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ORIGINAL ARTICLE

Prevalence and Difference of Factors Affecting Burnout Amongst Health Care Workers in Bahrain: A Cross-Sectional Study

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Abstract

Introduction: The incidence of burnout amongst Health Care Workers (HCW) has become an important issue in recent years. This is mostly due to the potential harm and negative consequences it imposes, not only on the medical staff but also on the patient's quality of care. The aim of this study was to find the prevalence of burnout amongst HCWs and to determine its associated factors.

Methods and materials: An online survey was sent out electronically in October 2021, to a large number of physicians and nurses practicing in both governmental as well as private hospitals. It included a total of 19 questions measuring overall physical and psychological fatigue and was filled anonymously. Burnout was considered a dependent variable, and data analysis was done using SPSS Ver. 24.

Results: The study shows that 165 (58.7%) participants worked in a High-Risk Environment (HRE), while only 38 (13.5%) participants replied that they seldom or never experience burnout. Burnout was experienced by 243 (86.5%) participants on a regular basis, either sometimes (39.5%), often (24.9%), or always (22.1%). Relative to two years ago, 217 (77.2%, p-value <0.001) respondents reported to have experienced more burnout 52 (18.5%) of them reporting that the symptoms have increased significantly over time.

Conclusion: It is clear that burnout levels amongst HCW in Bahrain are high with evidence suggesting that they are slightly increasing over time.

Keywords: Burnout, Health Care Workers, Bahrain, Stress

Introduction

Burnout has become a common challenge faced by employees within any dynamic work environment regardless of their profession. Initially, the term burnout was introduced by Freudenberger H. J., an American Psychologist and writer, who has been awarded the Gold Medal Award for Life Achievement in the Practice of Psychology.[1] He defined it as "exhaustion resulting from excessive demands on energy, strength or resources in the workplace", which can lead to the development of adverse psychological as well as physical symptoms such as decreased work efficiency, frustration, cynicism, and fatigue.[1] He described the process as a "gradual emotional depletion and a loss of motivation and commitment" as time progressed.[2] It has officially been recognized as a psychiatric medical diagnosis by the World Health Organization (WHO), in May 2018.[3]

Although it affects all professions with varying severity, the incidence of burnout amongst Health Care Workers (HCW) has become an important issue in recent years owing to its potential harm and negative consequences on the medical staff and on the patient's quality of care.[1] Approximately one in three physicians experiences burnout at any given time.[4] It has also been witnessed that increasing the degree of burnout, increases the likelihood of a medical error.[4,5]

A study published in the US in 2012 stated that physicians were more likely to have symptoms of burnout relative to others in different career paths and be discontent with their work-life balance.[3] Another study in the US during 2007 found that burnout among medical students seemed to be associated with an increased likelihood of subsequent suicidal ideation.[6]

With the emergence of the global pandemic, initiated by the newly discovered SARS CoV-2 (COVID-19) virus, commonly known as Novel Coronavirus, HCWs were faced with unprecedented conditions and new challenges which led to an increase in work stress. The outbreak which started in the city of WuHan, China spread rapidly across the world in December of 2019 and on January 30th, 2020 the WHO announced that the pandemic was a public health emergency.[7]

Preventative measures were implemented to ensure safety for all citizens and nationals. HCW from all fields and specialties were recruited in response to the outbreak. However, COVID-19 cases continued to rise and reached up to a total of 21,8047 on 23rd May 2021 in comparison to only a total of 8,971 cases back on the same day March 23rd, 2020.[9,10] This added to the risk of increased levels of burnout amongst HCWs as they were required to handle the incline of cases as time progressed.

Several research has been previously conducted on physician burnout in Bahrain. However, since the outbreak began, it could possibly contribute to higher stress levels and burnout prevalence may significantly related to it. None of the previous burnout studies in Bahrain included both physicians as well as nurses. This encouraged us to dwell into this research, making it the first in Bahrain in tackling the incidence of the psychological impact of burnout in HCW.

The main objective of this research is to investigate the prevalence of burnout amongst HCW in the Kingdom of Bahrain, and its associated factors. Factors include age, gender, nationality, marital status, presence of children, years of experience, and sector of work. The HCW currently employed in government and private hospitals were the target sample of the research.

Methodology

There are various methods to evaluate burnout, provided by the National Academy of Medicine, this includes the Maslach Burnout Inventory (released in 1981), the Oldenburg Burnout Inventory (released in 2002), as well as the Copenhagen Burnout Inventory, a survey released in 2005 which we implemented in our study.[11] The survey was sent out mid-October to 300 HCW. The survey was closed at the end of October, with a total of 281 responses.

Our questionnaire was modeled on the Coenhagen survey because it evaluates three aspects of burnout including personal life, work life, and client-based; in which "client" refers to an entity such as a patient.[11] The questionnaire includes a total of 19 items measuring overall physical and psychological fatigue.[11] Questions 2 - 7 assessed personal burnout, whereas questions that followed were used to assess work-related burnout. Before proceeding with the survey, the term burnout was clearly defined to the participant.

In addition to the burnout questions, the survey included other variables that may contribute to an increased level of burnout. This information includes participant demographic details such as gender, age, years of experience, sector of work (Government or private), marital status, nationality, and presence of children.

The inclusion criteria for this research were practicing physicians and nurses who were currently practicing in the medical field. Retired HCW, medical students or HCW who have not been in clinical practice over the past 2 years, were excluded. After constructing the questionnaire, it has been reviewed and approved by the Primary

Health Care Research Committee. Following which it has been uploaded on Google® Forms and sent out in October 2021. The survey was sent out randomly and electronically via Whatsapp® to the physicians and nurses practicing in both governmentas well as private hospitals and was filled anonymously with the data recorded online. Data provided by the responders was kept confidential. Participation in this research was entirely voluntary, as an informed consent has been taken before proceeding with the questionnaire. Data analysis was done using the SPSS version 24 and a Chi Square test was done to calculate statistical significance. Burnout was considered the dependent variable.

Results

Table 1 demonstrates the demographic deails of the participants, the majority of which were females constituting 212 (74.0%) from a total of 281 participants. Bahraini nationals formed the majority with241 (86.8%) followed by Indians 30 (10.7%) with only a minority of other nationalities such as Jordanian, Pakistani, and Syrian.

Most of the respondents were married as seen in 184 (65.4%) participants out of which 138 (49.2%) had children. As noticed in Table 1, most participants 265 (95%) were from the Government Sector. Slightly more than half the participants, 160 (56%), reported having 0 - 5 years of experience, whereas 46 (16.3%) had more than fifteen years of experience. Moreover, in regards to profession, 180 (64.0%) of participants were practicing physicians whereas 101 (36.0%) were nurses.

Table 2 shows the responses to the personal and work-related burnout questions. It shows that 165 (58.7%) of participants worked in a High-Risk Environment (HRE) whereas, only 38 (13.5%) participants replied that they seldom or never experienced burnout. This demonstrates that 243 (86.5%) of participants experience burnout on a regular basis, either sometimes (39.5%), often (24.9%) or always (22.1%).

Table 1: Demographic Table showing demographic characteristics & professional status of the HCW responders

Total Sample Size (n) = 281

Demographic		P Value
Gender		
Males	69 (24.5 %)	0.450
Females	212 (74.5 %)	
Nationality		0.040
Bahraini	244 (86.8 %)	
GCC	(1.4 %)	
Indian	I 30 (10.7 %)	
Jordanian	1 (0.4 %)	
Pakistani	1 (0.4 %)	
Syrian	1 (0.4%)	
Marital status		
Single	97 (34.6 %)	0.221
Married	184 (65.4 %)	
Presence of children		
Yes	143 (50.8 %)	0.122
No	138 (49.2 %)	
Experience		
0-5 years	160 (56.9 %)	0.008
5-10 years	32 (11.3 %)	
10-15 years	43 (15.3 %)	
More than 15	46 (16.3 %)	
Job title		
Doctor	180 (64.0%)	0.374
Nurse	101(36.0%)	
Age		
21-30 years	147 (52.3 %)	0.006
31-40 years	86 (30.6 %)	
41-50 years	34 (12.1 %)	
>50 years	14 (5.0 %)	
Workplace sector		
Government	267 (95.0 %)	0.542
Private	14 (5.0 %)	

Table 2: Burnout questionnaire

The questions that were distributed for participants and their corresponding responses.

Burnout Variable	P Value
1. Are you working in High-Risk environment?**	<0.001
No 116 (41.3 %)	
Yes 165 (58.7 %)	
2. How often do you feel tired?	<0.001
Always 88 (31.3 %)	
Often 104 (37%)	
Sometimes 81 (28.8 %)	
Seldom 6 (2.1%)	
Never 2 (0.7%)	
3. How often are you physically exhausted?	<0.001
Always 68 (24.2 %)	
Often 111 (39.5 %)	
Sometimes 90 (32 %)	
Seldom 9 (3.2 %)	
Never 3 (1.1 %)	
4. How often are you emotionally exhausted?	<0.001
Always 82 (29.2 %)	
Often 99 (35.2 %)	
Sometimes 82 (29.2 %)	
Seldom 13 (4.6 %)	
Never 5 (1.8 %)	
5. How often do you think: "I can not take it anymore"?	<0.001
Always 41 (14.6 %)	
Often 72 (25.6 %)	
Sometimes 114 (40.6 %)	
Seldom 33 (11.7%)	
Never 21 (7.5%)	
6. How often do you feel worn out?	<0.001
Always 47 (16.7 %)	
Often 82 (29.2 %)	
Sometimes 104 (37 %)	
Seldom 27 (9.6 %)	
Never 21 (7.5 %)	
7. How often do you feel weak and susceptible to illness?	<0.001
Always 47 (16.7 %)	
Often 57 (20.3 %)	
Sometimes 111 (39.5 %)	
Seldom 50 (17.8%)	
Never 16 (5.7%)	
8. Do you feel worn out at end of the working day?	<0.001
Always 71 (25.3 %)	
Often 108 (38.4 %)	
Sometimes 77 (27.4 %)	
Seldom 19 (6.8 %)	
Never 6 (2.1 %)	
9. Are you exhausted at the thought of another day?	0.071
Always 63 (22.4 %)	
Often 98 (34.9 %)	
Sometimes 78 (27.8 %)	
Seldom 24 (8.5 %)	
Never 18 (6.4 %)	
10. Do you feel that every working hour is tiring you?	0.021
Always 46 (16.4 %)	
Often 55 (19.6 %)	
Sometimes 108 (38.4 %)	
Seldom 44 (15.7 %)	
Never 28 (10 %)	
11. Do you have enough energy for friends and family during leisure time?	0.060
Always 13 (4.6 %)	
Often 27 (9.6 %)	
Sometimes 116 (41.3 %)	
Seldom 93 (33.1 %)	
Never 32 (11.4%)	
12. Was your work emotionally exhausting?	<0.001
Always 58 (20.6 %)	
Often 92 (32.7 %)	
Sometimes 101 (35.9 %)	
Seldom 22 (7.8 %)	
Never 8 (2.8 %)	
13. Does your work frustrate you?	<0.001
Always 48 (17.1 %)	
Often 74 (26.3 %)	
Sometimes 115 (40.9 %)	
Seldom 26 (9.3 %)	
Never 18 (6.4 %)	
14. Do you feel burn out because of work?	0.001
Always 62 (22.1 %)	
Often 70 (24.9 %)	
Sometimes 111 (39.5 %)	
Seldom 27 (9.6 %)	
Never 11 (3.9 %)	

15. Are you currently dissatisfied with your job? Neutral 180 (64.1 %) Dissatisfied 58 (20.6 %) Greatly Dissatisfied 43(15.3%)	0.012
16. Are you experiencing more burnout symptoms* relatively compared to the first few years of your career?** Yes 217 (77.2 %) No 64 (22.8 %)	<0.001
17. Have these symptoms increase over the past 2 years? Increased Significantly 52 (18.5 %) Increased 135 (48%) Remained the same 70 (24.9 %) Decreased Significantly 6 (2.1 %) Decreased 18 (6.4 %)	<0.001
18. Do you feel a great sense of accomplishment? Yes 178 (63.3 %) No 103 (36.7 %)	0.307

**P-Value <0.05 is considered significant.*

***High Risk environments include: Operation Theatres, Accident & Emergency, Intensive Care Unit, or COVID-19 Ward.*

****Burnout symptoms include: Fatigue, emotional/ physical exhaustion, low mood, depression, anxiety, and/or difficulty sleeping/waking up.*

Discussion

HCW are at an increased risk of depression, anxiety, and burnout due to the nature of their profession as well as the number of hours spent at work.[1] This risk increased due to the overwhelming workload. The purpose of this research was to find the prevalence of burnout amongst HCW and its related factors, in the Kingdom of Bahrain. Research participants reached a total of 281 respondents.

A higher number of responses came from younger participants, 147 (52.3%). As age increased, the number of participants decreased with with only 14 (5%) above 50 years. This can be explained by the fact that most participants are from younger age groups which means they are junior doctors and nurses and naturally will have more physically demanding duties in the start of their careers.

Statistical analysis of questions in Table 2 revealed that all of the questions were statistically significant having a *p*-value of less than 0.05; except questions number 9 and number 11 having *p* values of 0.071 and 0.060 respectively. This meant that participants were not exhausted at the idea of another day of work and still had energy to spend leisure time with family members and friends. Furthermore, when asked about whether these symptoms increased with time, 217 (77.2%, *p*-value <0.001) respondents reported to have experienced more burnout and 52 (18.5%) of which reported that the symptoms of burnout have increased significantly over time, whereas 70 (24.9%) has remained the same and only a total of 24 (8.5%) reported symptoms to have decreased with time. This could a result of increase in responsibilities as career progresses. The COVID-19 pandemic could also be a major distributing factor leading to an increase in burnout among HCW during this period.

A study conducted in Bahrain, in January 2020 depicted a burnout prevalence of 41.2% among primary health care physicians.[14] This is significantly lower than the rates reported in our study (86.5%). This indicates a noticeable increase in burnout during this dictated period. The study sample in the comparative study only included primary care physicians whereas, here we included both nurses and physicians in tertiary as well as primary care centers and thus could have affected the responses. It was also found that higher rates of Emotional Exhaustion (EE) have been associated with female gender and an increased age of the physician.[14] This is not comparable to our study as gender was not a statistically significant (*p*-value 0.450) indicator of burnout and younger age groups reported significantly higher rates of burnout than their older counterparts.

Another study published in Lithuania in May 2020 regarding the level of burnout among Lithuanian hospital physicians demonstrated high rates of work and personal related burnout with 46.7% and 44.8% respectively, which is still lower than the rates noted in our study.[12] The same study emphasized that participants that have high levels of burnout more frequently did not have any children and were single.[12] Compared to these findings, neither marital status nor children had a significant impact, *p*- values 0.221 and 0.122 respectively, on burnout rates. This could reflect the higher demands on HCWs during the current situations leading to higher burnout rates affecting both single and married

workers irrespective of the presence of children. HCW, from private and public sectors, practicing in HRE constituted more than half (58.7%) of the total respondents; this could explain the high level of burnout, as these HRE require more physical and mental efforts and may lead to more exhaustion in relative to other work areas.

Limitations to this study include that the majority of responses were from women which may perhaps be attributed to the fact that the study included nurses who are mostly female in gender. Another limitation is the fact that most of the responses were from younger age groups with naturally less experience, the less experience and lower familiarity with the workplace can potentially affect stress levels and feelings of burnout.

Conclusion

In conclusion, it is clear that burnout levels amongst HCW in Bahrain are high and evidence suggests that they are increasing over time. However, neither gender nor the presence of children were variables that were correlated significantly with burnout. We have found that burnout has been associated with higher levels of emotional and physical exhaustion. HCW working in HRE were more susceptible to burnout. Further studies should be conducted in the future to include a more diverse amount of health care workers including technicians, auxiliary staff, laboratory workers, etc. to get a more comprehensive view of the prevalence of burnout and ways to mitigate its effects like counseling, meditation, good work distribution should be implemented.

Conflict of Interest

The authors have no conflict of interest to disclose.

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