Relationship between Work Related Nurses Stress and Socioeconomic Status of Critical Care Units at Medical City in Baghdad city

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Abstract:
Work related stress is recognized worldwide as a major challenge for the health of workers especially nurses. Nursing has been identified as one of the most stressful jobs. Work-related stress in nurses affects both individual and organizational functioning as well as health care. A descriptive study was conducted among the nurses of the critical care units in the medical city to assess the work-related stress and determine Socioeconomic Status for nurses at Critical Care Unit. A non-probability (purposive) sample of (200) nurses who were working at Critical Care was chosen. The questionnaire was developed by the researcher; It consists of three parts; the first one (nurse demographic data) consists of (7) items; the second part (Socioeconomic Status scale) consists of (13) items, and Perceive stress scale which consists of (10) items. The data was collected by using a questionnaire and analysed through Statistical Package for the Social Sciences (version24.0) using a descriptive statistical approach (frequency, percentage, mean of score, standard deviation) and inferential statistical approach (chi_square test). The result reveals that, all staff nurses who are working in Critical Care Unit suffer from stress; that nurses working in critical care units are experiencing severe stress (71%). Motivational and specification programs for workers in critical care units are exposed to work pressure, and encourage nurses for working in critical units by giving awards and increase of encouragement, Working providing a sufficient number of nurses in critical units to avoid nursing shortage in critical care unit, and increase level of income

Keywords: Work related stress, critical care unit, nurses

Introduction
Work stress is defined as adverse physical and emotional reactions that occur when the demands of the job do not match the skills, resources or needs of the worker. Stress at work is a number of examples that occur in work environments. A range of actions occur in people's behaviour, physical or physical functioning, or in the way they do their jobs because of people's interaction with their stressful work environment. Work stress occurs when 'There is no coordination between job requirements and skills, skills and requirements (Abdullah, Mirza, & Othman, 2018).

Nurses but above all, suffer greatly and the risk of problems is associated with stress, Work and stress, with high rates of infection. Health care workers have found that 27% of them experience mental stress compared to 14 to 18% of the world population (Clegg, 2001; Kirkcaldy & Martin, Mark 2012).

Many of work are exposed to different types of stress in the work place environment; one of these occupations is nursing, which occupies essential role and vital parts of the effectiveness of health care system (Ameen & Faraj, 2019).

According(NationalHealthService.2019), Critical Care Units (CCU) are specialized hospital services that treat critically ill patients and require constant monitoring. For example, these patients may have problems with one or more vital organs, or they may not be able to breathe unaided. These units have specially trained health professionals who provide intensive care and treatment. For example, there is usually a nurse for one or two patients. Patients in these units are closely monitored and assisted by sophisticated equipment, including ventilators that make it easier for the patient to breathe. Employees are more likely to develop
depression, and doctors and nurses rank higher. Among the various services in health care facilities, intensive care and emergency rooms are perhaps the most stressful. Emergency and intensive care units are exposed to a high level of stress due to the handling of precarious, difficult and unsafe medical situations, quick decisions, complex procedures and considerable technical requirements (Chatzigianni, Markopoulos, & Sarafis, 2018).

Methodology

A descriptive study was conducted among the nurses of the critical care units in the medical city to assess the work-related stress and assess the Socioeconomic Status at Critical Care Unit.

A non-probability (purposive) sample of (200) nurses who were working at Critical Care were chosen.

The questionnaire was developed by the researcher; It consists of three parts; the first one (nurse demographic data) consists of (3) items; the second part (Socioeconomic Status scale) consists of (13) items, and Perceive stress scale which consists of (10) items.

The data was collected by using a questionnaire and analysed through Statistical Package for the Social Sciences (version 24.0) using a descriptive statistical approach (frequency, percentage, mean of score, standard deviation) and inferential statistical approach (chi-sequre test).

Ethical Considerations: The Institutional Review Board (IRB) at the University of Baghdad, College of Nursing approved the study to be conducted. The study protocol meets both the global and the Committee on Publication Ethics (COPE) standards of respecting human's subjects, rights.

Results:

Table (1): Distribution of the Nurses According to their Socio-demographic Characteristics

<table>
<thead>
<tr>
<th>List</th>
<th>Variables</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Male</td>
<td>111</td>
<td>55.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>89</td>
<td>44.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M±SD=31±8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 – 29 years</td>
<td>96</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>30 – 39 years</td>
<td>63</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td>40 – 49 years</td>
<td>31</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>50 ≤ years</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Nursing qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary school</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>78</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>61</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation
Table (2) Association between Nurses' Perceived Work-related Stress and their Socioeconomic Status (n=200)

<table>
<thead>
<tr>
<th>Stress Socioeconomic</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Total</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0</td>
<td>22</td>
<td>34</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>1</td>
<td>22</td>
<td>54</td>
<td>77</td>
<td>$R = .168$</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>13</td>
<td>54</td>
<td>67</td>
<td>$P = .018$</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>57</td>
<td>142</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

| Chi-square | $\chi^2_{obs.} = 7.541$ | df = 4 | $\chi^2_{crit.} = 7.863$ | P-value = .110 |

R= Pearson Correlation, df: Degree of freedom  
$\chi^2_{obs.}$: Calculated Chi-square  
P: Probability level (P-value ≤ 0.05)  
$\chi^2_{crit.}$: Tabulated Chi-square

This table shows that there is a significant relationship between nurses’ stress and their socioeconomic status at p-value = .018.

Figure (1): Levels of Work-related Stress among Nurses working at Critical Care Units (N=200).

Discussion:
Discussion of the socio-demographic characteristics of the study sample who working at critical care units:  
1. Gender
The results of the study showed that more than half (55.5%) of the nurses are men; these results are confirmed by Abdullah and Abbas (2015) who showed that the highest percentage (79%) of nurses were men. Furthermore, he contradicts the results of the study conducted by Jissir and Hassan, which mentions that (56.6%) of the participants were women.

The high proportion of the male study sample in intensive care units corresponds to a normal situation due to the long working hours in intensive care units and the majority of the study sample in the early shift in the intensive care units.

2. Age

The results of the study showed that the majority of nurses (48%) are between 20 and 29 years old. This is consistent with the results of Abdullah, Mirza and Othman, (2018), who found that a high percentage of the study sample was under (30) years old. The high percentage of (20-29) year olds in the study sample is due to the fact that ICUs employ highly qualified nurses and recent graduates to provide ICU health services.

The results found in Mousa et al. (2015), otherwise the study of Mohammed and Tawfiq, (2014), do not agree with these conclusions, which showed that the majority of the study sample was deliberately selected and is of the same age (over 30 years) as the overall sample.

3. Nursing qualification

With regard to qualifications in nursing, the highest proportions (39%) are among the nurses with a diploma and (30)% of the study sample. This finding is consistent with the study performed by Abdullah and Abbas (2015), in addition to Abdullah, Mirza and Othman (2018), which showed that most nurses are graduates of a medical institute (diploma).

Furthermore, it is inconsistent with the results obtained in Hami and Atiyah (2020), which mention that the majority of study participants working in the ICU are nursing school graduates.

Critical care units require highly qualified nursing staff, such as a graduate and bachelor's degree; these results are due to the lack of postgraduate university students.

Discussion of Association between Nurses’ Perceived Work-related Stress and their Socioeconomic Status (Table: 2)

The nurses participated in the study reported moderate to high socioeconomic status in which (38.5%) of them are with moderate level and (33.5%) of them are with high level socioeconomic status. The results of the present study is in line with the findings of Jissir and Hassan (2017) which declared that (70%) of study sample at high level of income.

Conclusion:

The study shows high work stress (71%) of Nurses, All nurses suffer from job stress, and the study shows a significant relationship between general stress and the scale of socioeconomic level.

Recommendations:

Motivational and specification programs for workers in critical care units are exposed to work pressure, and encourage nurses for working in critical units by giving awards and increase of encouragement. Working providing a sufficient number of nurses in critical units to avoid nursing shortage in critical care unit, and increase level of income.

References


