Cross-sectional study of burnout among Nurses in Emergency Department

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Abstract

Background: Burnout among nurses is one of the key challenges that affecting health care practice and quality of care. Working in Emergency Departments involves high work pressure and stress due to dealing with human suffering and unpredictable nature of the work. This environment puts personnel at risk of burnout.

Aim: The aim of this study was to assess the prevalence and level of burnout among emergency nurses.

Method: A cross-sectional design conducted among nurses in Emergency Department at King Abdulaziz Hospital and King Faisal Medical Complex in Taif City, Saudi Arabia. Online structured questionnaire using to collect data from the nurses. The questionnaire included two parts: socio-demographic characteristics of nurses and Burnout Assessment Tool (BAT) with 16 statment. Burnout scored as mild, moderate and severe burnout. Data were analysed using SPSS version 23.0. Inferential statistic using chi-square tests (χ2) used to explore correlation between variables measured BAT scales.

Result: Majority of the nurses 112 (70 %) of nurses were female, 87 (54.4%) were aged from 30 and 39 years. 103 (16.2%) of them had bachelor's degree in nursing and Nearly one third 50 (31.3%) had less than 5 years of experience. 102 (63.8%) of the nurses reported they had moderate levels of burnout and only 18 (11.3%) had severe level of burnout. Majority of participants suffered from physical exhaustion, and difficult work conditions. There was no statistical significant relationship between burnout and gender, age and years of experience, while there was a statistical significant relationship between the burnout and levels of education.

Conclusion: The results indicated that burnout is significantly prevalent among nurses working in Emergency Department. There are some factors may be associated with burnout. Burnout has negative consequences on workers, patients and organizations .

Key words: burnout, Nurses, Emergency Department.

الملخص باللغة العربية

أهمية الدراسة: الإرهاق بين الممرضات هو أحد التحديات الرئيسية التي تؤثر على ممارسة الرعاية الصحية ونوعية الرعاية. ينطوي العمل في أقسام الطوارئ على ضغط عمل مرتفع وضغوط بسبب التعامل مع المعاناة الإنسانية وطبيعة العمل غير المتوقعة. هذه البيئة تعرض الأفراد لخطر الإرهاق.

هدف الدراسة: هدفت هذه الدراسة الى تقييم انتشار ومستوى الإرهاق بين ممرضات الطوارئ.

منهاج الدراسة: تصميم مقطعي تم إجراؤه بين الممرضات في قسم الطوارئ في مستشفى الملك عبد العزيز ومجمع الملك فيصل الطبي في مدينة الطائف بالمملكة العربية السعودية. استبيان منظم عبر الإنترنت يستخدم لجمع البيانات من الممرضات. تضمن الاستبيان جزأين: الخصائص الاجتماعية والديموغرافية للممرضات وأداة تقييم الإرهاق (BAT) مع 16 بيانًا. سجل الإرهاق على أنه إجهاد خفيف ومتوسط وشديد. تم تحليل البيانات باستخدام الإصدار 23.0 من SPSS. الإحصاء الاستنتاجي باستخدام اختبارات مربع كاي (χ2) المستخدمة لاستكشاف الارتباط بين المتغيرات المقاسة بمقاييس BAT.

نتائج الدراسة: غالبية الممرضات 112 (70٪) من النساء ، 87 (54.4٪) تتراوح أعمارهم بين 30 و 39 سنة. 103 (16.2٪) منهم حاصلون على درجة البكالوريوس في التمريض وحوالي الثلث 50 (31.3٪) لديهم خبرة أقل من 5 سنوات. أفاد 102 (63.8٪) من الممرضات أن لديهم مستويات معتدلة من الإرهاق و 18 فقط (11.3٪) لديهم مستوى شديد من الإرهاق. عانى غالبية المشاركين من الإرهاق الجسدي ، وظروف العمل الصعبة. لا توجد علاقة ذات دلالة إحصائية بين الإرهاق والجنس والعمر وسنوات الخبرة ، بينما توجد علاقة ذات دلالة إحصائية بين الاحتراق ومستويات التعليم.

ملخص الدراسة: أشارت النتائج إلى أن الإرهاق منتشر بشكل كبير بين الممرضات العاملات في قسم الطوارئ. هناك بعض العوامل التي قد تترافق مع الإرهاق. الإرهاق له عواقب سلبية على العمال والمرضى والمنظمات.

الكلمات المفتاحية: الإرهاق والممرضات وقسم الطوارئ.

CHAPTER ONE

INTRODUCTION & LITERATURE REVIEW

1.Introduction:

Occupational burnout is a psychological disorder that is usually prevalent among employees who work in stressful environments. Burnout syndrome is one of the most important occupational health problems experienced by the nurses (Jawad, et al., 2021). Working in emergency department is considered as stressful job for nurses (Jawad, et al., 2021). It involves dealing with critical cases that needs immediate and correct intervention, and working circumstance such as overcrowding, shift work, critical decisions made with incomplete information, and sometimes death that have been associated with high burnout factors (Hamdan, & Hamra, 2017; Chemali, et al., 2019; Jawad, et al., 2021).

Burnout is a psychological syndrome that results from exposure to overwhelming, and chronic stress particularly at work and leads to reduce personal accomplishment (Chemali, et al. 2019). The high prevalence of burnout reported among Emergency Department nurses has been attributed to high work pressure, shortages of resources and the nature of care along with witnessing human suffering (Hamdan, & Hamra, 2017) .

Nurses are the first line in providing medical care, they provide required care to the patients according to their needs and complaint. Also, they provide the optimal health and quality of life for patients (Mikhael, et al., 2020). According to this evidence, They are dealing with different types of stressors such as long working hours, angry patients, large number of patients, work pressure, night shifts, exposure to traumatic situations and sometimes staff shortage. and they have to maintain good quality for work and patient care. By repeatedly expressed these stressors, it will lead to burnout (Li, Cheng, & Zhu, 2018; Alqahtani, et al., 2019).

Thus, burnout has potential negative effects for the nurses either physical or mental effects. For patient, it affects the quality of care and patient satisfaction. For healthcare institution, it increases the level of absenteeism, turnover, job dissatisfaction, costs and financial losses (Gómez-Urquiza, et al., 2017; Elbarazi, et al., 2017). In specific, turnover intention is more prevalent among nurses with high level of burnout in health care institutions**.**There are many studies have been conducted worldwide to assess the level of burnout among nurses and showed that it is a serious problem. Most of the Studies found high level of burnout among nurses, with the prevalence found to be 40-60%, 15.8%-29.6% (Chemali, et al. 2019; Moukarzel, et al., 2019) respectively. While, the rate of burnout among healthcare workers in other high income countries have been reported to be the comparable.

Both job-related (years of experience, long working hours, nonclinical duties, shortage of the staff, shift duties and organization system) and non-job-related factors (demographics and lifestyle factors) are documented to be associated with burnout among health workers (Elbarazi, et al. 2017; Moukarzel, et al., 2019; Gualano, et al., 2021). Many studies suggested that sociodemographic factors have an effect to increasing job burnout rates, particularly age, gender**,** and marital status (Batayneh, Ali, & Nashwan, (2019; Putra, & Setyowati, 2019; Abedi-Gilavandi, et al., 2019; Franca, De Martino, Aniceto, & Silva, 2012). Terefore, it is important that the sociodemographic and workplacerelated factors should be carefully elected to identify predictors for burnout among healthcare professionals (Jameel, et al., 2021).

Because nurses constitute the largest workforce in healthcare institutions, it is important to identify the main factors that contribute to the development of burnout in nursing and to measure its effect on nurses, patients, and health organizations (Sexton, Levine, & Flores, 2021). Some of studies discussed the development of burnout among nurses (Batayneh, Ali, & Nashwan, 2019; Nobre, Rabiais, Ribeiro, & Seabra, 2019; Sexton, Levine, & Flores, 2021).

1.1 Statement of research problem

In health care, the nurses have one of the highest rates of burnout which influences different aspects of nursing health care (Gómez-Urquiza, et al., 2017). Working in Emergency Department increases the risk of burnout due to the stressful work such as related to excessive mental work, such as the pressure experienced in unpredictable situations that require rapid decision-making and the excessive workload (Nobre, Rabiais, Ribeiro, & Seabra, 2019). Many studies found high level of burnout among emergency nurses comparing to nurses working in other units (Li, Cheng, & Zhu, (2018; Paton, 2019; Simisola, Akinade, & John, 2021). With burnout, nurses may complain of physical weakness, insomnia, hostility, irritability, and depression and in consequences leads to decrease in the quality of nursing care and increase absenteeism, and job rotation, and they have to maintain good quality for work and patient care (Jawad, et al., 2021).

1.2 Objective:

Our study objective was assess the prevalence and level of burnout among emergency nurses.

1.3 The research question:

What is the level of burnout among nurses working in Emergency Department?

1.4 Research hypothesis

H1. There is a significant relation between level of burnout and nurses' performance.

H2. There is a significant relation between levels of burnout and participants' socio-demographic data.

1.5 Significance of study

Nurses are the major care givers who play an important role in Emergency Department through providing immediate medical care, accomplish the optimal health and quality of life for patients. On daily basis, they face different types of stressors such as long working hours, angry and violent patients, large number of patients, work pressure, night shifts, exposure to traumatic situations and sometimes staff shortage (Jawad, et al., 2021). Beside all these stressors, they have to

maintain good quality for work and patient care. Repeated of stressors will lead to burnout (Gómez-Urquiza, et al., 2017).

In Saudi Arabia, there are few studies conducted about burnout among healthcare providers especially the nurses. Therefore, this study attempts to clarify the level of burnout among nurses and the main factors that increase burnout level and how to manage this problem.

1.6 Literature review:

The researcher reviewed all literature to find relevant results that clarify where are known about the research problem (Polit, and Beck, 2018). To find relevant studies, Literature exploration was carried out using different electronic data bases including the Pub Med, Cumulative Index Nursing and Allied Health Literature (CINAHL), Medical Literature On Line (Medline), The Exerpta Medical Data base (EMBASE) and Google Scholar. The search about the articles that published between 2017 to 2021.The search for this subject was conducted by entering a word or phrase that captures the key concepts in the articles. Key words used: burnout, Nurse, healthcare workers, Emergency Department.

A correlational, cross-sectional study was conducted by Batayneh, Ali, & Nashwan, (2019) to examine the relationship between workplace stress, job satisfaction,intention-to-leave and the development of burnout among multinational nurses in Riyadh, Saudi Arabia. 224 nurses were involved in the study and a web-based questionnaire designed on Survey Monkey used to collect data. The result revealed that Workplace stress and nurses intention-to-leave have a positive correlation with the development of burnout symptoms. While job satisfaction levels had a negative correlation with the development of burnout symptoms. Overall, nurses' demographics had no significant effect on the development of burnout.

Quantitative, descriptive, correlational and cross-sectional study carried out by Nobre DFR, Rabiais, Ribeiro, & Seabra (2019) to assess the level of Burnout among nurses in a general emergency department in Portugal. 32 nurses were recruited to participate in the study. Copenhagen

Burnout Inventory used to collect data. The result showed that 59.4% of the nurses presented total Burnout. Work-related burnout was the subscale with the highest average score. It was found that the lower the age and the longer the time working in the institution, the higher the level of Burnout. Longer professional experience was related to lower levels of Burnout. There were also higher scores of Burnout among participants who thought about changing their profession, their institution or their service.

A cross-sectional hospital-based study conducted by Alqahtani, Awadalla, Alsaleem, Alsamghan, & Alsaleem, (2019) to explore the magnitude and determinants of burnout among emergency physicians and nurses working at emergency departments in Saudi Arabia (Abha and Khamis Mushait cities). The sample included all physicians (n=95) and nurses (n=187) currently working at these sites. A validated self-administered questionnaire including two main sections: personal and professional characteristics of physicians and nurses as well as Maslach burnout inventory (MBI) to assess the three components of the burnout syndrome: emotional exhaustion, depersonalization, and reduced personal accomplishment. *Results*. The study included 282 physicians and nurses. The result revealed that majority of the emergency healthcare professionals (88.7%) had high emotional exhaustion. The prevalence of high depersonalization (cynicism) was 20.6% whereas that of low personal accomplishment was 41.1% among emergency healthcare professionals. The overall prevalence of burnout among healthcare professionals was 16.3%. Multivariate logistic regression analysis revealed that male healthcare professionals were at almost higher three-folded risk for developing burnout compared to females (aOR=2.76; 95% confidence interval (CI): 1.21-6.28, p=0.017).

A Cross-sectional design carried by Hamdan, & Hamra, (2017) to assess burnout levels and associated risk factors among health workers in EDs in Palestinian (West Bank and Gaza Strip) hospitals. 444 workers (response rate 74.5%) participated: 161(36.3%) nurses, 142 (32.0%) physicians and 141(31.7%) administrative personnel. a self-administered questionnaire was used to collect data from all workers at 14 EDs. Burnout was measured using Maslach Burnout Inventory-Human Services Survey. The result revealed that high levels of burnout among EDs workers; 64.0%

suffered from high emotional exhaustion, 38.1% from high depersonalization and 34.6% from low personal accomplishment. In addition, high levels of emotional exhaustion (72.3%) was significantly prevalent among physicians compared to nurses (69.8%) and administrative workers (51.4%) (p <0.05). In comparison, high levels of depersonalization was significantly prevalent among nurses (48.8%) compared to physicians (32.1%) and administrative workers (31.9%) (p < 0.05). However, there were no significant differences in the levels of personal accomplishment burnout among the three groups (p > 0.05). Moreover, high degree of burnout was more prevalent among EDs workers in the West Bank than among those working in the Gaza Strip (OR 2.02, 95% CI = 1.11–3.69, p = 0.019), and higher among younger workers (aged ≤30 years old) than their older counterparts (OR 2.4, 95% CI = 1.302–4.458, p = 0. 005). Exposure to physical violence was significantly associated with having a high degree of burnout (OR 2.017 95% CI = 1.121–3.631, p = 0.019), but no association was observed with regards to exposure to verbal violence (p > 0.05). Finally, burnout was significantly associated with workers' intention to leave work at EDs (p < 0.05).

A cross-sectional survey study conducted by ALmutairi, & El.Mahalli, (2020) to determine levels of burnout among emergency medical services (EMS) professionals and the coping strategies they use to alleviate burnout in Riyadh, Saudi Arabia (SA). 270 active-duty emergency medical services (EMS) recruited to participate in the study. The Maslach Burnout Inventory (MBI) — Health Services Survey. Coping Methods Checklist (CMC). The result revealed that EMS professionals perceived high levels of emotional exhaustion and depersonalization and low levels of personal achievement. The most frequently used coping strategies were talking with colleagues (87.4%), looking forward to being off duty (82.6%), and thinking about the positive benefits of work (81.1%). CMC7 (thinking about the positive benefits of work) contributed most to variations in emotional exhaustion, depersonalization, and personal achievement. Saudis had lower emotional exhaustion and depersonalization.

Across-sectional study carried out by Moukarzel, et al., (2019) to assess the prevalence burnout among all ED staff and to determine associated factors in three EDs located in the South

France. 529 professionals working in EDs, 379 responses were selected to participate in the study. A standardized questionnaire. It included demographical and occupational data, general health questions, burnout level (Maslach Burnout Inventory), job strain (Karasek), and quality of life (Medical Outcome Study Short Form). The result showed that Emotional exhaustion (EE) and depersonalization (DP), the major components of burnout, were reported, respectively, by 15.8% and 29.6% of the professionals. Burnout prevalence was 34.6%, defined as a severely abnormal level of either EE or DP. The medical category was significantly more affected by the burnout compared with their colleagues: nearly one ED physician out of two had a burnout (50.7%). In the multivariate analysis of covariance, job strain and a low mental component score were the two main factors independently associated with burnout ($p < 0.05$).

CHAPTER TWO
METHOD and MATERIAL

2. Methodology:

The critical step for conducting any research study is selecting a suitable approach and design. The research design describes the process and strategies that the researcher takes to meet the objectives (Gray, & Grove, 2020). The design of research as a blueprint for study managing with extreme control factors that may contrast with validity of the finding. Quantitative research is an official and systemic method that analyzes or uses numerical data to be used and generalized to other population. A research design is essentially how the research is conducted to achieve the research purpose, based on the problem and gap in the literature by answering research questions. There are three basic research designs - qualitative, quantitative, and mixed methods (Gray, & Grove, 2020).

A cross sectional study design was used in this study. It is a type of research design in which you collect data from many different individuals at a single point in time. In cross-sectional research, you observe variables without influencing them (Polit, & Beck, 2018).

2.2 Study Setting:

The research setting is the environment within which data can be collected and the interpretation of results (Boswell& Cannon 2017). The study conducted in 2 hospitals operated under Ministry of Health in Taif City namely; King Abdulaziz Hospital (KAH) and King Faisal Medical Complex (KFMC). Emergency Department (29-bed, and 36-bed capacity) respectively.

2.3 Population & Sample:

The population was nurses who are provide direct care to patients in the Emergency Department in both hospitals 160 nurses (84 KAH and 76 KFMC). A convenient sample of nurses will be selected as the sample of the study by non-probability enumerative sampling technique. The inclusion criteria will include nurses who are assigned to provide care to patients, working in Emergency Department and willing to participate in the study, while excluded criteria includes other healthcare workers and nurses who not assigned to patients and not welling to participate in the study.

2.4 Study Instrument:

Online structured questionnaire which applied through Google Form prepared after reviewing many research studies related to burnout among nurses using Burnout symptoms measured. The questionnaire included two parts: Part one regarding socio-demographic characteristics of the participants (gender, age, level of education, years of experience). Second part included Burnout Assessment Tool (BAT) which is a newly developed self-report questionnaire to measure burnout. It included 16 statement using Likert scale ranging from 0 (never) to always (5),

then total score rate is 80. The score of sverity of burnout ranged 1->50%, ≥ 50 - >75% and score ≥75- 100% would be considered mild, moderate and severe burnout respectively.

The questionnaire revised by 2 experts in the same field to test content validity, completeness, and clarity of items, the comments, a suggestion to be considered and the tool modified accordingly. Also, the consistency of using tool assessed for reliability using Cronbach's alpha coefficient (α = 0.892), which is an indicator of internal consistency of the scale.

2.5 Data collection Method

Data collection started upon ethics clearance from the various research ethics boards. The Online structured questionnaire link sent through WhatsApp and E mail to the nurses. To obtain the consent of the participants, an explanation of the purpose of the study and confidentiality of information is discussed at the beginning of the questionnaire. Participating in the questionnaire provided consent of the participants to be part of this study.

Participants asked to answer the BAT statements based on how often they experience these feelings. The researcher reviewed all the questionnaires, and canceled questionnaires not met the criteria of the sample or incomplete questions until reach the sample size (160), and then closed the site to stop accepting any response.

2.6 Data Analysis

Statistical Package for Social Sciences (SPSS) software version 23 used for data entry and analysis. Univariate descriptive statistics used to explore socio-demographic and work-related characteristics, and burnout of the sample. Inferential statistic using chi-square tests (χ^2) to identify factors that will be likely to be significantly correlated with each of the BAT scores.

Multiple linear regressions will be done to explore correlations between multiple factors measured in this study with each of the BAT scales. Statistically significance of study is p-value <0.05. All data will be presented in frequency and percentage in tables and graphs.

2.7 Ethical considerations

This research approved from Ethical Committee at Faculty of Nursing, AL Taif University. Also, permission obtained from the Administration of King Abdulaziz Hospital and King Faisal Medical

Complex to conduct the study in Emergency Department. Participating on line questionnaire considered as Consent from the participants to participate after explaining the purpose of the study in the first page. The name or identity of personal data did not include in the digital data (anonymous). In addition, information received from the participants handled confidently and privacy guaranteed for all participants, and a code was given to each participant to ensure confidentiality of the data obtained.

CHAPTER THREE
RESULTS

3.Results:

3.1 Demographic and Work-related Characteristic of Nurses

A total of 160 online electronic questionnaires were sent to the nurses working in Emergency Room at both hospitals (KAH and KFMC). Table1 shows the socio-demographic and work-related characteristics of the nurses. Majority of the nurses 112 (70 %) of nurses were female, while 48 (30%) of them were male. 87 (54.4%) were aged from 30 and 39 years. Regarding the level of education, 103 (16.2%) of them had bachelor's degree in nursing followed by a master's degree 31 (19.4%) and only 26 (1.2 %) had Diploma in Nursing. Nearly one third 50 (31.3%) had less than 5 years of experience, 45 (28.1%) had 10 to 15 years, 44 (27.5%) had 5 to 10 years of experience, while only 21 (13.1%) had more than 15 years of experience**.**

Table 1: Frequency Distribution of Socio-demographic Characteristic of Nurses.

Variable	N	%
Gender		
Female	112	70.0
Male	48	30.0
Age:		
20-29	52	32.5
30-39	87	54.4
40-49	17	10.6
>49	4	2.5
Educational level		
Diploma in Nursing	26	16.2
bachelor's degree in nursing	103	64.4
Master's degree	31	19.4
Work Experience		
<5 years	50	31.3
5 - 10 years	44	27.5
10-15 years	45	28.1
>15 years	21	13.1

3.2 Burnout perception among nurses

Table 2 illustrated the result of nurses regarding their perception of burnout. The result revealed that majority of the nurses experienced burnout during their work in ER. Majority of participants suffered from muscle pain, for example in the neck, shoulder or back (83), felt physically exhausted (74), found it hard to recover energy at the end of the day (70), everything done required a great deal of effort (58), disturbed from noise and crowds (51), felt a strong aversion towards my job (45), felt mentally exhausted (42), became irritable when things don't go my way (41), struggled to find any enthusiasm for my work (40), forgetful and distracted (33), have trouble staying focused (38), struggled to think clearly (30), did not recognize myself in the way I react emotionally (29), felt unable to control emotions (28).

Table 2: nurses' perception of burnout.

Statements	Never	Rarely	Sometimes	Often	Always
I feel mentally exhausted.	23	19	76	26	16
Everything I do requires a great deal of effort.	7	26	69	38	20
At the end of the day, I find it hard to recover my energy.	8	27	55	44	26
I feel physically exhausted.	3	21	62	44	30
I struggle to find any enthusiasm for my work.	11	32	77	23	17
I feel a strong aversion towards my job.	15	30	70	27	18
I have trouble staying focused.	20	41	61	28	10
I struggle to think clearly.	20	44	66	17	13
I'm forgetful and distracted.	19	44	64	25	8
I feel unable to control my emotions.	25	44	63	16	12
I do not recognize myself in the way I react emotionally.	33	35	63	21	8
I become irritable when things don't go my way.	19	38	62	28	13
Noise and crowds disturb me.	12	33	64	27	24
I feel anxious and/or suffer from panic attacks	51	46	43	11	9
I suffer from stomach and/or intestinal complaints.	45	40	46	17	12
I suffer from muscle pain, for example in the neck, shoulder or back.	10	17	50	40	43

Figure 1 shows the level of burnout among the participants nurses working in Emergency Department in both hospitals. Among them, 102 (63.8%) reported they had moderate levels of

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burnout, while 40 (25%) of them had mild level of burnout and only 18 (11.3%) had severe level of burnout.

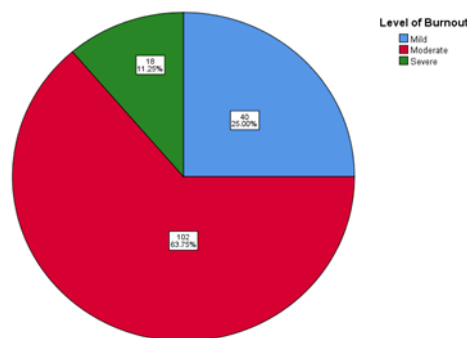**Figure 1. Distribution of the participants according to their level of Burnout.**

Table 3 illustrates the relationship between nurses' Socio-demographic data and their level of Burnout. It shows that high level of burnout was identified among females 11 (61.1%) than males. Females were in the majority than males in this study (Table 1). Chi-square test analysis shows the association between gender and the level of burnout was not statistically significant as the P value was >0 .05. Furthermore, this study revealed that 9 (50%) of the participants who had high level of burnout had age ranging from 30-39 years old. The statistical test did not show any association between age and the level of burnout (P >0.05).

The majority of the participants 10 (55.5%) with Bachelor degree in nursing were found to have high level of burnout. However, there was a statistical significant relationship between the levels of education and burnout (P < 0.05). Moreover, high level of burnout was identified among participants with experience less than 5 years 7 (38.9%). This study did not find any association between burnout and working experience (P>0.05).

Table 3. Relation between Socio-demographic data and level of Burnout among nurses.

Variable	Level of Burnout			χ^2
	Low	Moderate	High	
Gender				
Female	30 (75%)	71 (69.6%)	11 (61.1%)	.560
Male	10 (25%)	31 (30.4%)	7 (38.9%)	
Age:				
20-29	12 (30%)	33 (32.4%)	7 (38.9%)	.157
30-39	18 (45%)	60 (58.8%)	9 (50%)	
40-49	7 (17.5%)	8 (7.8%)	2 (11.1%)	
>49	3 (7.5)	1 (1%)	0 (0%)	
Educational level				
Diploma in Nursing	4 (10%)	15 (14.7%)	7 (38.9%)	.014
bachelor's degree in nursing	31 (77.5%)	62 (60.8%)	10 (55.5%)	
Master's degree	5 (12.5%)	25 (24.5%)	1 (5.6%)	
Work Experience				
<5 years	12 (30%)	31 (30.4%)	7 (38.9%)	.954
5 - 10 years	10 (25%)	30 (30.4%)	4 (22.2%)	
10-15 years	11(27.5%)	29 (28.4%)	5 (27.8%)	
>15 years	7 (17.5%)	12 (11.8%)	2 (11.1%)	

* Significance was considered at p-value of <0.05

Table 4 shows that negative significant correlation between level of burnout and gender, age, educational level and years of experience whereas P value < 0.001. Meanwhile it shows that

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there was no significant correlation between nurse knowledge and nurses' attitude regarding palliative care whereas P value > (0.05).

Table 4. Correlation among level of burnout and gender, age, educational level and years of experience.

Parameters	Gender		Age		Educational level		Years of Experience	
	r	P	r	P	r	P	r	P
Level of Burnout	-.084	.292	-.146	.065	-.113	.155	-.061	.443

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

CHAPTER FOUR
DISCUSSION AND CONCLUSION

4.0 Discussion:

This study focused on studying burnout levels among ER nurses working in two large hospitals in Taif. Moreover, it explored the relationship between burnout and demographic characteristics. Majority of the nurses were females, aged between 30 and 39 years, with Bachelor degree and had had less than 10 years of experience. Similar result found in study of Dyrbye, et al. (2019) reported that (94.5%) were women, held a baccalaureate (38.2%). Jawad, et al., (2021) reported more than half of nurses (57.4%) aged between 30 and 39 years, (75.7%) were females, (40%) had clinical experience ranged between 5 and 10 years and (83.1%) held Bachelor holders.

Shah, et al., (2021) found (90.4%) were female and White (80.7%). The mean (weighted SD) age of nurse respondents was 48.7 (0.04) years, and 95.3% were US graduates. The percentage of nurses with (45.8%) held Bachelor. Abedi-Gilavandi, et al., (2019) reported that most of the subjects were female (77.1%), (71.4%) had a bachelor's degree and (42.3%) had less than 5 years of work experience.

In contrast, study of Nobre, Rabiais, Ribeiro, & Seabra, (2019) reported that most of participants (53.1%) were male, (90.6%) had an undergraduate "licentiate" degree and (43.7%) were experience range of 6 to 10 years. Putra, & Setyowati, (2019) found majority of respondents were women (61.2%), aged between 21 and 30 years (47%), with educational attainment of Nursing Diploma (66%) and work experience between 1-5 years (40.8%). Batayneh, Ali, & Nashwan, (2019) revealed that the respondents' age (34.4%) were between 20 to 30, (91.1%) where Females.

In the present study, the findings showed moderate-to-severe level of burnout among nurses in the EDs of both hospitals. This result was previously confirmed by other researchers that nurses are the most healthcare workers develop burnout especially in ER. This result was consistent to the study Jameel, et al., (2021) reported that (92.92%) were found to be suffering from burnout. Among them 86 (66.15%) had mild burnout and 40 (30.76%) were with moderate burnout. Another study done by Li, Cheng, & Zhu, (2018) which showed that emergency nurses have higher level of burnout as compared to nurses working in medical units. Mikhael, Elsheikh, El-Bakry, & Abd-Elmaksoud, (2020) the prevalence of burnout syndrome was seen among 64% of nurses.

Majority of participants suffered from physical exhaustion, and difficult work conditions. Similar result found in study of Mikhael, Elsheikh, El-Bakry, & Abd-Elmaksoud, (2020) the most commonly mentioned life stressors among the studied nurses were difficult work conditions (84%), and tension at work (80%). This result in contrast with result of Hamdan, & Hamra, (2017); Abedi-Gilavandi, et al., (2019) and Putra, & Setyowati, (2019) declared that most of the nurses had sever burnout on emotional execution.

The data of present study revealed that severe level of burnout was identified among females (61.1%), (50%) had age ranging from 30-39 years old, (55.5%) with Bachelor degree and (38.9%) had

experience less than 5 years. This result similar to result of Mikhael, Elsheikh, El-Bakry, & Abd-Elmaksoud, (2020) who found female nurses reported higher levels of burnout (71.4%), mean age of nurses with burnout was higher (30.3), and it was found that burnout was higher among nurses with longer years of experience. This study disagree with the result of study found highest incidence of burnout syndrome was present in young nurses, particularly those who had not yet reached 30 years of age (Franca, De Martino, Aniceto,& Silva 2012).

The findings from this study showed that the nurses' demographic features have no significant effect on the development of burnout. In addition the nurses' years of experience, current experience, work location and position were also found to have no significant effect on burnout development. This result in consistent with result of studies reported that Overall, nurses' demographics had no significant effect on the development of burnout. (Batayneh, Ali, & Nashwan, (2019; Putra, & Setyowati, 2019; Abedi-Gilavandi, et al., 2019; Franca, De Martino, Aniceto, & Silva, 2012).

4.1 Conclusion:

From this study finding, it was concluded that the prevalence of Emergency Department nurses who experience burnout syndromes is high as they experienced mild to moderate burnout. Physical exhaustion and difficult work conditions are the most common sources of stress that lead to burnout. Some socio-demographic data and work-related conditions have an effect on it, especially older age, and female sex. This study considers socio demographic factors that influence the incidence of burnout symptoms. Work-related factors such as difficult work conditions and workload are the most common sources of stress among nurses that can lead to burnout. According to the data obtained no statistically significant difference between severity of burnout and socio-demographic characteristics.

4.3 Recommendations

Consequently, it is recommended that by identifying factors that predict burnout and factors that improve satisfaction at work, such as suitable offices, decrease in the number of shifts, improvement in income, adequate health care insurance, and increase in the number of qualified

nurses in hospitals may support the nursing staff and help them provide excellent care, without affect their own health and happiness.

The hospital management needs to identify socio-demographic characteristics which will improve the working environment, recruitment and retention systems and the provision of effective health services. Interventions should include implementing professional education for emergency workers to raise their awareness and to acquire skills to deal with burnout and reduce destructive consequences of burnout for themselves and for their patients. Finally, hospitals should ensure social support to workers and enhance the ED resources in order to avoid workload stress.

References:

Abedi-Gilavandi R, Talebi F, Abedi-Taleb E, Nateghi S, Khedmat L, Amini F, Moshfeghi S, & Effatpanah M. (2019). Burnout among Nursing Staff in Ziaeian Hospital. *Mater Sociomed.*,31(1),10-13.

ALmutairi, M.N., & El.Mahalli, A.A. (2020). Burnout and Coping Methods among Emergency Medical Services Professionals. *Journal of Multidisciplinary Healthcare*,13,271-279.

Alqahtani, A.M., Awadalla, N.J., Alsaleem, S.A., Alsamghan, A.S., & Alsaleem, M.A. (2019). Burnout Syndrome among Emergency Physicians and Nurses in Abha and Khamis Mushait Cities, Aseer Region, Southwestern Saudi Arabia. *Scientific World Journal*,4515972,1-14.

Batayneh, M.H., Ali, S. & Nashwan, A.J. (2019). The Burnout among Multinational Nurses in Saudi Arabia. *Open Journal of Nursing*, 9, 603- 619.

Chemali, Z., Ezzeddine, F.L., Gelaye, B., et al. (2019). Burnout among healthcare providers in the complex environment of the Middle East: a systematic review. *BMC Public Health,* 19(1),1337.

Dyrbye, L.N., Shanafelt, T.D., Johnson, P.O. et al. (2019). A cross-sectional study exploring the relationship between burnout, absenteeism, and job performance among American nurses. *BMC Nursing,*18, 57.

Elbarazi, I., Loney, T., Yousef, S. et al. (2017). Prevalence of and factors associated with burnout among health care professionals in Arab countries: a systematic review. *BMC Health Service Researches,*17,491.

Franca, S.P.S., De Martino, M.M.F., Aniceto, E.V.S.,& Silva, L.L. (2012). Preditors of Burnout syndrome in nurses in the prehospital emergency services. Acta Paul Enferm.,25(1),68–73.

Gualano, M.R., Sinigaglia,T., Lo Moro, G., Rousset, S., Cremona, A., Bert, F., & Siliquini, R. (2021). The Burden of Burnout among Healthcare Professionals of Intensive Care Units and Emergency Departments during the COVID-19 Pandemic: A Systematic Review. *International Journal of Environment Research Public Health*,18(15),8172.

Hamdan, M., & Hamra, A.A. (2017). Burnout among workers in emergency Departments in Palestinian hospitals: prevalence and associated factors. *BMC Health Service Research,*17,407.

Gómez-Urquiza, J.L., De la Fuente-Solana, E.I., Albendín-García, L., et al., (2017). Prevalence of Burnout Syndrome in Emergency Nurses: A Meta-Analysis. *Critical Care Nurse*, 37(5),e1-e9.

Jameel, F., Kousar, S. ., Saif, N., Ghani, M., Shahjahan, & Latif, W. (2021). Factors Contributing to Burnout among Nurses Working in Emergency Rooms. *Journal of Farkhanda Institute of Nursing And Public Health (JFINPH)*, 1(01),12–16.

Jawad, A.A., Al Zahrani, A.O., Mubarak, A.S., Albogami, S.A., Alzahrani, M.O., & Al Shehri, D. (2021). The Prevalence and Determinants of Burnout among Nurses Working at Al Hada Hospital, Taif, Kingdom of Saudi Arabia. *International Journal of Medical Research Professional*,7(2),14-19.

Li, H., Cheng, B., & Zhu, X.P. (2018). Quantification of burnout in emergency nurses: A systematic review and meta-analysis. *International emergency nursing*,39,46-54.

Mikhael, V.S., Elsheikh, H.E., El-Bakry, S.T., & Abd-Elmaksoud, S.F. (2020). Burnout among nursing staff in Benha University Hospital. *Egyptian Journal of Psychiatry*, 41(3),153-161.

Moukarzel, A., Michelet, P., Durand, A.C., Sebbane, M., Bourgeois, S., Markarian, T., Bompard, C., & Gentile, S. (2019). Burnout Syndrome among Emergency Department Staff: Prevalence and Associated Factors. *Biomed Res International,*6462472.

Nobre, D.F.R., Rabiais, I.C.M., Ribeiro, P.C., & Seabra, P.R.C. (2019). Burnout assessment in nurses from a general emergency service. *Rev Bras Enferm,*72(6),1457-1463.

Polit, D., & Beck, C. (2018). *Essentials of nursing research: Appraising evidence for nursing practice*. 9th Edition. Lippincott. W& W: New York.

Putra, K.R., & Setyowati, A. (2019). Prevalence of burnout syndrome among nurses in general hospitals in provincial East Java: Cross-sectional study, *Enfermería Clínica*, 29 (2),362-366.

Sexton, B., Levine, L.K., & Flores, D. (2021). An Analysis of Nurse Burnout in the Emergency Department. *Journal of Business and Behavioral Sciences*, 33(1),94-108.

Shah, M.K., Gandrakota, N., Cimiotti, J.P., Ghose, N., Moore, M., & Ali, M.K. (2021). Prevalence of and Factors Associated With Nurse Burnout in the US. *JAMA Netw Open,* 4(2),e2036469