RESEARCH ARTICLE

Prevalence of Burnout among National Guard Health Affairs Physicians in Dammam, Saudi Arabia - A Cross- sectional Study

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Abstract

Objective: This study aimed to determine the prevalence of burnout among physicians of National Guard Health Affairs, Dammam Saudi Arabia. **Methods:** A cross-sectional, descriptive study among physician working in the National Guard Health Affairs was conducted in 2016. The Oldenburg Burnout Inventory questionnaire was used. A total of 140 medical doctors invited for the study. A test of ANOVA was performed to find any difference between the variables and a $P < 0.05$ represents a statistically significant difference. **Results:** The overall response rate was 65.51%. The mean age standard deviation of respondents was 40 (9.39) years; years of experience 14.03 ± 8.81, and the mean working hours per week 14.03 ± 8.81; of the respondent, 62.1% were male, 37.9% were female, 36.8% of Saudi nationalities, while 63.2% were non-Saudi. There was no significant difference found in prevalence of burning, among different health specialties, gender, and nationalities with a value of $P = 0.952$, $P = 0.806$, and $P = 0.055$, respectively. **Conclusion:** The sttudy findings revealed that prevalence of burnout among physicians was found to be moderately high and is more common among medical profession. It is recommended that awareness of the problem should be underlined; programs need to be put in place to reduce the prevalence of burnout syndrome.

Key words: Burning syndrome, healthcare professionals, job stress, prevalence

INTRODUCTION

Burnout is a psychological syndrome which was established more than four decades ago by Freudenberger and Maslach among human service professionals, and they confirmed that it could be a relatively common incidence in human service work.[1-4] However, previously published studies define burnout, as a concept used to describe stressful responses experienced by working professionals' that includes a measure of professional distress,[4] a form of extreme fatigue,[5] or a distant skills toward work and reduced professional efficacy (a sense of occupational accomplishment).[6]

Literature reports from the previous studies indicate that medical practice workers, especially physicians and nursing professionals, known to be highly stressful and associated with higher rates of psychological discomfort than other professions and often leads to burnouts.[6-9] Previous research reports have been concluded that occupational stress and burnouts were established by medical schools.[6,10] According to the National Institute for Occupational Safety and Health, occupational stress is "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities," resources, or needs of the worker.[11] Burnout

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is a widespread concern across all employment sectors and occupational levels and is reported to cause work-related illness and associated administrative outcomes (e.g., lost work days, turnover, workers" compensation claims, and feeling of negative) and reduced accomplishment. Many study results state that age, sex, working hours, classification of job, and social lifestyle were the major causative factors identified for burnouts.[12-15]

High level of stress among individual workers in the sector is not only an individual burden but also frighten both the maintenance of a sustainable and healthy workforce and the capacity to provide quality services. Results from old literature revealed that the quality of the patient and doctor relationship is one of the major factor in general practice.[16] In addition to this, the previous studies revealed that GP job satisfaction and feeling at easiness were associated with honesty to patients and more attention to the psychosocial aspects of complaints, whereas a lack of time and frustration were related to a decrease in the tendency to provide explanations to patients and to an increase in prescribing.[16,17]

The vast majority of previous studies has found potential serious consequences of burnout for workers, organizations, clients, and institutions.[12-24] These include cynical attitudes, mental and physical health illness, absenteeism, decreased job performance, exhaustion, and impaired health improper dispensing medicine making medical errors.[18] This forces a physician to leave the field of practising medicine. While there are a few published studies examining the prevalence of stress and job satisfaction among healthcare professionals in the Middle East, there is a little amount of data on burnout among physicians in Saudi Arabia (SA). We therefore conducted a cross-sectional study to measure the prevalence of burnout among the National Guard Health Affairs physicians in Dammam, SA.

METHODS

A cross-sectional study was conducted to find the prevalence of burnout among physicians working in National Guard Health Affairs, Dammam, SA. The data collection was carried out from January 2017 to February 2017 using a structured self-administered questionnaire.

The questionnaire was designed and adopted from a review of the literature and previous studies.[19,20] The survey questions were pre-tested to check for readability, understanding, question design, and the length of the questionnaire by a medical doctor with extensive experience in subject, the final questionnaire was sent to the participants by handing over in person.

Study instruments

The questionnaire consisted of a brief introduction of the study and a total of twenty-three questions. The questions consisted of fill-in short answers closed-ended. The questionnaire was constructed to include two sections. The first section of the questionnaire was added to assess the demographics of the responded. These included age, sex, nationalities information, and fill in the blank questions. The second section asked about what causes of burnout and questions related to burnout emotional exhaustion and disengagement (16 items). The participant answers these items using a 4-point scale ranging from (strongly agree, agree, disagree, and strongly disagree).

All physicians including staff, residents, specialists, assistant consultants, associate consultants, and consultants were invited to complete the study. We excluded Interns and LOCUM physicians. The prepared questionnaires were distributed to physicians working in the National Guard Health Affairs, Dammam. The study included only physicians who fulfil the inclusion criteria. The questionnaire was followed up for collection on a later date that ranged from 1 to 6 weeks. All returned usable questionnaires were completed anonymous.

Ethical consideration

The research protocol for the survey was approved by the Ethics Department in National Guard Hospital Dammam in 2016.

Statistical analysis

The data from each of the returned questionnaire were coded and entered using the Statistical Package for the Social Sciences (SPSS) version 21 software (SPSS Inc., Chicago, IL, USA) which was used for statistical analysis. Descriptive statistics included frequencies, percentages, and measures of central tendency and measures of dispersion to explore the findings of the study. Cross-tabulation and ANOVA were performed for testing association and variations between variables at 95% confidence level ($P \leq 0.05$ represents a statistically significant difference).

RESULTS

A total of 95 physicians responded to the survey with completely answered questionnaire. The overall response rate was 65.51%. The mean age ± standard deviation of respondents was 40 ± 9.39; years of experience (mean) 14.03 ± 8.81, and the mean working hours per week 14.03 ± 8.81; of the respondent, 62.1% were male, 37.9% were female, 36.8% Saudi nationals, while 63.2% were non-Saudi. Of the respondent, 85.3% were married, 12.6% were single, and 2 (2.1%) were divorced [Table 1].

Majority of survey respondents were belongs to family medicine 17.9% and internal medicine 15.8%, followed by general surgery 11.6%, obstetrics and gynecology 11.6%, and radiology 8.4%, and very small number of other specialties found were as follows

Table 1: Demographic characters and specialties of the participated respondent

Characteristics	*n* (%)
Gender	
Male	59 (62.1)
Female	36 (37.9)
Nationality	
Saudi	35 (36.8)
Non-Saudi	60 (63.2)
Marital status	
Single	12 (12.6)
Married	81 (85.3)
Divorced	2 (2.1)
Specialties	
Family medicine	17 (17.9)
General physician	5 (5.3)
General surgery	11 (11.6)
Internal medicine	15 (15.8)
Obstetrics and gynecology	11 (11.6)
Pediatric	4 (4.2)
Ophthalmology	4 (4.2)
Radiology	8 (8.4)
Emergency medicine	4 (4.2)
Dentist	6 (6.3)
Others	10 (10.5)

dentist 6.3%, general physician 5.3%, and pediatric 4.2% which were contributed in the study. The detail characteristics of the respondent are summarized in Table 1.

The overall prevalence of burnout among study respondent was found to be 46%. Table 2 details the frequency of occurrence of series of burning problems.

According to study results, the majority of the responded (90.5%) agreed toward taking work as a positive challenge. In response to the survey scenarios, results show that the majority of the responded strongly agreed toward finding new and interesting aspect in work (87.4%) when asked about work pressure (87%) of the respondents agreed to tolerate work-related pressure. However, most of the responded show more interest toward managing the work load (96.9%), when asked about interest toward work 90% of the responded given positive agreement and stated that they feel more and more engaged in work schedule. However, the disagreement was seen in most of the responded regards to overtime disconnection, 72.6% of the responded disagreed toward "overtime one can become disconnected," although when asked about negative conversation of work, 79% of the responded disagreed with talking about work in a negative way. In general, when responded were asked about vitality in free time, 46.3% disagreed toward having enough energy for leisure activities, the details of response was given in Table 2. In addition, there was no significant difference between different health specialties, nationality, and gender ($P = 0.952$, $P = 0.806$,and $P = 0.055$, respectively) in prevalence of burn out [Table 3].

With regard to age group, years of working experience and working hours per week the P value was found ($P = 0.097$, $P = 0.297$, and $P = 0.401$), respectively. These results clearly indicate that there is no significant difference among those variables. Although there was a significant difference observed in scores of questionnaire, I always find new and interesting aspects in my work and there are days when I feel tired before I arrive at work ($P = 0.000$, $P = 0.000$).

DISCUSSION

This study evaluated the prevalence of burnout and the overall prevalence was 38.5%, these results suggested that a physician's from the National Guard Health Affairs Hospitals findsa higher risk of work-related stress. The predominant working conditions might lead to undesirable emotional and physical health conditions with extensive consequences to the quality and effectiveness of patient care. These findings have observable public health implications that needed to be addressed. The previous studies on the prevalence of physician's burnout among healthcare specialties from various countries in the hospitals were found from 32% to 80%.[21-26]

As expected, the most affected physician with the burnout syndrome in studies was general practitioner, family medicine, and internal medicine.[15,27] This is because the most of the patients received are the elderly with complex multiple medical problems and require more time and effort with regard to their medical and nursing care. Many physicians in our setting were foreigners and could face difficulties in terms of communication. Another significant result was that increasing frequency of work interfering with family commitments was associated with burnout. Attention needs to be paid toward achieving work-life balance for healthcare staff.

The overall prevalence of burnout in our study was found to be 38.5% among the sampled healthcare professionals which is lower than that found by other studies[15] Previously published some study reports revealed a high prevalence of burnout (63.2%).[17] A study conducted among general physician in the Netherlands found that the prevalence of burnout was 41%,[28] whereas in the United States 54%.[29] This can be explained by the fact that kingdom of SA is considered as one of the underdeveloped country, with considerable financial support and economic levels, good working environment, and other resources compared to undeveloped countries. However, the prevalence of exhaustion in our study was lower 34.36%, comparing to another cross-sectional study conducted in SA among primary-care physicians and found emotional exhaustion rates were 46% and 53%, respectively.[15]

Table 2: The frequency of occurrence of specific burnout problems

Questionnaire	Strongly disagree (%)	Disagree (%)	Agree (%)	Strongly agree (%)
I always find new and interesting aspect in my work	2 (2.1)	10 (10.5)	57 (60)	26 (27.4)
There are days when I feel tired before I arrive at work	3 (3.2)	26 (27.4)	58 (61.1)	8 (8.4)
It happens more and more often that I talk about my work in a negative way	17 (17.9)	58 (61.1)	16 (16.8)	4 (4.2)
After work, I tend to need more time than in the past to relax and feel better	9 (9.5)	22 (23.2)	48 (50.5)	16 (16.8)
I can tolerate the pressure of my work very well	3 (3.2)	9 (9.5)	57 (60)	26 (27.4)
Lately, I tend to think less at work and do my job almost mechanically	11 (11.6)	40 (42.1)	39 (41.1)	5 (5.3)
I find my work to be a positive challenge	4 (4.2)	5 (5.3)	56 (58.9)	30 (31.6)
During my work, I often feel emotionally drained	14 (14.7)	45 (47.4)	34 (35.8)	2 (2.1)
Over time, one can become disconnected from this type of work	18 (18.9)	51 (53.7)	23 (24.2)	3 (3.2)
After working, I have enough energy for my leisure activities	6 (6.3)	38 (40)	44 (46.3)	7 (7.4)
Sometimes, I feel sickened by my work tasks	9 (9.5)	38 (40)	43 (45.3)	5 (5.3)
After my work, I usually feel worn out and weary	10 (10.5)	48 (50.5)	34 (35.8)	3 (3.8)
This is the only type of work that I can imagine myself doing	6 (6.3)	32 (33.7)	24 (25.3)	33 (34.7)
Usually, I can manage the amount of my work well	1 (1.1)	2 (2.1)	64 (67.4)	28 (29.5)
I feel more and more engaged in my work	0	9 (9.5)	57 (60)	29 (30.2)
When I work, I usually feel energized	0	25 (26.3)	50 (52.6)	20 (21.1)

However, one study conducted among emergency physicians 32.1%, exhibited emotional exhaustion which is very close to our results.[30] Although with regard to gender most of the previously published data show that burnout occurs more often among females than among males,[19,22,31,32] our study results show that there was no significant difference among gender in the prevalence of burnout.

The study results confirmed that there was no significant difference found between age group, nationalities years of working experience, and working hours per week. Response rates were comparably less in this study with regard to burnout syndrome as a whole. As expected, a high percentage of burnout was more likely with low job dissatisfaction and intention to change job. According to the previous results, personal factors such as younger age and marital status were also another important factors contribute to burnout.[15,27,33] Participants not receiving overtime reward, working more than recommended hours per week, and working night shifts all the time had very high burnout rates when compared to those not exposed to these factors.[27] We suggest that the hospital adopt preventive measures such as avoiding these factors through administrative solutions, to include increasing the number of staff or rotating between staff. We also suggest that the hospital administration works on a comprehensive program to reduce stress levels among the staff.

Limitations

Our study has several limitations. First, this is a cross-sectional study, so it has a limitation in evaluating temporality and causality of the observed relationship. Second, this is a single site study, this study was included only in one tertiary care center in the city of Dammam, and thus, its results do not allow for generalization and extrapolation to other hospitals and centers.

CONCLUSION

In this study, the prevalence of burnout among physicians was found to be slightly higher; however, these results were lower

Table 3: Mean score of burnout ratio for different specialties

Specialty	Mean (SD)	*P*
Family medicine	43.11±2.44	0.952
General physician	42.40±1.94	
General surgery	44.18±6.24	
Internal medicine	43.93±3.82	
Obstetrics and gynecology	42.90±5.08	
Pediatric	43.00±3.74	
Ophthalmology	42.75±2.62	
Radiology	42.25±4.55	
Emergency medicine	45.75±3.77	
Dentist	42.50±2.16	
Others	44.00±4.18	
Sex		
Male	43.0±3.85	
Female	43.6±4.00	0.806
Nationality		
Saudi	43.2±4.41	
Non-Saudi	43.5±3.05	0.055

A *P*<0.05 represents a significant difference. SD: Standard deviation

than previously reported studies. Addressing workload, work hours and working conditions, and psychological well- being may minimize the risk of burnout and its impact on physicians as well as the patients they care for.

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