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Factors Contributing And Management Strategies For Stress And Burnout In Healthcare Professionals

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Abstract

Background: *Stress at workplace has an adverse impact not only on the employees in terms of health, well-being, and job dissatisfaction, but also affects the organization in terms of quality of output, absenteeism, and attrition which ultimately has detrimental financial implications. Health care professionals comprise of an important group that are majorly affected by workplace stress because of the nature of their work environment. Stress and burnout are a reality which nurses encounter and try to cope with especially in the Emergency Department (ED) so that they can provide optimal patient care. Nurses who work in ED are front line providers of immediate medical care needed to stabilize patients. With the known critical shortage of health workforce, nurses are over-loaded with work and often experience stress and burnout.* ***The study aims****: to determine the causes, effects and management strategies of stress and burnout among nurses working in the ED in hospitals in Makkah, KSA.* ***Methods:*** *A descriptive cross-sectional study was conducted. The sample consisted of seventy nurses from five different hospitals. A purposive sampling technique was used and data was analyzed using SPSS version 28.0. Data was collected using a structured q[1]uestionnaire developed from the International Stress Management Scale.* ***Results:*** *The highest reported cause of stress in this study was heavy workload (12.88%) and the least was no experience in handling the challenges of the department. The leading reported effect of stress was the development of musculoskeletal disorders such as joint and back pain (16.48%) and the least effect was contemplating quit- ting the profession (5.99%). The major management strategy used was humor (8.27%), while the least was crying out stress to feel relieved (2.18%). Conclusion: The major cause of stress and burnout among nurses in our study setting was heavy workload, which mostly results in joint and back pain. Moreover, humor was the prime management strategy for stress and burnout among nurses in the emergency department in the study setting. Thus more nurses*

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should be employed and the working conditions of nurses improved to reduce the workload in the study hospitals.

Keywords: *Stress, Burnout, Nurses, Causes, Effect and Management.*

Introduction

Large numbers of healthcare professionals (HCPs) on the frontlines face high adversity, workloads, and stress, making them vulnerable to burnout [1, 2]. Burnout, defined by emotional exhaustion, depersonalization, and personal accomplishment, is known to detract from optimal working capacities, and has been previously shown to be similarly prevalent among HCPs in HICs (High-Income Countries) and LMICs (Low-to-Middle-Income Countries) [3-6]. Burnout has been found to be driven by high job stress, high time pressure and workload, and poor organizational support. These factors are common between HICs and LMICs despite their differences in healthcare and socioeconomic structures [3]. In the health system, stress reactivity has been predominantly correlated with a series of variables related to the work environment, and variables independent of it. When considering variables related to work, we must review the multiple and complex interactions of this professional entity [7].

Nursing is unavoidably a hard and stressful job [8]. The healthcare sector is known to be a stressful manufacturing with manpower unavailability and high demands. Compared to other HCPs, nurses are the first line of contact; the most engaged with patients and are always exposed to the emotional strains of catering for the sick and dying, with most of them tirelessly working in Emergency Departments (EDs) [9]. When such stressors are left unchecked and unmanaged, it might lead to stress and burnout [9]. Stress in nursing is a mental and physical response and adaptation by the nurse to the real or perceived changes and challenges faced in their job. A stressor is any real or perceived physical, social or psychological event or stimulus that causes our body to react or respond [10].

There exist a relationship between stress and burnout and proven by the fact that prolonged stress leads to burnout [11]. That is, if the stress continues to operate on a full scale for an extended period, there is an increased risk for burnout. Burnout in nursing, on the other hand, is a condition where nurses experience chronic fatigue, exhaustion, and frequent headaches on account of work stress, affecting professional performance. Nurse burnout has three elementary features which are; emotional exhaustion, depersonalization and poor personal achievement [12]. This showcases the fact that nurses are leaving the profession due to occupational stress and powerlessness to provide nurse-assessed good quality care [13]. Globally, nurses encompass the group that experiences the maximum stress and burnout among HCPs. Worldwide, the situation is a more serious concern due to shortages of healthcare professionals [8].

Moreover, Middle East studies show high percentages of prevalence of burnout among HCPs (40% - 60%) and show high levels of burnout especially among nurses [14]. In Arab countries, there is an estimation that burnout is moderate to high among HCPs [15]. Furthermore, a study conducted to include the healthcare workers in both Saudi Arabia and the United Arab Emirates shows high level of burnout among all HCPs [16]. While other studies have explored the prevalence of burnout and determined the factors that may potentiate it among medical professionals [14, 17], there is dearth of research exploring its prevalence among health care workers in Saudi Arabia. With such critical shortage of nurses, there is a high expectation and workload for the available few. Thus, nurses are at risk of having stress and automatically burnout syndrome in KSA. This study thus sought to determine the causes, effects and management strategies of stress and burnout among nurses working in the Emergency Department in some hospitals in Makkah, KSA so as to attract policy makers and hospital administrators' concern and assistance.

Methods

This study was a descriptive cross-sectional design carried out from January to March 2022. This study was carried out in selected hospitals in Makkah, KSA. These hospitals are the major hospitals and they have emergency departments. The study population comprised all nurses who work in EDs in five hospitals in Makkah, KSA. This study made use of a purposive sampling technique. This is a non-probability sampling method which is selected based on the characteristics of a population and the objectives of the study, where sampling for proportionality is not the main concern [(18)]. Also, the purposive sampling method used is total population purposive sampling which examines the entire population which has one or more shared characteristics common to a particular group or groups within larger populations [(18)]. This study, therefore sampled hospitals based on a common characteristic of having an emergency department and all nurses who work in the ED. Nurses who worked full-time in the ED and nurses who had worked in the ED for at least six months were included in the study.

A well-structured questionnaire was used as the main tool for data collection. The questionnaire was structured to first collect demographic information about the participants. The later part of the questionnaire was divided into three parts with each part containing at least twelve questions based on the three specific objectives of the study (Causes, Effects, and Management strategies). Closed- ended questions were used as well as one open-ended question at the end of each objective to assess the factors not listed in the questionnaire. Each of the questions on the three parts of the questionnaire had 4 responses graded from 1 to 4 (1 = very low, 2 = low, 3 = high, 4 = very high). To assess the level of stress, a stress scale guided by the International Stress Management Scale [(19)] was used. This scale assessed the objectives as follows.

For causes of stress, after adding up the responses for each cause, everyone who scored a total of ≤7 had the least causes of stress and as such had a lower risk of developing stress-related illness 8 - 23 was more likely to experience stress-related illness >24 was most prone to experiencing stress showing a greater number of characteristics and suffered from stress-related illnesses. For the effects of stress, after adding up the responses for each effect, everyone who scored a total of ≤6 felt the least effects of stress. 7 - 19 were more likely to experience the effects of stress. >20 were most prone to experiencing the effects of stress. For management: ≤11 least management strategies used. 12 - 34 make more use of management strategies. >35 make the most use of management strategies.

A total number of 73 questionnaires were administered with a 95.89% response rate. In the end, 3 questionnaires were rejected due to incomplete responses giving a non-response rate of (4.29%). The nature of the distribution of the questionnaires was based on the number of ED nurses in each hospital. Data was analyzed using SPSS version 28.0. Demographic data (gender, age, marital status, educational qualification number of working hours per week, years of experience, number of night shifts, post of responsibility and shifts with more work) was arranged in a tabular form for all the hospitals. For each objective, the number of responses was put in tabular form under the headings very low, low, high and very high, as well as their respective percentages were also represented in a tabular form. The mean, mode and median for each objective were represented. At the end, a table showing the causes, effects and management strategies of stressed and burnout was presented. The values of each measure presented used the Stress Management Scale as a reference or gold standard.

Results

Table (1) shows the summary of the demographic data. **Table (2)** shows perceived causes of stress according to the International Stress Management Scale. **Table (3)** shows

perceived effects of stress according to the International Stress Management Scale. **Table (4)** shows management of stress according to the International Stress Management Scale.

Table (1): Summary of demographic data

Demographic Data		n
Gender	Male	13
	Female	57
Age	20-30	34
	31-40	23
	41-50	13
	51-60	0
Marital Status	Single	34
	Married	35
	Widow	1
	Divorce	19
Level of Education	Diploma	18
	BSc	29
	Masters	4

Table (2): Causes of stress

Perceived Causes	**Very low**	**Low**	**High**	**Very high**
Heavy Workload	2	5	31	32
Verbal and Physical Assault	12	19	19	20
Limited Time of Nursing Intervention	16	20	16	18
Confronted with Broad Range of Health Conditions	14	10	16	30
Frustration from Patients and Relatives	6	18	17	29
No Breaks during Shift	21	5	9	35
Complex Medical Conditions (which are emotionallydemanding)	13	11	23	23
No Experience in Handling Critically Ill Patients	27	20	8	15

Perceived Causes	Very low	Low	High	Very high
Low Salaries Compared to Workload	16	5	30	19
Exposure to Health Hazards	10	8	12	40
Lack of Equipment	11	12	18	29

Table (3): Effects of stress

Perceived Effects	Very Low	Low	High	Very High
Contemplate quitting job	35	15	10	10
Memory loss and poor decision making	16	20	20	14
Headaches and extreme fatigue	6	14	17	33
High blood pressure	16	30	9	15
Development of gastritis	18	15	14	23
General disappointment with life	21	28	11	10
Altered character (anger and hostility)	23	21	13	13
No balance between work and personal life	16	17	10	27
Musculoskeletal disorders	7	8	20	35
Disturbed emotional and psychological state	11	29	14	16

Table (4): Management of stress

Management	Very Low	Low	High	Very High
Identifying area of stress	9	9	20	32
Do more research	13	15	24	18
Social support from friends and family	5	21	15	29
Physical exercise	13	12	15	30
Using humor	10	7	27	26
Reading interesting novels	28	24	7	11
Listening to music	4	21	17	28
Regular meditation and thinking	20	14	20	16
Frequent massage	25	16	22	7
Watching Television	15	15	21	19
Spending time on hobby	10	15	25	20
Adequate rest	11	10	9	40
Drink much or binge feeding	26	20	12	12

Management	Very Low	Low	High	Very High
Avoiding panic	10	14	16	30
Psychosocial counseling	16	28	13	13
Ignore stress	19	18	18	15
Cry out stress	6	50	3	11

Discussion

The results from the study of causes of stress and burnout among nurses in the ED in five hospitals in Makkah, KSA revealed that 12.88% of the nurses cited heavy workload as the leading cause of stress. This finding is similar to the results of a study carried out in Ghana, which listed heavy workload as the leading cause of stress [(20)]. Furthermore, another study noted that poor working conditions and heavy workload were the leading causes of stress among nurses [(21)]. From this study, 9.61% of nurses do experience stress as a result of a lack of equipment. Similar findings were observed among nurses in Turkey where nurses reported that they were stressed due to inadequacy of equipment [(22)]. In both settings, nurses were forced to improvise methods of care and were exposed to health hazards. Also, our study revealed that 7.98% of nurses were stressed out as a result of verbal and physical assault from patients and their relatives.

This finding is similar to that of another study which showed that nurses in the emergency department and the intensive care unit faced more stressed than nurses from other departments owing to verbal and physical assault from patients and their relatives [(23)]. Moreover, 9.41% of nurses were stressed due to handling complex medical conditions which were emotionally demanding. This finding is analogous to that of a study, which observed that ED nurses were stressed due to dealing with major incidents, death and resuscitation of patients [(24)]. Furthermore, conditions of patients are constantly changing and the work in the ED is very unpredictable. For this reason, nurses get confronted with a broad range of conditions and problems which need mix skills. It is, therefore, important for hospitals to recruit unlicensed less specialized staff to undertake tasks that do not necessarily need a registered nurse to perform. This leads to increased productivity, greater work satisfaction and cost effectiveness by decreasing work pressures and allowing nurses to focus on maximizing nursing care [(25)].

The major effect of stress from the result of this study is the development of musculoskeletal disorders such as joint pain and back pain. 16.48% of nurses suffered this condition as result of bending, lifting patients and standing for long hours during their shifts at the hospital. This is consistent with the results gotten from a study in Finland where ED nurses reported musculoskeletal disorders as the main effect of stress and burnout [(25)]. This is quite different from the results gotten from Clark (2012) whose main effect of stress was feelings of fatigue and liable to making medical errors [(26)]. Moreover, 14.97% of nurses complained of developing headache frequently as a result of stress. This finding is in agreement with that of a study carried out in Dutch which reported that stress and burnout cause poor health and psychological illnesses (such as headaches), impairment of immunological system, and gastroenteritis [(27)].

Up to 10.18% of nurses in this study reported loosing concentration as an effect of burnout. This can result in poor decision making and negligence to identify work-related errors. This is in line with the finding that linked increase burnout to increase nosocomial

infection in acute care facilities [28]. Some nurses (5.99%) in this study felt frustrated and contemplated quitting their job as a result of stress and burnout. Similar studies reported that nurses faced overwhelming exhaustion, detachment from their jobs, a sense of ineffectiveness and lack of accomplishment as a result of stress [29]. 8.27% of nurses used humor to overcome stress; that is, they used humor as a stress management strategy [30]. This finding is quite different from a previous study whose major management strategy was carrying out regular physical activities as a means to restore energy and a sense of wellbeing [31]. The fact that women make up the vast majority of the population of nurses and being generally less physically active than men can partially explain this disparity. They tend to prefer discussions and socializing as a means of relaxation rather than vigorous physical activity [32].

Comparing the results with studies applied in Saudi Arabia, this study found high prevalence of burnout among healthcare workers [17, 33]. In comparison with some of the burnout measures that applied using the students' survey in other researches, we can notice that there is increase in the results for students or residents to be approximately near this study results [34, 35]. Burnout associated with long working hours may be due to a reduction in sleep time and increased susceptibility to job stress [36]. It is well documented that periodic breaks facilitate short-term productivity and lessen exhaustion and uneasiness; consequently HCWs who do not have regular break time may be less productive and may experience more exhaustion and physical discomfort resulting in burnout [37].

Conclusion

Based on the findings, the leading cause of stress is heavy workload and the least cause of stress comes from having little or no experience in handling the critically ill and facing the challenges of the department. Also, the major effect of stress and burnout is the development of musculoskeletal disorders and the least effect is contemplating quitting the profession. The most used management strategy was humor and the least used was crying out one’s stress. Although a small amount of stress is needed to keep these nurses alert, there are levels that should be avoided because it becomes a danger to their health and can compromise the care rendered to patients. Therefore, hospital administrators should urgently address this issue. ED nurses should also learn to manage stress properly.

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