Occupational pressures and its impact on time consumed in receiving and providing emergency department in Governmental Hospitals at Najran, Saudi Arabia

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Abstract: The study aims to measure Occupational pressures and its impact on time consumed in receiving and providing emergency service in the emergency department of Governmental Hospitals in Najran Region in Saudi Arabia, the study followed Quantitative research methodology, descriptive and analytical research method depending on questionnaire which was applied a sample that consists of (229) physicians, Medical Support Services, nursing staff, and Administration in all public hospitals in Najran Province the study reached results the most important of which there was a high degree of occupational pressures, where the study results indicated that the work environment dimension was in the first rank, followed by the role ambiguity dimension, where are two variables at a high level of estimation. In the third rank there was the career growth dimension, followed by the role burden dimension in the fourth rank. In fifth rank there was the volume of work required dimension, while in last rank there was the difficulty of the work dimension,

where these dimensions were at medium level of estimation. The study results showed that there is a statistically significant relationship between (role burden, career growth, work environment) and the time consumed in providing emergency service in public hospitals in Najran Province in Saudi Arabia. According to the results the study reached recommendations that could reduce occupational pressures to reduce time consumed in providing emergency service in public hospitals in Najran Province in Saudi Arabia.

Key words: Occupational pressures/stress, time consumed in receiving and providing emergency service.

Introduction

To expand the scope of work; increasing job demand and job pressure have become a big problem these days. Extended working hours and increased professional responsibilities are becoming more and more common in the workplace. Both employees and organizations understand work pressure as a physical and psychological concept as it affects workers and leads to health problems and family-work conflicts. Work pressure leads to high employee turnover, poor job quality, high absenteeism and low productivity (1).

On the other hand, health care staff stress arises from the daily need to make quick decisions, especially in life-threatening situations, repeated exposures leading to patient death,

and thus the impact of occupational stress on health care staff work behavior. is important to understand. or suffering and inability to provide adequate medical care to the patient. Additional aspects that increase the level of stress among medical personnel are occupational factors such as burnout, the need to provide professional care at night and on public holidays, poor organization and equipment, the need to make life-and-death decisions alone, and a lack of sense of safety or security (2).

On the other hand, the appropriate working environment provides workers with the appropriate psychological, social and organizational conditions to enhance the health and safety of the worker and enables managers and employees to control and improve their relationship (3).

Workers in Emergency Department face many critical cases that dealing with accurately and quickly forms the difference between life and death, as well as these workers face many challenges and changes that form job pressure, which may contributes in weakening the work capabilities and keeping them away from achieving their aims, and the pressure degree may from an individual to another; some are more affected than others by work pressures.

Thus, its impact on the medical personnel varies by the nature and the size of pressures and the personal and psychological factors of individuals. Workers in Emergency department of Governmental Hospitals in Najran Region face numerous pressures due to the large number of cases that they received in the Emergency Department in these hospitals that often lead to lateness in dealing with these cases, which may affect the life and the health of patients. This highlighted the message of current research that seeks to identify and assess the job pressures faced by government emergency room workers.

Literature review

A study aimed at addressing the issue of how stress at work can be effectively managed, reduced, or prevented by the government and hospital management boards in order to enhance the health of their nurses, as well as improving their work behavior. The sample of the study consists of (850) nurses, (500) doctors, around (300) patients and (90) administrators/medical directors. The study revealed a fact that job stress has significant negative effect on work behavior of the nurses. The study recommended that it is essential to reorganize work environment and remove as many as possible stressors, along with training of staff in ways with which they can manage job stress and achieve better adjustment in order to promote employees' health and safety (4).

Another study conducted to determine the average waiting period of patients visiting a tertiary level emergency department. The study comprised (38) emergency admissions for duration of two weeks. The results revealed that the average total waiting period from entry till disposal was 2.46 hours with a mean deviation of 1.26 hours. The key factors responsible for the delays are examination of patient, time taken for consultation, emergency investigations or imaging, unavailability of vehicles for transport, admission procedure (5).

In Nigeria, there was a study aimed to investigate the impact of job stress on employees' productivity and commitment among academic staff of Nigeria Universities. The population of the study combined of all universities in Nigeria, and the sample of the study consists of (40) respondents of these universities. The results showed that there is an impact of job stress on the productivity of employees. In addition, there is an impact of job stress on employees' commitment; when higher level of stress exists with no managerial concern for solution consequently lowering the employee performance; staking organizational reputation and loss of skilled employees, these situations call for immediate concern from organization

management for employing effective stress management practices to increase employee satisfaction and overall employee performance. The study recommended that remedial measures need to be taken by management to minimize the effects of job stress on a permanent basis. For this purpose, management must conduct the research programs to build the managerial and technical skills of employees. (6).

Ilczak T et al. carried out a study to assess the predictors of stress that paramedics, nurses and doctors experience in the face of the COVID-19 pandemic. The study used a validated survey that developed for the study. The study group included 955 medical staff,

and the level of significance adopted for statistical analysis was p=0.05. Non-parametric Mann-Whitney and Kruskal-Wallis tests were used to analyze the qualitative variables divided into groups. The selection of tests was carried out based on the distribution of variables, verified using the Shapiro-Wilk test. The study results showed that during the COVID-19 pandemic, stress among emergency medical personnel has increased considerably due to new factors that did not previously exist. The predictors of stress in the professional environment include the fear of contracting COVID-19, a decrease in the level of safety while conducting emergency medical procedures, and the marginalization of treatment for patients not suffering from COVID-19. Appropriate training, the supply of personal protective equipment and opinions on the preparedness of the system to deal with the outbreak of the pandemic did not affect the level of stress among health service personnel (2).

Regarding the association between job stress and metabolic syndrome among medical university staff, there was association between job stress and metabolic syndrome and its components in a group of Iranian workers affiliated with Tehran University of Medical Sciences. The study was performed on (3,537) randomly selected staff in Tehran University of Medical Sciences including the staff of clinical, administrative, and service departments with at least one year of working experience. The overall frequency of metabolic syndrome was assessed based on the international diabetes federation (IDF) criteria. The Persian version of the Copenhagen Psychosocial Questionnaire (COPSOQ) was used to measure major domains of psychosocial factors in the workplace. The study results showed that the overall frequency of metabolic syndrome in the assessed personnel was estimated to be 22.1 % and there was a significantly higher rate of metabolic syndrome in office workers,

and service personnel compared to clinical staff (OR: 1.51, CI 95 %: 1.25–1.82 and OR: 1.74, CI 95 %: 1.41–2.14, respectively). Health and well-being as a major domain of COPSOQ was found to be significantly impaired by the presence of metabolic syndrome. (7).

The study aims to measure Occupational pressures/stress and its impact on time consumed in receiving and providing emergency service in the emergency department of Governmental Hospitals in Najran Region in Saudi Arabia. Further, the study seeks to achieve the following objectives: identify pressures and its causes that face workers in Emergency Department, identify the extent of speed and efficiency of receiving emergency cases and dealing with them in the Emergency Department, and identify the impact of work pressures on time consumed in receiving and providing emergency service in the emergency department.

Methodology:

Quantitative research methodology and its analysis tools was used in determining the results and conclusions between March, 2022 and April, 2022.

Descriptive and analytical research method was used to describe Occupational pressures and its impact on time consumed in receiving and providing emergency service in the emergency department of Governmental Hospitals in Najran Region in Saudi Arabia.

After applying the study tool, the responses of the study sample were collected, and their responses were converted into raw scores, then the frequencies and percentages were found. Validity and stability tests of the tool were conducted to ensure its validity to measure the study variables (8). Means and standard deviations were calculated, and the chi-square test to clear-out Occupational pressures and its impact on the time spent in providing the emergency service in public hospitals in Najran Province in Saudi Arabia at the level of statistical significance ($\alpha \le 0.05$).

Study population& sample:

The total population of the research includes all physicians, Medical Support Services, nursing staff, and Administration in all public hospitals in Najran Province in Saudi Arabia whose number is (6,761) according to the statistical book of the Ministry of Health for the year 2020. The number of the study sample was determined based on a study carried out by Sekarann et al., where it reached (248) individuals from the community. The study tool was distributed electronically to the study sample members, and 233 questionnaires were retrieved. After checking, 4 questionnaires were excluded for not completing the answers in them. Therefore, the number of questionnaires capable of statistical processing reached 229 (9).

Data Sources:

The study relied on two types of data: primary and secondary data, whereas secondary data was represented by the theoretical and previous literature, as well as books and research on the subject under study in order to develop the theoretical framework and the goal of dimensions that measure Occupational pressures, and time consumed in receiving and providing emergency service.

The primary data was represented by the development of a questionnaire to measure the variables and dimensions and study hypotheses.

Study tools:

The study was based on a questionnaire carried out by (Abu-Siam, 2018) on which validity and reliability tests were conducted (8), the five-point likert scale questionnaire consists of three key components, as follows:

- Part 1, provides general information regarding study sample.
- Part 2, contains statements regarding of the study independent variable Occupational pressures.
- Part 3, describes the study dependent variables in relation to time consumed in receiving and providing emergency service in the emergency department.

Results:

The study dealt with many of demographic variables for the study sample members in terms of "gender, Nationality, age, experience, and educational qualification", where based on that, the study sample was described through frequencies and percentages, as follows:

Table 1: Distribution of the sample according to Sociodemographic data

Variables	Category	(N)	(%)
	Male	163	71.2
Gender	Female	66	28.8
	Total	229	100.0
	Saudi	169	73.8
Nationality	Non-Saudi	60	26.2
	Total	229	100.0
	26-35 Years	78	34.1
Age	36-45 years	124	54.1
	46-55 Years	22	9.6
	More than 55 years	5	2.2
	Total	229	100.0
	Less than 5 years	85	37.1
	5-10 years	113	49.3
Experiences	11-15 years	26	11.4
	16 years and more	5	2.2
	Total	229	100.0
Educational	Diploma	40	17.5

Qualification	Bachelor	166	72.5
	Master	21	9.2
	PhD	2	0.9
	Total	229	100.0

Table (1) shows the distribution of the sample according to Sociodemographic data. The percentage of males is higher than females, reaching (71.2%), while the percentage of females is (28.8%). The percentage of Saudis reached (73.8%), while the percentage of non-Saudis reached (26.2%). It is

noted that those whose educational level (Bachelor) is the most frequent, with percentage reached (72.5%), while those whose educational level (PhD) is the least frequent, with percentage reached (0.9%). The most age group was (36-45 years), with a percentage reached (49.3%), while those aged (more than 55 years) were the least frequent, with a percentage reached (2.2%). Regarding the experiences, we note that those whose experiences (from 5 years - 10 years) were the most frequent, with a percentage reached (49.3%), while those whose experiences (from 16 years and above) were the least frequent, with a percentage reached (2.2%).

The views of the study sample were analyzed to understand the expressions of Occupational pressures and its impact on the time consumed in providing emergency service in public hospitals in Najran Province in Saudi Arabia. The mean and standard deviations were calculated for each field of study, as follows:

Occupational pressures:

Occupational pressures include six variables (role burden, role ambiguity, career growth, difficulty of work, volume of work required, work environment).

Table (2) refers to the Occupational pressures variables, where the mean was calculated for each of the Occupational pressures variables, and they were arranged in descending order according to the degree of estimation, where the results were as follows:

Table 2: Occupational pressures variables, where it arranged in descending order according to the degree of estimation

the degree of estimation					
Variable	mean	SD	Rank		

work environment	4.078	0.733	1	
role ambiguity	3.713	0.840	2	
career growth	3.663	0.783	3	
role burden	3.620	0.863	4	
volume of work required	3.536	0.703	5	
difficulty of work	3.403	0.687	6	
Occupational pressures	3.669		_	_

Table (2) shows the mean, standard deviations, and rank of the Occupational pressures' variables, where the table indicates a high degree of estimation of Occupational pressures with an arithmetic average reached (3.669). The table indicates that the work environment dimension was in the first rank with an arithmetic average reached (4.078) and a standard deviation reached (0.733), followed by the role ambiguity dimension with an arithmetic average reached (3.713) and a standard deviation reached (0.840), where those variables were at a high level of estimation.

In the third rank was the career growth dimension, with an arithmetic average reached (3.663) and a standard deviation (0.783). In fourth rank there was the role burden dimension, with an arithmetic average reached (3.620) and a standard deviation (0.863). In the fifth rank, the volume of required work dimension, with an arithmetic average reached (3.536) and a standard deviation (0.703). In the last rank was the required work difficulty dimension, with an arithmetic average reached (3.403) and a standard deviation (0.687), where these variables were at medium level of estimation.

Table 3 Dependent variable: The time spent in receiving and providing the emergency service

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Paragraph No.	The paragraph	mean	SD	Rank
1	The emergency service reception transactions are done quickly and without obstacles.	4.175	0.814	4
2	There are no waiting times for emergency patients at the reception.	4.183	0.796	3
3	The priority of providing emergency services	4.415	0.730	1
	is determined according to the nature and severity of the cases and quickly.			
4	The emergency team cooperates well in providing ambulatory service.	4.376	0.712	2
5	The lack of human resources negatively affects the provision of emergency services	3.969	0.850	5
	Total	4.224	0.780	

Table (3) shows that there is a high level of estimation for dependent variable "the time consumed in receiving and providing the emergency service", where the arithmetic average for the dependent variable was (4.224). The table noted that that the mean of the study sample opinions about the dependent variable paragraphs ranged between (3.969-4.415), with high degree of agreement for all paragraphs of the dependent variable.

emergency

service

volume of work

required

difficulty of

work

0.416

0.679

service								
Independent variables	Dependent variable	Sample volume	Chi-square	P. value				
work environment	mi	229	199.994	0.000*				
role ambiguity	The time	229	196.601	0.65				
career growth	consumed in	229	226.869	0.000*				
role burden	receiving and providing the	229	232.617	0.024*				
l	providing the							

229

Table 4: Factors associated with the time consumed in receiving and providing the emergency service

171.251

12.932

Table (4) shows that there was a statistically significant association between the time consumed in receiving and providing the emergency service and work environment (P. value 0.000), career growth (P. value 0.000), and role burden (P. value 0.024).

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Discussion: The study has aimed to measure Occupational pressures/stress and its impact on time consumed in receiving and providing emergency services in the emergency department of Governmental Hospitals in Najran Region in Saudi Arabia. Stress / Pressure is a significant occupational health risk. Work-related stress is a very serious problem, both for the individuals experiencing it and for the organizations that incur significant financial losses as a result (10). Work-related stress (WRS) can occur specifically when a conflict arise from the job demands of the employees and the employees themselves; and if not handled properly, the stress can become distress. Occupational stress/pressure among health workers has been a matter of much scientific inquiry in literature in the past decades. High level of stress at work is a major factor to both physical and psychological health (11,12). In healthcare workers are grouped as the sources of stress under context of work and content of work. Context of work included those factors involved in work organization, career development and interpersonal relationships while content of work stress include risk factors arising from the work environment and equipment, division of tasks and planning, hours of work and workload (13).

Overall, it should be acknowledged that the sources of job stress/pressure and its level of effect are different according to the working conditions, working department, and culture of each society so nurses and other ED staff may have different levels of job stress and influencing factors due to different working conditions and the level of support provided.

The Concept of occupational pressures/stress includes six variables that has been focused in this study (e.g. work environment, role ambiguity, career growth, role burden, volume of work required, difficulty of work). And the time consumed in receiving and providing the emergency service", include five variables that has been focused with the occupational

pressure/stress variables. (e.g. 1.The priority of providing emergency services is determined

according to the nature and severity of the cases and quickly. 2. The emergency team cooperates well in providing ambulatory service 3. There are no waiting times for emergency patients at the reception.4. The emergency service reception transactions are done quickly and without obstacles 5. The lack of human resources negatively affects the provision of emergency services.)

Occupational Pressures and Factors of Occupational Pressures Emergence:

The findings of this study reveal the experiences and perceptions of pressure/stress among the participating ED staff. The study which has reached that pressure/ stress in work setting stems from different sources like (work overload, organization culture, performance pressure, lack of

communication, job ambiguity, role conflict, lack of support and inadequate resources). In Table (4) Occupational pressures/stress variables, where it has arranged in descending order according to the degree of estimation. The results have indicated a high degree of Occupational pressures/stress, where the study results indicated that the **work environment** dimension was in the first rank, followed by the **role ambiguity dimension**, where are two variables at a high level of estimation.

These results agree with Previous studies that have also reported that a heavy workload is a powerful source of stress / pressure for ED staff as well as nurses (14, 15, 16).

In the third rank there was the career growth dimension, followed by the role burden dimension in the fourth rank. In fifth rank there was the volume of work required dimension while in last rank there was the difficulty of the work dimension, where these dimensions were at medium level of estimation. This result agrees with the study of (17) which reached that most nurses reported that their work is stressful, this result also agrees with study of (6) which reached that there is a negative impact of job stress on the productivity and employees' commitment. this result also agrees with the study (18).

Regarding the factors that contribute to pressure/ stress at workplace were stressors related to staffing, supplies/equipment and problems among other nurses, doctors and co-workers, patients/their families, administrative issues. The nurse patient ratio, communications problems, poor supply of equipment, over and unrealistic expectations of patients and their relatives were the stressors that contributed to stress/pressure.

The researcher has attribute these results to the fact that during COVID-19 pandemic there was an increasing in job stress and occupational pressures among nurses (2) resulted that during the COVID-19 pandemic, stress among emergency medical personnel has increased considerably due to new factors that did not previously exist i.e. decrease in body resistance due to the presence of excessive, monotonous physical work activity, and insufficient rest time.

Factors associated with the time consumed in receiving and providing the emergency service

The study results have showed that there is a statistically significant relationship between (**role burden, career growth, work environment**) and the time consumed in providing emergency service in public hospitals in Najran Province in Saudi Arabia. Table (6) shows that there was a statistically significant association between the work environment (P. value 0.000), career growth (P. value 0.000), and role burden (P. value 0.024). This result agrees with one previous study, which reached that job stress has significant negative effect on work behavior of the nurses (4). Also, our findings were in line with another study, which reached that job stress has significant negative effect on commitment level of nurses (19).

According to the quantitative data in this study, **workload, time management, and working environment** were the most significant pressure/stress sources for nurses in the emergency department. This is consistent with previous studies conducted in other nations or cultural contexts (20, 21, 22, 23, 24, 25, 26).

In general, **job satisfaction** is related to the environment in which the staff as well as nurse works. The presence of support from colleagues and supervisors is a significant predictor of job satisfaction and it is a major factor responsible for reducing pressure/stress. In addition, organizational support is highly essential for the nurses (27). Therefore, support from colleagues, supervisors and organization is very much needed to reduce the stress/pressure among nurses and other ED staff.

Moreover, the participants claimed that there was inadequate support from either the department or the hospital for skill development, such as pursuing a master's degree or completing additional specialist training. Experienced insufficient support from supervisors and coworkers might contribute to high stress/pressure responses among nursing professionals (28). As in the study by (15), insufficient skill improvement in the professional environment served as a stressor in the ED.

Some other Factors associated with the time consumed in receiving and providing the emergency service

The results indicated that there was no statistically significant relationship between (**role ambiguity**, **difficulty of work, and volume of work entrusted**) and the time consumed in providing emergency service in public hospitals in Najran Province in Saudi Arabia i.e. difficulty of work, (P. value 0.679), role ambiguity (P. value 0.65), and volume of work entrusted (P. value 0.416).

The data analysis showed a weak inverse relationship between job stress/pressure and different dimensions of caring behaviors. It should be noted that the increase in scores in various dimensions of job stress had a significant negative relationship with the psychosocial domain, which was moderate. Apparently, psychosocial support of the patient decreases with an increase in such stressors as conflict with physicians, patient and family, and increased workload.

The finding of the current study found that excessive paperwork and inadequate (nursing and non-nursing) staff for **the volume of work** to be done are the top two sources of stress, adds further weight to the body of evidence regarding workload and occupational stress for nurses. Our study findings support and strengthens the conclusions of (21) that the combination of excessive workload and nursing shortage are key issues bedeviling the nursing profession. Drawing from our findings and the body of evidence on the adverse impact of workload, it is perhaps safe to suggest that restructuring work organization and requirements of nurses to reduce the volume and hours of work per shift should be prioritized to tackle occupational stress levels for ED staff, especially ED nurses.

Faremi FA et al assessed the occupational related stress among nurses and the findings were similar to our study findings (29). It was identified that too many non-nursing tasks required such as clerical work, inadequate staff to cover ward workload, and unpredictable staffing and scheduling, as the frequently reported stressful events as conceived by the nurses (29). Likewise, **administrative issues**, such as shortage in the nursing workforce, inadequate support from nursing supervisors, low salary, and high levels of expectations were also

reported as stressors in a study (30).

Consequences of occupational stress in the Emergency Department (ED)

Pressure/Stress in the ED led to a decrease in the quality of nursing care, including non-holistic care, misinformation, malpractice, below-standard care delivery, delayed nursing care and a reduction in abilities as a result of decreased concentration and focus. **The quality of nursing care** also seems to be affected by occupational stress, a finding that is congruent with the previous research (31, 32, 33, 34). The participants have indicated that occupational stress in the ED led to a decreased quality of nursing care, including non-holistic care, misinformation, malpractice, below-standard or delayed nursing care, and a reduction in their abilities because of reduced concentration, which caused confusion.

Occupational stress can lead to poor psychophysiological health and negative social interactions, especially with family members (35, 36). Work-related stress/occupational pressure reactions also contribute to incomplete and delays in nursing care (37), which can lead to impaired patient safety (38). Some study participants in the current study considered leaving the ED because of occupational stress and job dissatisfaction. This could lead to shortage of ED nurses (39), and the shortage of nurses leads to more stress, causing a vicious circle.

According to Previous study, job stress is a physical-psychological syndrome accompanied by fatigue that leads to negative behaviors and attitudes toward oneself, work, family, and patients, and causes ineffective activity and absenteeism, immorality, and job dissatisfaction, seemingly stemming from nurses' mental stress and lack of concentration (40). Excessive job stress has negative impacts on nurses' psychological well-being and reduces their work productivity. The results of the present study have been confirmed by

the reports of other researchers; in this respect, the job stress/pressure of healthcare workers has a relationship with their low job satisfaction, negative attitude towards own job, and negative consequences on the quality of caregiving (41, 42).

However, the combination of high patient flow, especially in emergency units, combined with inadequate nursing personnel, often mean that for a large proportion of nurses, the volume, needs and diversity of patients they must provide care for, can be overwhelming. While a wide range of studies have investigated and reported the problem of 'excessive workload' among nurses, (43) provided a good insight into how workload for nurses compare with the general population. They compared the levels of occupational stress/pressure among nurses and non-nursing staff working in the same hospital. They found that nurses reported significantly higher stress levels compared to the non-nursing staff.

Patients' and the family members' misunderstandings or expectations of the ED triage system seemed to create stress among the ED staff who participated in this study. The participants experienced this situation and perceived it as a source of stress/pressure in their workplace. This result is in accordance with previous research (44). The treatment system in an ED requires staff to treat patients according to the severity of their symptoms. Thus, some patients with non-urgent conditions must wait for treatment while more acute patients are cared for. However, patients often misunderstand the ED's treatment system and expect to receive treatment immediately; those patients pressured the ED staff as well as nurses about their treatment. This situation, in which patients and their relatives who had been waiting a long time for treatment would complain and put pressure on ED staff, was also reported by (45). Such negative encounters may result from the hospital's failure to provide adequate information about the ED service system to patients and their relatives.

Conclusion

The results of this study have showed that indeed ED staff as well as nurses are suffering from occupational pressure / stress. The results of the study are consistent with most of the findings from other studies done on occupational stress/pressure among nurses and ED staff. The study has revealed that the main causes of occupational pressure/ stress among ED staff as well as nurses are; workload, time management, and working environment are the most significant pressure/stress sources for nurses in the emergency department. e.g. poor working conditions, poor relationship with co-workers and lack of interest on staff welfare. The causes of occupational pressure/stress among nurses as well as ED staff call for urgent need to design interventions which can make easier the work environment conducive for ED staff. The environment which individuals work determine the level of satisfaction with work performed and can also contribute to a sense of unhappier among the individuals. On the one hand, the understanding of the relationship between stress and the workplace is still a challenge, and thus it is important to acknowledge that work can cause pressure/ stress and therefore stress should be prevented (46).

In general, the findings of this study have showed that employed staff as well as nurses had higher levels of perceived job pressure/stress that can have negative effects on their quality of life and caring behaviors. Job pressure/stress can endanger the physical and mental health of nurses, decrease energy and work efficiency, and fail to provide proper nursing care, which ultimately has a negative impact on patient outcomes. Therefore, it is required to investigate the stressors and effective planning to eliminate these factors. The provision of educational programs to the proper introduction of this profession to the community can increase awareness about the nurses and ED staff' problems and concerns, and ultimately, improve their quality of life.

The results have indicated a high degree of Occupational pressures which have impact on time consumed in receiving and providing emergency department of Governmental Hospitals in Saudi Arabia. This result agrees with the (5) study which reached that average total waiting period from entry till disposal was 2.46 hours with a mean deviation of 1.26 hours. The key factors responsible for the delays are examination of patient, time taken for consultation, emergency investigations or

imaging, unavailability of vehicles for transport, admission procedure.

The researcher attributes these results to the existence of a high degree of work pressure that led to high time consumed in receiving and providing the emergency service, which is confirmed by many studies (4, 19).

Role Burden, Career Growth, Work Environment have also significant impact on time consumed in receiving and providing emergency department services of Governmental Hospitals in Najran, Saudi Arabia.

The insight and findings of this study can be useful for policymakers, nursing leadership and health care administrators to further promote a positive and pressure-free work environment for nurses and other ED staff.

Recommendations:

This study has explored the perception and experiences of occupational pressure/stress among nurses and staff working in major emergency departments of Saudi hospitals, as well as how the nurses cope with perceived levels of stress. Given the importance of nurses and emergency staff to any health care system, the physical, emotional and mental health of nurses, and emergency staff and by extension, their productivity and efficiency significantly affect the integrity of the health care system.

The study has reached the following recommendations:

To reduce the level of Occupational pressures related to the ambiguity of the role the necessity of working. To achieve this, the time allotted for the completion of a task must be determined for the worker, and clearly identified with the direct responsible for the task he/she is performing, and clarifying policies and instructions and their non-confliction, and clarifying the limits of the authority entrusted to the employee.

In reducing the level of Occupational pressures/stress related to the work environment the need to work. To achieve this, it is necessary to achieve justice in salaries among employees, and the level of income must be compatible with the requirements of life, and the need to find appropriate annual rewards and material incentives commensurate with the employee's effort and efficiency.

It is necessary to work on conducting periodic surveys in hospitals with the aim of showing the job pressures/stress that workers are exposed to in order to reduce them in order to achieve the highest level of efficiency in work, which would contribute to reducing the time consumed in receiving and providing medical and emergency services.

The researcher also recommends that future researchers should conduct more studies on the various Occupational pressures/stress and their effects on the psychological and functional factors of workers in the emergency department.

Acknowledgment

We are thankful for all participants for their participation as well as king Khalid hospital in Najran for facilitating carried out this study.

Funding

This study did not receive a fund.

Conflict of interest

Authors have no conflict of interest in this study.

Reference:

- 1. Shaikh, S. B., & Wajidi, A. (2021). Role of Employee Behaviour and Job Stress on Work-Life Balance: A Case of HEIs of Pakistan. *Journal of Entrepreneurship, Management, and Innovation*, *3*(2), 177-201.
- 2. Ilczak, T., Rak, M., Ćwiertnia, M., Mikulska, M., Waksmańska, W., Krakowiak, A., ... & Kawecki, M. (2021). Predictors of stress among emergency medical personnel during the COVID-19 pandemic. *International Journal of Occupational Medicine and Environmental Health*, *34*(2), 139-149.
- 3. Pravamayee, Samantaray (2014), Strategy to Develop an Effective Workplace Environment, International Journal of Language & Linguistics Vol. 1, No. 1; p. 57-61.
- 4. Rawal, C. and Pardeshi, S. (2014), Job Stress Causes Attrition among Nurses in Public and Private Hospitals, Journal of Nursing and Health Science, Vol. 3, Issue 2: 42-47.
- 5. Sreekala, P., Dan, A. and Varghese, E. (2015), Patient Waiting Time in Emergency Department, International Journal of Scientific and Research Publications, Vol. 5, Issue 5: 1-3.
- 6. Ekienabor, E. (2016), Impact of Job Stress on Employees' Productivity and Commitment, International Journal for Research in Business, Management and Accounting, Vol. 2, Issue 5: 124-133
- 7. Eftekhari, S., Alipour, F., Aminian, O., & Saraei, M. (2021). The association between job stress and metabolic syndrome among medical university staff. *Journal of Diabetes & Metabolic Disorders*, 1-7.
- 8. Abu Siam, Muhammed Madaan Suleiman (2018). Job Stress and Their Impact on Nursing Staff Performance of Al Bashir Public Hospital in Jordan, Master Thesis, Al al- Bayt University, Amman, Jordan.
- 9. Sekaran, U. and Bougie, R. (2014) Research Methods for Business: A Skill-Building Approach. 6th Edition, John Wiley & Sons, Haddington.
- 10. Marcatto F, Colautti L, Filon FL, Luis O, Di Blas L, Cavallero C, Ferrante D. Work- related stress risk factors and health outcomes in public sector employees. Safety science. 2016 Nov 1;89:274–8.
- 11. Ivancevich, JM, Matteson MT. Organizational Behavior and Management. 6th ed. Boston, Mass: McGraw-Hill; 2002.
- 12. Verhaeghe R, Vlerick P, De Backer G, Van Maele G, Gemmel P. Recurrent changes in the work environment, job resources and distress among nurses: A comparative cross-sectional survey. Int J Nurs Stud 2008;45:382-92.
- 13. Helps S. Experiences of stress in accident and emergency nurses. Accid Emerg Nurs 1997;5(10):48-53. 14. Chudzicka-Czupała Agata, Stasiła-Sieradzka Marta, RachwaniecSzczecińska Żaneta, Grabowski Damian. (2019). The severity of work-related stress and an assessment of the areas of worklife in the service sector. "International Journal of Occupational Medicine and Environmental Health" (Vol. 32, iss. 4 (2019), s. 569 584), doi 10.13075/ijomeh.1896.1406.
- 15. Ross-Adjie G, Leslie G, Gillman L. Occupational stress in the ED: What matters to nurses? Australas Emerg Nurs J 2007;10(3):117-23.
- 16. Yuwanich N, Akhavan S. Occupational Stress experienced by Emergency Department nurses at a public hospital, Bangkok, Thailand [Master Thesis]. Eskilstuna: Malardalen "University, Sweden; 2012.
- 17. Fernandes, W. and Nirmala, R. (2015), Work Stress, Coping and Expectations of Nurses, Journal of Nursing and Health Science, Vol. 4, Issue 5: 49-56.
- 18. Jadeja, Hiteshwari and Verma, Monica (2016), Investigating Sources of Occupational Stress: A Conceptual Framework, International Journal of Advance Research in Computer Science and Management Studies, Vol. 4, Issue 1: 239-247.
- 19. Hans, Arvind and Sathyan, Sanitha (2015), A Study on Occupational Stress and Organizational Commitment among Nurses in Government Hospitals of Oman, Proceedings of 12th Asian Business Research Conference, Novotel Hotel Bangkok on Siam Square, Bangkok, Thailand.
- 20. Adriaenssens J., De Gucht V., Maes S.J. Causes and consequences of occupational stress in emergencynurses, a longitudinal study. *J. Nurs. Manag.* 2015;23:346-358. doi: 10.1111/jonm.12138. [PubMed] [CrossRef] [Google Scholar]
- 21. Glazer, S., & Gyurak, A. (2008). Sources of occupational stress among nurses in five countries. International Journal of Intercultural Relations, 32(1), 49–66. https://doi.org/10.1016/j.ijintrel.2007.10.003
- 22. Godwin A., Suuk L.A., Selorm F.H. Occupational stress and its management among nurses at St. Dominic Hospital, Akwatia, Ghana. *Health Sci. J.* 2016;10:1. doi: 10.21767/1791-809X.1000467. [CrossRef] [Google

Scholar]

- 23. Jones G., Hocine M., Salomon J., Dab W., Temime L. Demographic and occupational predictors of stress and fatigue in French intensive-care registered nursesand nurses' aides: A cross-sectional study. *Int. J. Nurs. Stud.* 2015;52:250–259. doi: 10.1016/j.ijnurstu.2014.07.015. [PubMed] [CrossRef] [Google Scholar]
- 24. Kakemam E., Raeissi P., Raoofi S., Soltani A., Sokhanvar M., Visentin D.C., Cleary M. Occupational stress and associated risk factors among nurses: A cross-sectional study. *Contemp. Nurse.* 2019;55:237–249. doi: 10.1080/10376178.2019.1647791. [PubMed]
 [CrossRef] [Google Scholar]
- 25. Stimpfel A.W., Brewer C.S., Kovner C.T. Scheduling and shift work characteristics associated with risk for occupational injury in newly licensed registered nurses: An observational study. *Int. J. Nurs. Stud.* 2015;52:1686–1693. doi: 10.1016/j.ijnurstu.2015.06.011. [PubMed] [CrossRef] [Google Scholar]
- 26. Zhou H., Gong Y.H. Relationship between occupational stress and coping strategy among operating theatre nurses in C hina: A questionnaire survey. *J. Nurs. Manag.* 2015;23:96–106. doi: 10.1111/jonm.12094. [PubMed] [CrossRef] [Google Scholar]
- 27. Tuckett A, Winters-Chang P, Bogossian F, Wood M. 'Why nurses are leaving the profession...lack of support from managers': What nurses from an e-cohort study said. International journal of nursing practice. 2015 Aug;21(4):359 66.
- 28. Ito S, Fujita S, Seto K, Takefumi K, Matsumoto K, HasegawaT. Occupationalstressamonghealthcareworkers in Japan. Work 2014;49:225-34.
- 29. Faremi FA, Olatubi MI, Adeniyi KG, Salau OR. Assessment of occupational related stress among nurses in two selected hospitals in a city southwestern Nigeria. International Journal of Africa Nursing Sciences. 2019 Jan 1;10:68–73.
- 30. Donaldson A;, Harriss A. Workplace stress -an occupational health case study. Vol. 68, Occupational Health & Wellbeing. 2016.
- 31. Kutney-Lee A, McHugh MD, Sloane DM, Cimiotti JP, Fynn L, Neff DF, Aiken LH. Nursing: A key to patient satisfaction. Health Affair 2009;28:W669-W667.
- 32. McVicar A. Workplace stress in nursing: A literature review. J Adv Nurs 2003;44(6):663-42.
- 33. Nantsupawat A, Srisuphan W, Kunaviktikul W, Wichaikhum O, Aungsuroch Y, Aiken LH. Impact of nurse work environment and staffing on hospital: Nurse and quality of care in Thailand. J Nurs Scholarsh 2011;43(4): 426-33.
- 34. Poghosyan L, Clarke S, Finlayson M, Aiken LH. Nurse burnout and quality of care: Cross-national investigation in six countries. Res Nurs Health 2010;33:288-98.
- 35. Healy, S. and Tyrrell, M. (2011) Stress in Emergency Departments: Experiences of Nurses and Doctors. Emergency Nurse, 19, 31-37. https://doi.org/10.7748/en2011.07.19.4 31.c8611
- 36. Sauter, S., Murphy, L., Colligan, M., Swanson, N., Hunell, J., Scharf, F., Tisdale, J., et al. (2009) Stress...at Work (NIOSH). DHHS (NIOS-)-CDC, Cincinnati
- 37. Yuwanich, N., Sandmark, H. and Akhavan, S. (2016) Emergency Department Nurses' Experiences of Occupational Stress: A Qualitative Study from a Public Hospital in Bangkok, Thailand. Work, 53, 885-879. https://doi.org/10.3233/WOR-152181
- 38. Oh, H., Uhm, D.C. and Yoon, Y.J. (2016) Workplace Bullying, Job Stress, Intent to Leave, and Nurses' Perceptions of Patient Safety in South Korean Hospitals. Nursing Research, 65, 380-388.https://doi.org/10.1097/NNR.000000000000175
- 39. Sawatzky, J.-A.V. and Enns, C.L. (2012) Exploring the Key Predictors of Retention in Emergency Nurses. Journal of Nursing Management, 20, 696-707. https://doi.org/10.1111/j.1365-2834.2012.01355.x
- 40. Roh H, Lee D, Kim Y. Prevalence of work-related musculoskeletal symp- toms and their associations with job stress in female caregivers living in South Korea. J Phys Therapy Sci. 2014;26(5):665–9
- 41. Begat I, Ellefsen B, Severinsson E. Nurses' satisfaction with their work environment and the outcomes of clinical nursing supervision on nurses' experiences of well-being—a Norwegian study. J Nurs Manag. 2005;13(3):221–30.
- 42. Visser MR, Smets EM, Oort FJ, De Haes HC. Stress, satisfaction and burnout among Dutch medical specialists. CMAJ. 2003;168(3):271–5.
- 43. Effionm, D. O., Ejue, J. B. and Eworo, G. M. (2007). A comparative study of occupational stress among

Nurses and non-Nurses in the University Teaching Hospital Calabar, Nigeria. West African Journal of Nursing, 18, 101.

- 44. Laposa JM, Alden LE, Fullerton LM. Work stress and posttraumatic stress disorder in ED nurses/personnel. J Emerg Nurs 2003;29(1):23-8.
- 45. Lim J, Hepworth J, Bogossian F. A qualitative analysis of stress, uplifts and coping in the personal and professional lives of Singaporean nurses. J Adv Nurs 2010;67(5): 1022-33.
- 46. Lanjini, P. (2014). Why stress should be managed in the workplace; Healthy work places managing stress. African News letter on Occupational health and safety,24,1

Appendix

Appendix (1) The study questionnaire:

Through this research, we conduct a field study on Occupational pressures and its impact on the time spent in providing emergency service in public hospitals.

Please answer all the questions of the questionnaire, where your cooperation in answering the questionnaire paragraphs accurately is extremely important to support the study scientifically.

We trust your opinions and these opinions will be appreciated, and they will be treated confidentially and used only for research purposes.

one

Thank you for your kind cooperation to make this study a success.

The researcher

	Part one
Gene We kindly ask you to put an (X) when the a	ral information appropriate choice:
Gender: Male Female]
Nationality: Saudi Non-Saud	i
Age: 26-35 Years 36-45 years	
46-55 Years More than 55 years	;

Experiences: Less than 5 years 5-10 years
11-15 years
Educational Qualification: Diploma Bachelor
Master PhD PhD

Thank you for your kind cooperation in filling out this form

Part Two Occupational pressures

Below is a list of the issues an employee encounters on a daily basis. Please assess the extent of the pressures you face from each case by placing a tick \square according to the appropriate answer.

pre	essures you face from each case by place	acing a ti	ck 🗆 accord		ropriate an	iswer.
	Role Burden	Never	Scarcely	sometimes	usually	continuously
1	There is pressure as a result of the					
	employee's lack of complete					
	knowledge of the nature of some					
	of the work entrusted to him.					
2	There is pressure as a result of the					
	officials' lack of knowledge of the					
	employee's experience and job					
	skills.					
3	There is pressure due to the lack of					
	qualified auxiliary staff.					
4	There is stress as a result of work					
	stress on the employee's social life.					
5	There is pressure due to different					
	working hours and night shifts.					
	Role Ambiguity	Never	Scarcely	sometimes	usually	continuously
1	There is pressure due to					
	uncertainty about the limits of					
	authority delegated to the					
	employee.					
2	There is pressure as a result of the					
	employee's lack of awareness of					
	the relationship between what he is					
	doing and achieving the basic					
	objectives of the ministry.					
3	There is pressure due to the					
	uncertainty of the time allotted to					
	complete a task.					
4	There is pressure as a result of the					
	employee not knowing who is					
	directly responsible for the task he					
	is doing.					
5	There is pressure as a result of					
	working under conflicting policies					
	and guidelines.					
	Career Growth	Never	Scarcely	sometimes	usually	continuously
1	There are pressures as a result of					
		1	1	T	1	1
	the slow process of professional					
	development.					
2	There is pressure as a result of the					
	employee's endeavor to be at the					
	best of the management's					
	expectations.					

3	There is pressure as a result of					
	poor opportunities to grow, learn					
	and learn new skills.					
4	There is pressure as a result of					
Γ	unfair promotions.					
5	There is pressure as a result of not					
3	achieving the ambition that the					
	workers are seeking.					
		Never	Scarcely	sometimes	usually	continuously
1	There is pressure as a result of the		Scarcely	sometimes	usuany	Continuously
1	employee being responsible for					
	several duties at the same time.					
2						
2	There is pressure as a result of					
	having high difficulty jobs.					
3	There is pressure as a result of the					
	lack of appropriate training					
	programs to perform some tasks.					
4	There is stress as a result of the					
	employee being responsible for					
_	duties outside his specialty.					
5	There is pressure as a result of the					
	large size of the responsibility					
	placed on the employee.					
	*	Never	Scarcely	sometimes	usually	continuously
1	There is pressure due to the large					
	amount of work required.					
2	There is pressure due to lack of					
	time to complete the work.					
3	There is pressure as a result of					
	wasting work time on matters					
	outside the scope of the job.					
4	There is pressure as a result of the					
	lack of employees in the work					
	departments.					
5	There is pressure as a result of					
	misallocation of business.					
	Work Environment	Never	Scarcely	sometimes	usually	continuously
1	There is pressure as a result of the					
	lack of material incentives					
1	lack of material incentives commensurate with the employee's					
	commensurate with the employee's effort and efficiency.					
2	commensurate with the employee's effort and efficiency. There is pressure as a result of the					
2	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible					
2	commensurate with the employee's effort and efficiency. There is pressure as a result of the					
2	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible with the requirements of life.					
2	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible with the requirements of life. There is pressure due to the lack of					
	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible with the requirements of life. There is pressure due to the lack of appropriate annual bonuses.					
	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible with the requirements of life. There is pressure due to the lack of appropriate annual bonuses. There is pressure due to lower					
3	commensurate with the employee's effort and efficiency. There is pressure as a result of the income level not being compatible with the requirements of life. There is pressure due to the lack of appropriate annual bonuses.					

5	There is pressure as a result of			
	unfair pay among employees.			

Part Three The dependent variable: the time spent in receiving and providing the emergency service

	he Time Spent In Receiving And roviding The Emergency Service	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	The emergency service reception transactions are done quickly and without obstacles.					
2	There are no waiting times for emergency patients at the reception.					
3	The priority of providing emergency services is determined according to the nature and severity of the cases and quickly.					
4	The emergency team cooperates well in providing ambulatory service.					
5	The lack of human resources negatively affects the provision of emergency services					