

BURNOUT AMONG JORDANIAN FRONTLINE PHYSICIANS AND NURSES DURING COVID-19 OUTBREAK

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ABSTRACT

Background: Burnout is a chronic job-related stress, physical and emotional exhaustion, negative attitudes, leading to reduced job performance and quality of care.

Aim: The current study aimed at measuring the level of burnout among Jordanian nurses and physicians working in King Abdullah University Hospital, north of Jordan.

Method: The study adopted the quantitative research approach through performing a cross-sectional descriptive study. A convenient sample of 124 physicians and nurses was recruited in this study. The Oldenburg Burnout Inventory developed by Demerouti E and co-authors, (2003) and consists of (16 items) was used as a data collection tool in this study.

Results: The results of the study showed that the level of burnout among Jordanian nurses and physicians working in the frontline during the COVID-19 outbreak, in King Abdullah University Hospital (KAUH), had a moderate level of burnout, the burnout score (2.3) was slightly higher than the cut-off value (2.25). The participants indicated they do not find their work to be a positive challenge (1.81 ± 0.55), and they could not manage the amount of their work well (1.95 ± 0.74). In addition, it was reported that they need more time than needed in the past to relax and feel better (1.99 ± 0.66), and they did not find new and interesting aspects in their work during COVID-19 outbreak.

Conclusion: This study reported that the level of burnout among frontline nurses and physicians during COVID-19 outbreak are significantly exposed to get higher levels of burnout, getting tired is the main prevalent aspect during this period. Further survey studies should be performed to measure the level of burnout among nurses and physicians in the frontline during COVID-19 outbreak.

KEYWORDS: Jordanian, COVID-19, Frontline Physicians, Frontline Nurses, chronic stress, quality of care.

INTRODUCTION

Nurses and physicians often see themselves as principle givers [Jasemi M et al., 2017], feeling that they must be able to get themselves completely to their patients without showing any signs of stress, fatigue or depression [Cherniss C, 2016]. Medical professions are stressful jobs, and sometime healthcare workers get stressed along stress can cause burnout [Hämmig O, 2018]. Burnout is

not just stress; stress is situational, but burnout lasts and lasts [Baigent M, Baigent R, 2018].

Although burnout is very similar to depression, fatigue or anxiety, is actually a whole different bundle; for now is characterized by emotional exhaustion; nurses and physicians can run out of emotions [Dall'Ora C et al., 2020], depersonalization; being overtly cynical and detached, reduced personal accomplishment, which is negative feelings about oneself or the lack of enthusiasm [Grow H et al., 2019]. These three characteristics lead to physical or psychological distress, at least certain ability to care for patients have empathy or even perform basic medical care skills, nurses and phy-

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sicians become indifferent or numb to their patients [Elshaer NSM et al., 2018].

There are a number of causes of burnout and risk factors that influence it [Shadid A et al., 2020]. There are both personal and environmental risk factors that have been found to contribute to the cause of burnout [McFarland D et al., 2019]. Some personal risk factors include age, gender, race or ethnicity, family status, educational status and personality traits [Azam K et al., 2017].

Kim J and Choi J (2016) carried out a study that examined the factors influencing the burnout level among emergency department during Middle East respiratory syndrome coronavirus (MERS-CoV). The study adopted the cross-sectional research approach through distributing a researcher developed questionnaire over a study sample consisted of 215 registered nurses from 15 hospitals in Korea. The study findings indicated that the nurse's burnout significantly affected by job stress, poor hospital resources and poor support from family and friends.

In another study performed by Wu Y and co-authors (2020) that aimed at comparing the frequency of burnout between physicians and nurses on the front line and those working in usual wards, the study adopted the cross-sectional approach. A survey questionnaire consisted of 49 items was distributed over 220 medical staff members from COVID-19 frontlines and usual wards. The study findings indicated that physicians and nurses working in the frontlines had a lower frequency of burnout compared to nurses in usual wards.

King Abdullah University Hospital (KAUH) is considered the only hospital in northern Jordan that receives either COVID-19 infected or suspected as infected patients. Nurses and physicians in KAUH are the first healthcare professionals dealing with those admitted patients with the novel contagious disease. Therefore, they are put under a stressed situation that requires them to effectively cope with the requirements of this condition.

The current study aimed at determining the level of burnout among the frontline physicians and nurses in KAUH, north of Jordan.

Therefore, the current study seeks to measure the level of burnout among physicians and nurses working in the front lines and having a higher risk of infection of COVID-19.

Significance of the study

The world today is facing more changes. Burnout is very important and needs to be given special priority, especially among healthcare workers [Selamu M et al., 2019]. It limits employee's ability to apply their skills at work [Livne Y, Goussinsky R, 2018]. Burnout was referred as one of the elements of compassion fatigue in that burnout arises from where one works [Ordway A et al., 2020]. Burnout is referred to limiting the skill of the employee by discouraging peer interaction and support in the work environment, disengagement, sense of hopelessness and feeling depressed [Wallace J, 2017].

The current study will provide a clear picture of the burnout level of the nurses and physicians who are working the frontline of COVID-19 outbreak and will consequently help in designing coping a bundle of coping strategies to deal with these situations.

In addition, the findings of the current study might help in tailoring innovative educational programs to increase nurses and physicians' knowledge with regard to being a frontline healthcare worker in outbreak cases.

MATERIALS AND METHODS

Research design: A cross-sectional study setting: This study was carried out in KAUH located in northern Jordan in Irbid city

Population: The study population was represented by physicians and registered nurses in all wards and departments in KAUH hospital, northern of Jordan.

Participants: Participants in the present study were selected conveniently after applying the inclusion and exclusion criteria over the study population.

Sample: A convenient sample of nurses was recruited to complete the questionnaire package that includes the consent form and the study instruments. The study sample consisted of 124 nurses from various educational and socioeconomic backgrounds in order to ensure that the study sample is representing the whole study population.

*To overcome it
is possible, due to the
uniting the knowledge and
will of all doctors in the world*



Inclusion criteria for the participants: The inclusion criteria were being a physician or a registered nurse (RN status) working, and willing to be involved in the study.

Data analysis: Data was analyzed using the Statistical Package for Social Science (SPSS), Version 26. The statistical method included using descriptive statistic such as frequencies, percentages, means and standard deviation will be performed to describe study variables and study sample. Dependent samples t-test and ANOVA test were performed to identify the statistical differences between the study participants' responses that might be referred to their demographic characteristics.

Study Instrument: Data collection instrument adopted in this study was the Oldenburg Burnout Inventory (OLBI) developed by Demerouti E and co-authors (2003) and consists of (16 items). In order to limit the study to burnout related to COVID-19, the phrase "caused by COVID-19" was added to each item. A five-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree) was used to scale each item.

Data collection Procedure: The data collection was performed in the period between 01/05/2020-20/05/2020 after taking approvals from the institutional review board of Jordan University of Science and Technology, the Ministry of Health in Jordan and after getting permissions from KAUH administrative authorities. The researchers prepared a questionnaire package that included the consent form and the study instruments. Then, the researcher, distributed the questionnaire package on the participants meeting the inclusion criteria and explains briefly the objectives of the study and guide them on how to fill in the included questionnaire. The participants were required to give the questionnaire back to the researcher.

Completed questionnaires were included in the data analysis stage. They were coded and transferred into Excel sheets that was exported into the statistical package for the social sciences (SPSS) for analysis purposes

RESULTS AND DISCUSSION

The results shown in table 1 indicated that 68.5% of the study participants were nurses, whereas 31.5% of the study participants were physicians. Male participants constituted 23.4% of the

study sample compared with 76.6% female participants. Investigating the years of experience of the study participants showed that those participants had more than 10 years of experience constituted 41.1% of the total study sample, whereas the participants having less than 5 years of experience and 5 to 10 years constituted 29.8 and 29%, respectively. About two-thirds of the study participants were holding bachelor degree (66.1%), the participants having master degree or higher represented 29.8% and those having diploma were constituting 4% of the total study sample.

The results shown in table 2 indicated that the total burnout score for the physicians and nurses working in KAUH was 2.3, which is slightly higher than the cut-off value (2.25). These results indicated that both nurses and physicians had a moderate to high level of burnout during the COVID-19 period. The participants' highly reported that they do not find their work to be a positive challenge (1.81 ± 0.55), and they could not manage the amount of their work well (1.95 ± 0.74). In addition, it was reported that they need more time than needed in the past to relax and feel better (1.99 ± 0.66), and they did not find new and interesting aspects in their work during COVID-19 outbreak.

Moreover, it was reported that they feel more and more engaged in work during COVID-19 outbreak (2.04 ± 0.61), and sometimes feel tired before

TABLE 1.
Participants' Demographic and clinical characteristics

Variable	F(%)
Position	
1. Physician	39 (31.5)
2. Nurse	85 (68.5)
Gender	
1. Male	29 (23.4)
2. Female	95 (76.6)
Years of experience	
1. Less than 5 years	37 (29.8)
2. 5 – 10 years	36 (29)
3. More than 10 years	51 (41.1)
Marital status	
1. Married	93 (75)
2. Single	27 (21.8)
3. Divorced	4 (3.2)
Educational qualification	
1. Bachelor	82 (66.1)
2. Diploma	5 (4)
3. Master or higher	37 (29.8)

TABLE 2.

Mean and standard deviation of the participants' responses to the study scale

Item	M ± SD
I always find new and interesting aspects in my work during COVID-19 outbreak	2 ± 0.71
There are days when I feel tired before I arrive at work during COVID-19 outbreak	2.08 ± 0.57
It happens more and more often that I talk about my work in a negative way during COVID-19 outbreak	2.82 ± 0.63
During COVID-19 outbreak, I tend to need more time than in the past in order to relax and feel better.	1.99 ± 0.66
I can tolerate the pressure of my work very well during COVID-19 outbreak	2.11 ± 0.51
During COVID-19 outbreak, I tend to think less at work and do my job almost mechanically	2.29 ± 0.76
During COVID-19 outbreak, I find my work to be a positive challenge.	1.81 ± 0.55
During COVID-19 outbreak, I often feel emotionally drained.	2.09 ± 0.61
Over time, one can become disconnected from this type of work	2.37 ± 0.39
During COVID-19 outbreak, I have enough energy for my leisure activities.	2.27 ± 0.67
Sometimes I feel sickened by my work tasks during COVID-19 outbreak	2.28 ± 0.88
During COVID-19 outbreak, I usually feel worn out and weary.	2.12 ± 0.54
This is the only type of work that I can imagine myself doing	2.39 ± 1.03
During COVID-19 outbreak, I can manage the amount of my work well	1.95 ± 0.74
I feel more and more engaged in my work during COVID-19 outbreak	2.04 ± 0.61
During COVID-19 outbreak, I usually feel energized.	2.16 ± 0.52
Total	2.3 ± 0.66

arriving at work during the COVID-19 outbreak (2.08±0.57), and they often feel emotionally drained (2.09±0.61). Furthermore, they reported that they can tolerate the pressure of their work very well during COVID-19 outbreak (2.11±0.51), in addition to feeling worn and weary (2.12±0.54) and usual feeling of being energized (2.16±0.52).

The over cut-off scores showed that both nurses and physicians had enough energy for their leisure activities during COVID-19 outbreak (2.27±0.67), barely felt sick by their work tasks during COVID-19 outbreak (2.28±0.88), did not tend to think less at work (2.29±0.76), and did not show that they might be disconnected from this work overtime (2.37±0.39), in addition to reporting that this is the only type of work they can imagine themselves doing (2.39±1.03). Finally, they highly reported that they more and more often talk about work in a negative way during COVID-19 outbreak.

It is obvious from the responses that there are differences in responding to the COVID-19 outbreak. However, perhaps the most prevalent is feeling tired. This pandemic brought an enforced change in the job

performance for both nurses and physicians; they both try to adapt the new situation through changing either their daily lifestyle or their job tasks to suit the new lifestyle. Even though burnout is normally associated with long hours spent behind the office, it is not restricted to that. Measuring the level of burnout among frontline healthcare workers longer period after dealing with a COVID-19 outbreak might provide different findings.

In conclusion, this study showed that the level of burnout among Jordanian nurses and physicians in KAUH is still slightly over the cut-off value. This might be referred to the wise procedures and plans implemented to contain the pandemic and reduce its short-term and long-term effects on both the provided healthcare services and job performance in the healthcare facilities. The planning had a major role in reducing the burnout among the healthcare workers as it organized the tasks performed by the involved healthcare workers. Still, there is a need to perform a large scale survey that investigates the level of burnout among nurses and physicians in the Jordanian healthcare facilities.

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