving doctor-patient communication is necessary to improve the doctor-patient relationship. The conflict between work and family has been considered another vital determinant of stress and hence, burnout in the literature. Female doctors are expected to spend more time on family activities as on work [31]. In a study of a large sample from surgeons in the USA, more women reported believing that they had experienced a work-family conflict, and women were found to have higher workplace related burnout rates than men [19]. Demir et al. [32] described in a Turkish study that problems with childcare were significantly associated with burnout in health care professionals. Further, the work-family conflict played an essential role in burnout among doctors in Greece, similarly to what is found in a study in Hungary about the family's role in society and burnout rates

[33, 34]. Traditional values still predominantly exist in Iraq. Although there is increasing female labor participation rate, home errands and childcare are still expected from women irrespective of their education level or occupation.

Although this study is the first to show higher emotional exhaustion rates among Iraqi female doctors than males, these findings have been building in the literature for more than two decades. The results of this study, together with the literature, can provide several policy suggestions for more significant gender equity among Iraqi doctors. The number of doctors in Iraq needs to be increased to help them cope with their excessive workload. Female doctors felt more frustrated by their jobs and used up, which in turn lead to emotional exhaustion. Regular communication with female doctors is essential for more trust and positive feedback. Taking into consideration that there is a unique cultural setting in Iraq, all interventions should be culturally sensitive and applicable to the Iraqi case. The results of this study highlight that there is a need for empowering for female doctors in Iraq to inform them that there is sufficient evidence to support their work and life experiences. Further, the results of this study may enlighten the policymakers and health care managers about necessary adjustments in the medical field. These also can motivate the policymakers and leaders that acting on improvements to avoid burnout among female doctors will, in return, improve the quality of care and patient satisfaction in Iraq. The main limitation of this study is its cross-sectional nature; a causal relationship cannot be established. Moreover, the study may suffer from a response bias as several participants did not provide any information for most of the questions. Further, the study survey was conducted at a time when the crises and conflicts were peaking in Iraq. This situation significantly limited our access to many big hospitals and districts, and hence, the limitation may lead to a selection bias. Lastly, the language barrier may play an essential role in the accuracy of the questions, although the English version of the questionnaire was test piloted.

Conclusion

This study demonstrates that female doctors in Iraq suffer higher emotional exhaustion levels than their male counterparts. Our findings suggest that work-related factors may serve as stressors for the development of burnout among Iraqi female doctors. The study provides some justification for advocating for immediate action at work to allow female doctors to work safely and less hours, and to facilitate them to balance their work and home lives more efficiently. We believe that these actions can ultimately reduce the level of burnout and can lead to improved welfare for female doctors in Iraq.

Abbreviations

MBI: Maslach Burnout Inventory CMO: The Chief Medical Officers
EE: Emotional Exhaustion SD: Standard Deviation M: Mean

Declarations

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Availability of data and materials

Data will be available by emailing drsaadalezzi@gmail.com

Authors' contributions

ID contributed in the study concept, design, writing, reviewing, editing and approving the manuscript in its final form. SAAJ and MA contributed in the study design, data collecting, analysis, and interpretation of data, drafting the work, writing the manuscript and reviewed and approved the manuscript. All authors read and approved the final manuscript.

Ethics approval and consent to participate

We conducted the research following the Declaration of Helsinki, and the protocol was approved by the Ethical Committee of the Izmir University of Economics (Ref: B.30.2.IEU.0.05.05-020-014). Confidentiality was assured with signed informed consent.

Consent for publication

Not applicable

Competing interest

The authors declare that they have no competing interests.

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