$^1{\rm Sabah}$ Mostafa Ahmed, 2 Ghada Mohamed Mourad, $^3{\rm Mawaheb}$ Mahmoud Zaki and $^4{\rm Rehab}$ EL-Sayed Mohamed

(1) Director of the School of Nursing for boys, Hosh Essa, El Beheira Governorate, Egypt, (2)Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing-Ain Shams University, Egypt and (3,4)Assistant Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing-Benha University, Egypt

Abstract

Background: Stress and burnout are frequently associated with critical care nursing. Nurses experience stressful situations in their daily work environment. Poor job performance among nurses might be induced by occupational stress. Aim of study: Was to assess the relation between occupational stress, burnout and job performance among nurses working in ICUs at Benha University Hospital. **Design:** A descriptive exploratory correlational design was used. **Setting**: This study was conducted at Benha University Hospital in (intensive care unit, intermediate care unit, pediatric and neonatal intensive care unit), Qalubia Governorate. Research sample: A purposive sample of 100 nurses was included in this study. Tools of data collection: Data was collected by the following tools. I: Work related stressors questionnaire, it consists of two parts: Part I: Sociodemographic data, Part II: Work related stressors scale. II: Maslach Burnout Inventory and III: Six dimension scale of nursing performance. Results: About to thirty quarters of studied nurses had severe level of work related stressors, near to two thirds had high level of burnout and about two thirds had good performance. Conclusion: There was a positive correlation between work related stressors and burnout among studied nurses. On the other hand, there was negative correlation between work related stressors, burnout and job performance. Recommendation: Conducting a nurse's assistance programs that introduced for early identification and interventions on problems that make stress so that performance levels could increase.

Key words: Burnout, Job performance, Nurses, Occupational stress.

Introduction:

A healthy working environment is not only absence of harmful conditions but also an abundance of health promoting ones. Stress is the harmful physical and emotional response caused by an imbalance between the demands perceived and the perceived resources and abilities of individuals to cope with those demands. Occupational stress occurs when the needs of the worker, or when the knowledge or abilities of an individual worker or group to cope are not matched with the expectations of the organizational culture (Eldin et al., 2021).

Stress is an interdisciplinary concept that becomes an area of great interest and has been widely explored. Occupational stress is the main issue under the focus of professions. Though, occupational stress depends mainly on the nature of profession. Stress is highly presented in health Professions. This high level of stress is related to the type of tasks and responsibilities required in this kind of professions. Occupational stress in nurses is considered a common problem worldwide. Nursing is a profession of high stress which cause negative effects on the health of nurses and on patients care (Aserri et al., 2021).

Occupational stress, job stress. organizational stress, and work related stress are interchangeably used terms. Work related stress has recognized as the main challenge for the nursing profession throughout the world and has negative emotional, physical, and psychological effects on the nurse. Research evidence demonstrated that nurses suffer from high levels of work related stress are threatening their health, patients' lives compromise the quality of nursing care. Excessive stress has been found to reduce the quality of nursing care (Baye et al.,2020).

Well-being of healthcare workers is an essential pillar in health service delivery. It may affect their performance at work as well as patients' safety. Burnout is one of the negative work related health conditions among healthcare workers. It is a syndrome that might develop among professional subjects who work in human service facilities. Burnout is considered as the clinical manifestation of occupational stress. It is highly prevalent among healthcare providers. This could be explained by the nature of their profession (Osman & Abdlrheem, 2019).

Most of the time, burnout can occur due to the presence of job demands like work overload, prolonged working hours, nurse patient ratio imbalance, role conflict, lack of fairness, conflict in values and job resources like lack of social support from colleagues or management, and poor participation in decision making. It represents a high cost to workers and their institutions. Burnout not only affects physical and mental abilities but also affects the individual's health. Therefore, identification and prevention of burnout play an important role in improving the nursing performance (Hailay et al., 2020).

The performance of nurses, who constitute a large part of the healthcare

industry workforce, is important for both the organization and those receiving the service. The performance of nurses is reported to be a priority in the delivery of quality healthcare. Nurses are the professional group within the health team that interact with patients/healthy individuals and their families and other professional groups in the organization the most while playing an important role in directly impacting the health outcomes and indicators of institutional quality and public health through the nursing care they provide (Bhatti et al., 2018).

Job performance defined as "the actions and behaviors of individuals responsibilities of their work that contribute organizational goals". Hospitals administrations can be enhanced nurse's performance by develop strategies improve work environment that reflect not only on performance of nurses, but also on the quality of nursing services provided. Poorer performance of nurses can lower individual work productivity and cause safety issues. patient Developing performance of nurses lead to organizational success (Safarpour et al., 2018).

Intensive Care Units (ICUs) nurses work in particularly stressful and burdensome environment .Patient care in ICU characterized by extremely demanding tasks and requiring urgent therapeutic intervention (Cotrau et al., 2019). An ICU nurse's job is characterized by an excessive workload, a need for fast decision making regarding patient care, and working with highly developed technologies. ICU nurses are also thought to experience more occupational stress and burnout than nurses working on general wards. It has been argued that because of an increasing elderly population and the growing burden of chronic illnesses. Occupational stress is negatively associated

with nurses' patient care behaviors (Chegini, 2019).

Significance of the study

Occupational stress has a financial burden on health care systems, World Health Organization estimated the cost of work stress and its related problems about \$ 150 billion annually. Besides that, low job performance and reduced quality of nursing services are affect patient safety. According to the American Institute of Stress Work stress is responsible about 80% of work injuries and 40% of workplace turnover. Occupational responsible is about 70% stress of absenteeism. It estimated 93% that of nurses under stress factors in their work (Al-Nuaimi et al., 2021).

Nursing is one sensitive and tense, yet important occupation; studying the status of physical and mental health of nurses is very important and certainly paying attention to their health and evaluating their difficulties causes to create motivations and effective interventions in maintaining human resources and their job performance as the most important part of the health system's capital. Occupational stress of nursing is associated with a high level of physical and mental diseases for nurses and negatively associated with nurses' patient care behaviors. As a result, in this research, we tried to assess the relationship between occupational stress, burnout and job performance among nurses working in ICUs at Benha University Hospital.

Aim of this study

The aim of the study was to assess the relationship between occupational stress, burnout and job performance among nurses working in ICUs at Benha University Hospital.

Research question

What was the relation between occupational stress, burnout and job performance among nurses working in ICUs at Benha University Hospital?

Subject and methods

Research design:

A descriptive exploratory correlational design was used.

Research setting:

The present study was conducted at Benha University Hospital in some ICUs departments (intensive care unit, intermediate care unit, pediatric and neonatal intensive care unit). Benha university hospital is composed buildings; three separated Medical building, Surgical building and ophthalmology building. It includes 19 clinical departments and 11 intensive care units.

Research sample:

- A purposive sample was used in the study.
- All staff nurses (152) who working at ICUs that selected and distributed as the following; intensive care unit (47), intermediate care unit (30), pediatric intensive care unit (35) and neonatal intensive care unit (40) staff nurses.
- There were (52) nurses from total number of staff nurses who working at the previously mentioned setting were excluded because their work experience less than one year, some were on leave. Also there were large number of them refused to participate in the study this is due to the short time and work load.
- -The total number of participants were (100) nurses after exclusion. Overall,(25) from each department.

Tools of the study:

Tool (1): Work related stressors questionnaire:-

It consists of two parts:

Part I: Socio-demographic data: to elicit data about staff nurses such as (age, sex, department, marital status, educational levels, work hours/weak, job tittle, years of experience, income and Place of residence).

Part II: Work related stressors scale: The work related stressors scale (Abu shousha, 2018) aimed to assess work related stressors among nurses. It contained 67 items divided into 11 major domains related to work related stressors distributed as the following: work .death and dving .Inappropriate load experiences, lack of support from my colleagues at work, the uncertainty of the treatment methods, conflict with physicians , conflict between nursing staff and others, job security, work requirements, contact with others and work environment.

Scoring system:

Each statement response will measured on three point likert scale that range from (1) mild, (2) moderate and (3) sever cause of stress. The range of score is from 67 to 201. The level of stress is considered sever if the percent score more than 150 score (>75%), moderate if the percent score range from (121-150) score (60% - 75%), while it consider mild if the percent score less than (120) score (<60%).

Tool (2): Maslach Burnout Inventory (MBI).

The MBI (Maslach and Jackson, 1982) was designed to measure burnout among individuals working in the human services and health care occupations including nursing. Consisting of 22 items grouped into three domains; Emotional exhaustion (EE), Depersonalization (DP) and personal accomplishment (PA).

Scoring system

| Items | Item | Degree of burnout | | | | Degree of burnout | | |
|-------|-------|-------------------|----------|------|--|-------------------|--|--|
| | Score | Low | Moderate | High | | | | |
| EE | 0-54 | ≤ 16 | 17- 26 | ≥ 27 | | | | |
| DP | 0-30 | ≤ 6 | 7- 12 | ≥13 | | | | |
| PA | 0-48 | ≥ 39 | 32- 38 | ≤ 31 | | | | |

Tool (3): The Six Dimension Scale of Nursing Performance (6-DSNP)

The (6-DSNP) (Schwirian, 1978) was used to assess the quality of nursing performance. It consisted of six sub-scales and 52 items. The sub-scales include: Leadership, Critical Care, Teaching / Collaboration, Planning / Evaluation, Interpersonal Relations / Communication, and Professional Development. Each item was answered on a 4-point likert scale rated as "not very well (1), satisfactory (2), well (3) and very well (4)".

Scoring system

The total performances score was divided groups namely; good and poor performance according to the total mean score (3.10 ± 0.30) . Nurses who scored above the mean was considered having good performance while nurses who scored below the mean considered having poor performance.

Validity of the tools:

The investigator prepared the tools for data collection. The tools were evaluated by five jury experts in Psychiatric and Mental Health Nursing. They were from different academic categories in Faculty of Nursing at Benha University who reviewed the tools for clarity, comprehensiveness, relevance, accuracy, understanding and applicability.

Reliability of the tools:

All study tools were tested for the reliability. The reliability was tested through Cronbach's Alpha reliability analysis. Reliability for work related stressors questionnaire was 0.69, Maslach burnout inventory was 0.72 and six dimensions scale of nursing performance was 0.75.

Ethical Considerations:

Oral informed consents were obtained from the participants. They were informed about their rights to refuse or withdraw from the study with no consequences. They were reassured about the anonymity and confidentiality of the information collected, and would be used only for the purpose of scientific research.

Pilot study:

A Pilot study was conducted on about 10% of total sample (10 nurses) working at ICUs. The aim was to examine the sequence of items, feasibility, practicability and applicability of the tool, clarity of the language and for estimating the time needed to fill it.

Field work:

- The researcher met staff nurses and explained the aim and the nature of the study and the method of filling questionnaire. This was done individually or through group meetings.
- After getting oral agreement from nurses to participate in the study. The researcher distributed the questionnaire sheets to the participated staff nurses to fill it. Also there were some nurses refused to participate in the study.
- The filled forms were collected in about time (15-30) minutes and revised to check their completeness to avoid any missing data.

- Data collected in the presence of the researcher to clarify any ambiguity.
- -The process of data collection took a period of 3 months from the beginning of March 2021 to the end of May 2021, 2 days/ week, from 10 A.M to 1 P.M , about 5 nurses/ day, 8 days/ month. The average number of sheets filled per month was ranged between 30 to 40 sheet.

Statistical analysis:

After completion of data collection, the data were organized ,coded, computerized, tabulated and analyzed by using the statistical Package, while statistical analysis was done using (SPSS version 21), which used frequencies and percentages for qualitative descriptive data, Chi-square X² test, F test and T test were used for relation tests, mean and standard deviation was used for quantitative data and person correlation coefficient (r) was used for correlation analysis and degree of significance was identified. Statistical significance level value was considered when p- value < 0.05 and a highly significance level was considered when p-value < 0.001, while p-value > 0.05 indicates non-significant results.

Results

Table (1): Reveals that more than (59%) of studied nurses between(18- < 28) years old with mean and standard deviations (30.1 \pm 6.74), near to two thirds (64%)of them were females and less than half (48%) of them were married. As regard to education level, less than half (44%) of the studied nurses had nursing institute. More than half (53%) of studied nurses worked for 36 hours / week and about two thirds (67%) of them were nursing staff. Regarding to years of experience, all studied nurses had more than one year of experience. While less than two thirds (63%) of studied

nurses from rural areas and less than two thirds (64%) of them had not enough income.

Table (2): Displays that the total mean score and standard deviation of work related stressors experienced by nurses was (1.52 ± 0.27) . The mean scores of work related stressors subscales showed that conflict with physician situations had the highest stress score; mean and standard deviation was (1.91 ± 0.29) , followed by uncertainty of the treatment methods; mean and standard deviation was (1.64 ± 0.60) and inappropriate experience had the lowest stress score; mean and standard deviation was (1.25 ± 0.41) .

Figure (1): Proves that all studied nurses were suffered from stress with different levels. About to thirty quarters (74%) of studied nurses had severe level of work related stress. In addition to less than one quarter (18%) of studied nurses had moderate level of work related stressors. The lowest percent (8%) of studied nurses had mild level of work related stress.

Figure (2): Shows that all studied nurses were suffered from burnout with different levels. Near to two thirds (64%) of studied nurses had high level of burnout. The lowest percent (17.0%) of studied nurses had moderate level of burnout. And (19.0%) of them had low level of burnout.

Table (3): Presents that the total mean score and stander deviation regarding to nursing performance among studied nurses was (3.10±0.30). The highest mean and stander deviation (3.27±0.39 & 3.22±0.59) of the studied nurses was regarding to

dimensions of critical care and professional development, respectively. On the other hand the lowest mean and stander deviation (2.91 ± 0.37) of the studied nurses was regarding to dimension of teaching / collaboration.

Figure (3): Reveals that about two thirds (67%) of the studied nurses had good performance. On the other hand, about one third (33%) of studied nurses had poor performance.

Table (4): Clarifies that there was a highly statistically significance relation between total work related stressors levels and total burnout levels among studied nurses at ($\mathbf{X}^2 = 82.76$, P < 0.001**)

Table (5): Demonstrates that there was a highly statistically significance relation between total work related stressors & total nursing performance among studied nurses. Additionally, there was highly statistical significant relation between total nursing burnout and total nursing performance among them at (F=7.71, P<0.001** & F=37.64, P<0.001**), respectively.

Table (6): Reveals that there was a positive correlation between work related stressors and burnout among studied nurses. On the other hand, there was a negative correlation between work related stressors, burnout and job performance.

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Table (1): Number and percentage distribution of sociodemographic data among studied nurses. (N=100)

| Socio-de | emographic data | N | % |
|--------------------|---|--------|-------|
| | • 18-<28 | 59 | 59.0 |
| Age | • 28-<38 | 31 | 31.0 |
| | • 38-<48 | 10 | 10.0 |
| | ≥48 | 0 | 0.0 |
| | $Mean \pm SD \qquad 30.1$ | ± 6.74 | |
| Sex | • Male | 36 | 36.0 |
| БСХ | Female | 64 | 64.0 |
| | • Single | 37 | 37.0 |
| Marital status | Married | 48 | 48.0 |
| Maritar status | Widowed | 6 | 6.0 |
| | Divorced | 9 | 9.0 |
| Level of education | Secondary Nursing | 6 | 6.0 |
| | Nursing Institute | 44 | 44.0 |
| | Bachelor of Nursing | 32 | 32.0 |
| | Postgraduate | 18 | 18.0 |
| Work hours /weak | • <36 hours / week | 33 | 33.0 |
| | • 36 hours / week | 53 | 53.0 |
| | • >36 hours / week | 14 | 14.0 |
| | Staff nurse | 67 | 67.0 |
| Job title | Supervisor | 31 | 31.0 |
| | Head nurse | 2 | 2.0 |
| Number of | One year | 0 | 0.0 |
| experience years | • > One year | 100 | 100.0 |
| Residence | • Rural | 63 | 63.0 |
| Residence | • Urban | 37 | 37.0 |
| | Not enough | 64 | 64.0 |
| Income | Enough | 34 | 34.0 |
| | Enough and save | 2 | 2.0 |

Table (2): Mean and standard deviation of work related stressors subscales among studied nurses. (N=100)

| work related stressors domains | Mean ± SD |
|--|-----------|
| Work Load | 1.57±0.33 |
| Death and dying | 1.51±0.31 |
| Inappropriate experience | 1.25±0.41 |
| Lack of support from my colleagues at work | 1.56±0.35 |
| The uncertainty of the treatment methods | 1.64±0.60 |
| Conflict with physician | 1.91±0.29 |
| Conflict between nursing staff and others | 1.51±0.46 |
| Job security | 1.54±0.36 |
| Work requirements | 1.52±0.51 |
| Contact with others | 1.33±0.43 |
| Work environment | 1.63±0.33 |
| Total work related stressors | 1.52±0.27 |

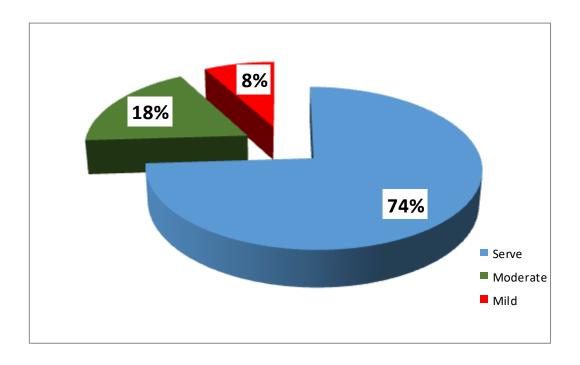


Figure (1): Percentage distribution of work related stress levels among studied nurses. (N=100)

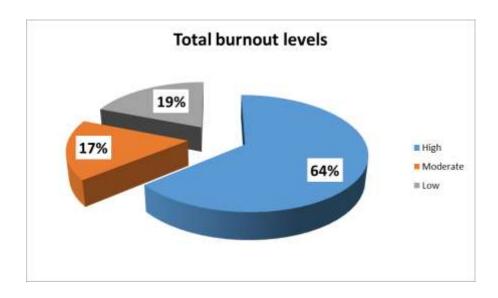
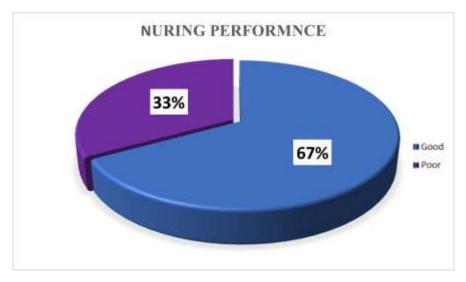


Figure (2): Percentage distribution of total burnout levels among studied nurses. (N=100)

Table (3): Mean and standard deviation of domains of six dimension scale of nursing performance (6-DSNP). (N=100)

| Domains of (6-DSNP) | Mean±SD |
|---|-----------|
| Leadership | 3.06±0.45 |
| Critical care | 3.27±0.39 |
| Teaching / Collaboration, | 2.91±0.37 |
| Planning / Evaluation | 3.14±0.41 |
| Interpersonal relationship /Communication | 3.03±0.36 |
| Professional development | 3.22±0.59 |
| Total nursing performance | 3.10±0.30 |



Figure(3):Percentage distribution of total nursing performance among studied nurses. (N=100)

Table (4): Relation between total work related stressors and total burnout inventory.

| | Total work related stressors | | | | | | | |
|------------------|------------------------------|-------|----------------|------|--------------|------|----------|-----------|
| Items | Mild N =8 | | Moderate N =18 | | Severe N =74 | | 2 | P value |
| | N | % | N | % | N | % | | |
| Total burnout | | | | | | | | |
| Low (n =19) | 8 | 100.0 | 11 | 61.1 | 0 | 0.0 | | |
| Moderate (n =17) | 0 | 0.0 | 6 | 33.3 | 11 | 14.9 | 82.76 | < 0.001** |
| High (n = 64) | 0 | 0.0 | 1 | 5.6 | 63 | 85.1 | | |

Table (5): Relation between work related stressors, nursing burnout and nursing performance among studied nurses. (N=100)

| Items | Job performance | F test | P value | |
|------------------------|--------------------|--------|----------|--|
| | Mean ± SD | | | |
| Burnout | | | | |
| Low (n =19) | 163.44 ± 29.12 | 7.71 | <0.001** | |
| Moderate (n =17) | 166.58 ± 3.42 | | | |
| High (n = 64) | 153.15 ± 9.61 | | | |
| Work related stressors | | | | |
| Mild (N =8) | 184.75 ± 2.18 | 37.64 | <0.001** | |
| Moderate (N =18) | 168.0 ± 0.29 | | | |
| Severe (N =74) | 151.71± 12.76 | | | |

Table(6):Correlation between work related stressors, burnout, nursing performance and Pearson's rank correlation coefficient (R) among studied nurses. (N=100)

| Items | | Work related Stressors | Burnout |
|------------------------|---------|------------------------|----------|
| Work related stressors | | | |
| Duran cust | r | 0.841 | |
| Burnout | P value | < 0.01** | |
| Nursing performance | r | - 0.63 | - 0.89 |
| runsing performance | P value | < 0.01** | < 0.01** |

Discussion:

The results of the study revealed that more than half (59%) of studied nurses were between (18>28) years old with mean and

standard deviations 30.1 ± 6.74 , near to two thirds (64%) of them were females and less than half (48%) of them were married. As regard to education level, less than half (44%) of the studied nurses had nursing institute.

Also, more than half (53%) of studied nurses worked for 36 hours / week and about two thirds (67%) of them were nursing staff. Regarding to years of experience, all studied nurses had more than one year of experience. While less than two thirds (63%) of studied nurses from rural areas and less than two thirds (64%) of them had not enough income.

The current study illustrated that nurses faces a lot of occupational stress and that the conflict with physician was the major source causing stress. In addition the uncertainty of the treatment methods, work environment and work load were main causes of occupational stress. This results come on the same line with study of **Johan et al.**, (2017), reported that occasional, frequent and extreme occurrence of nursing stress due to conflict and inappropriate communication with doctors and improper work environment.

This study was in contrary with study of Amini et al., (2020), studied Sources of occupational stress and their relationship with personal and occupational factors in nurses of Rasht Teaching Hospitals ".They indicated that the domains of uncertainty of treatment, death and dying, and workload were the most frequent sources of occupational stress. Also Gurung et al., (2020), reported that uncertainty concerning treatment, death and dying and workload were the most stressful factors for nurses.

Due to nurses' and physicians' common field of work, their inter-professional collaboration is inevitable. In ICU, the complexity of caring for critically ill patients requires teamwork and inter-professional interaction. The importance of proper communication between doctors and nurses and also amongst nurses cannot be overstated. A professional relationship between doctors and fellow nurses is of utmost importance for

the patient's wellbeing and proper management. Whenever there are conflicts, lack of cooperation or communication, problems appear and cause stress. Conflict with physician was the main cause of work related stress among nurses in this study.

This study illustrated that all studied nurses were suffered from stress with different levels. The majority of studied nurses had sever level of occupational stress and less than one quarter of them had moderate level of occupational stress. Also, the lowest percent of studied nurses had mild level of occupational stress.

The result of this study come in the same line with a study done by **Alkhawaldeh et al., (2020),** reported that more than two third of nurses had high level of occupational stress. By contrast, this result was inconsistent with the research of **Fanani et al., (2020),** reported that job stress level experienced by the nurses in the Malang Islamic Hospital was at a low to moderate level.

Regarding the total burnout levels, near to two thirds of the study participants were classified as having a high level of burnout. This is due to burnout defined as stress, result of continuous and long term stress exposure. Burnout has been described as an inability to cope with emotional stress at work or as excessive use of energy and resources leading to feelings of failure and exhaustion. As stress and burnout mutually affect each other's, there is high level of burnout in this study. These result consistent with a study done by Ashifa, (2020), showed that the nurses on the study were at a very high burnout level. This study was in contrary with Abbas et al., (2019), showed that more than two-thirds of the study participants were classified as having a moderate level of burnout.

The total mean score and stander deviation regarding to nursing performance among studied nurses was (3.10±0.30). The highest mean and stander deviation (3.27±0.39) of the studied nurses was regarding to dimension of critical which indicated nurses care. performed better in critical care skills. On the other hand the lowest mean and stander deviation (2.91±0.37) of the studied nurses was regarding to dimension of teaching / collaboration. This indicated that nurses were implemented the least activities of teaching/ collaboration. In general, two thirds of studied nurses had good performance implementing nursing activities and one third of them had poor performance in their wok.

The result of this study come in the same line with study of Mahat et al., (2018), revealed that, The mean scores for performance frequency showed the highest mean score of critical care. Then it was followed by professional development and relationship/communication, interpersonal also teaching/ collaboration had the lowest mean score. The overall mean score for performance quality was (3.51±0.34). And in general, nurses were performing well in their work.

In the other hand these finding was in disagreement with a study carried out by **Ramadan et al., (2020),** illustrated that, interpersonal relationship /communication had the highest mean score followed by teaching/collaboration. Also critical care had the lowest mean score.

In accordance to the relation between total work related stressors levels and total burnout levels among studied nurses, there was a highly statistically significant relation between total work related stressors levels among studied nurses and their total burnout

levels at $(X^2 = 82.76, P < 0.001)$. This result supported by **Saravanabavan et al., (2019),** Who reported a highly statistically significant relation between level of stress and domains burnout among ICU healthcare workers.

Concerning to the relation between total work related stressors and total nursing performance among studied nurses, there was a highly statistically significant relation between total work related stressors and total nursing performance among studied nurses at (F= 7.71& P< 0.001). This result comes in agreement with a study done by **Deng et al.**, (2019), reported that job stress was directly and highly significantly associated with nursing job performance. Also this result is contradicted with a study done by **Qattan**, **A**. (2017), reported that there was a very weak relationship between work-related stress and job performance among nurses.

Concerning to the relation between total burnout and total nursing performance among studied nurses, there was highly statistical significant difference relation between total nursing burnout and total performance among studied nurses at (F= 37.64, P < 0.001). This result comes in agreement with a study done by **Dvrbve** et al., (2019), indicated that burnout influence nurses' job performance. Where nurses with burnout were also more likely to rate their own job performance as worse. In contrast, this result is contradicted with a study done by Kim et al., (2017), reported that the relationship with burnout did not significantly predict task performance.

With concern to the correlation between work related stressors and burnout among studied nurses, this result revealed that there was positive correlation coefficient between work related stressors and burnout among

studied nurses. Nurses play an important role in the quality of health care provided, patient safety, treatment process, and hospital performance. However, with increase in work stress they will not be able to perform these roles effectively within the required time and this will lead to increased levels of burnout. ICU is a highly stressful work environment and may, therefore, be associated with a high rate of burnout syndrome among health care workers.

This result come in the same line with a study done by **Akkoc et al., (2021),** reported that there was positive correlation between work stress, burnout and its sub-dimensions. Also, this study agreement with a study had done by **Liu & Aungsuroch, (2019),** founded that work stress moderately and positively influenced burnout.

The study results showed a negative correlation between work related stressors and job performance among studied nurses. Work related stress causes physical and emotional exhaustion among nurses that leading to reduced efficiency or productivity among nurses and interferes with quality of care. This result supported by **Kouhnavard et al.**, (2020), illustrated the correlation of job performance with job stress in hospital nursing staff and showed that there was a significant inverse relationship between these two variables, so that, with increasing job stress, job performance decreased.

On the other hand, this result disagreement with a study done by **Ella et al., (2021),** suggested that as workers stress rises, their work performance is also likely to rise and vice versa. Mild stress enhances performance when under pressure, acts as a motivator and helps to ensure safety when there are threats. High level stress means high competitiveness, thus, high performance.

Concerning to the correlation between burnout and job performance among studied nurses, this result revealed that there was negative correlation coefficient between burnout and job performance among studied nurses. This result comes in agreement with a study done by **Dafchahi & Gilani**, (2021), reported that burnout had negative effect on nurses' performance.

Conclusion

The present study revealed that there was positive correlation between work related stressors and burnout among studied nurses. On the other hand, there was negative correlation between work related stressors, burnout and job performance.

Recommendations

- Conducting a nurse's assistance programs that introduced for early identification and interventions on problems that make stress so that performance levels could increase.
- Improving a safe and secure environment at the hospital by providing adequate and proper facilities.
- -Replication of the current study on a larger probability sample and in all ICUs is highly recommended to achieve generalizable results.

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العلاقة بين الضغط الوظيفي والأحتراق النفسي والأداء الوظيفي لدي الممرضين العاملين بأقسام العناية المركزة بمستشفى بنها الجامعي

صباح مصطفي أحمد _ غادة مجد مراد _ مواهب محمود زكي _ رحاب السيد مجد

الضغط الوظيفي والإستجابة الجسدية والعاطفية الضارة الناجمة عن عدم التوازن بين مطالب العمل وقدرات الأفراد على التعامل مع تلك المطالب. أصبح الضغط الوظيفي ظاهرة عالمية تحدث بأشكال مختلفة في كل مجالات العمل وخاصة في المهن الصحية ونظرا لطبيعة مهنة التمريض تمر الممرضات بمزيد من الضغط بالمقارنة مع مقدمي الرعاية الصحية الأخرين. لذا هدفت هذه الدراسة الي تقييم العلاقة بين الضغط الوظيفي والأحتراق النفسي والأداء الوظيفي لدي الممرضين العاملين بأقسام العناية المركزة بمستشفي بنها الجامعي. وأجريت هذه الدراسة في بعض أقسام العناية المركزة (العناية المركزة – العناية المركزة المتوسطة – عناية الأطفال والحضانات) بمستشفى بنها الجامعي – محافظة القليوبية – مصر علي (١٠٠) ممرض وممرضة ارتباطية موجبة بين الضغوطات المتعلقة بالعمل والأرهاق لدي الممرضين الخاضعين للدراسة علي وجود علاقة ارتباطية موجبة بين الضغوطات المتعلقة بالعمل والأرهاق لدي الممرضين الخاضعين للدراسة. من ناحية أخري كان هناك ارتباط سلبي بين الضغوطات المتعلقة بالعمل والأرهاق مع الأداء الوظيفي. كما أوصت الدراسة بتنظيم ندوات وورش عمل وبرامج تعليميه تستهدف حل الخلافات وإدارة الضغوطات التي يتعرض لها الممرضين.