The influence of individual, environmental and organizational factors on the work stress among Indonesian nurses in Kuwait

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Abstract

\textbf{Background:} The condition of Indonesian nurses in the Sabah Hospital Kuwait shows symptoms of nurse work stress, while the quality of service for health care facilities needs to be maintained and improved through strengthening individual, environmental and organizational factors towards optimizing the positive response of performing nurses.

\textbf{Purpose:} To determine individual, environmental, organizational and work stress factors as well as to determine the influence of individual, environmental and organizational factors on the work stress of Indonesian nurses in Kuwait.

\textbf{Method:} A descriptive cross-sectional observational design with multiple linear regression analysis and using a sampling technique with a total sampling of 65 nurses who work at Al Sabah Hospital in Kuwait.

\textbf{Results:} Shows that individual factors are in the Moderate category and have an effect of 9.6\% on nurses' work stress. Environmental factors are in the Moderate category and have an effect of 23.3\% on the work stress of nurses. Organizational factors are in the Moderate category and have an effect of 12.7\% on the work stress of nurses. The work stress of Indonesian nurses is in the Moderate category at 75.38\%, high at 1.54\% and in the low category at 23.08\%.

\textbf{Conclusion:} There is a significant influence of 45.6\% between individual, environmental and organizational factors on the work stress of Indonesian nurses in Sabah Hospital Kuwait while the rest is influenced by other factors.

\textbf{Suggestion:} Hospitals need to design workshops or training programs on individual coping mechanisms and work stress management on a regular basis, organizational strengthening and upgrading of the work environment according to changing needs of the times at least every 6 months to 1 year, reporting nurses' work stress and conducting family meetings for nursing. minimize and relieve work stress at least once every 1-2 years.

\textbf{Keywords:} Individual; Environmental; Organizational; Work Stress; Nurses.

INTRODUCTION

Nurses dominate health workers who are the most vital resource, around 60-80\% of hospital services are provided by nurses (Allu, 2020). Hospitals have dangerous potentials such as infectious diseases, situations and conditions that lead to occupational safety and health which include individual factors of health workers (nurses), work environment and nursing organizations (Aburuz, 2014; Alabdullah, 2020). Nursing work is a job that has a high level of stress, because it deals directly with various kinds of patients with disease diagnoses with different responses and the environment and organizations that regulate them (Almazan, Albougami & Alamri, 2019).

Individual factors (nurses), environment and organization are factors that affect work stress (Ahmad et al., 2018). Individual factors are character, nature and personality at work including family support, boredom and conflict with coworkers (Alhajjar, 2013).
Environmental factors are conditions that support the work of nurses such as lighting in the workspace, a safe workplace, a healthy workplace, the use of work tools and personal protective equipment at work (Al-Makhaita, Sabra & Hafez, 2014). Organizational factors are work culture which includes norms, values, beliefs, philosophies, habits and so on from the founders or seniors, socialized and applied ( Nursalam, 2014). Nurse work stress is a condition of tension that affects the emotions, thought processes and conditions of the nurse’s response beyond her ability to adjust ( Onciul, 1996).

Stress levels can lead to violent behavior (Ahmad et al., 2018). The health sector including nursing is one of the sectors with the highest prevalence of work stress and lower performance ( Batran, 2019). All professionals in hospitals are at risk of experiencing stress, but nurses have higher stress levels (Perwitasari, 2016). Furthermore, in Indonesia, 50.9% of nurses have experienced work stress (Herqutanto, 2017). Sources of stress in workers can come from work-related stressors, such as bad work environment factors and roles in organizations and individual characteristics (Greenberg, 2013).

Work stress can reduce nurse performance ( Fitrantini et al., 2019; Fujiana and Febriawati, 2019). The work environment is everywhere around the workplace that can influence employees to work less well ( Hu et al., 2020). The demands of the organization’s role on workers can cause stress (Mahrofi, 2019). Work stress is caused by individual and environmental factors (Herawati et al., 2019). Work stress is influenced by individual, environmental and organizational factors (Mahrofi, 2019; Herawati et al., 2019; Gaal, 2016). If the work environment factors are acceptable, nurses will not experience stress, otherwise if the physical environment is not comfortable it will make the work atmosphere uncomfortable and increase stress (Karodia, Cassim & Akweenda, 2016).

Organizational factors are also a cause of stress, one of which is an organization formed through the existing organizational design, for example through formalization, conflicting relationships between employees, specialization and a less supportive environment ( Amas & Jaka, 2018). Indonesian nurses are currently scattered in several Middle Eastern countries, allowing the Indonesian nurse population to experience work stress (Ibnu, 2021). One of the middle eastern countries where Indonesian nurses are part of the health workforce is Kuwait. Kuwait is an Arab region because the majority of the population is Arab. The state of Kuwait has one of the hospitals that is used as a strategic service in the country by every community. Sabah Hospital Kuwait is one of the hospitals that is widely used to serve the health needs of the Kuwaiti public. The Sabah Hospital Kuwait region has 3 seasons namely summer, spring and winter. Summer and cold are very extreme, summer temperatures can reach 55ºC so it will feel very hot and in winter it can reach -2ºC so it will feel very cold, causing dry skin and often causing skin diseases such as itching to eczema (Jaliman, 2021). Its nature in the form of a very wide desert, dry and flat, without mountains and far from fertility which makes its inhabitants have a distinctive character that tends to be rude, both in behavior, attitude and speech. This is different from the character of Asian people, especially Indonesians who are gentle and always pay attention to manners.

The state government system in the Sabah Hospital Kuwait area is a kingdom or monarchy, where influence is always fulfilled without much reason, if violated will be punished by not paying attention to balanced defense or tends to be authoritarian. There are around 6,561 Indonesian citizens who work and live in Kuwait ( Ministry of Foreign Affairs of the Republic of Indonesia, 2020). Most of them work in households, while the rest, which is around 1500 people, are professionals which include nurses and others. The population of Indonesian nurses in the Sabah Hospital Kuwait area is large enough to become professionals in this country. According to representatives of the Indonesian National Nurses Association (INNA), there are currently 350 Indonesian nurses working in Kuwait spread across several hospitals.

Indonesian National Nurses Association states that
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nurses’ problems are caused by individual factors such as language and differences in attitudes and character of Arabs and Asians. The character of Arabs who are loud, both in voice and expression and difficult to manage, is in stark contrast to the character of Asians, especially Indonesians who are gentle and always pay attention to manners. This causes Indonesian nurses to interpret Arabs as loud, fierce and loud so that it can trigger pressure and a negative stress response on Indonesian nurses. In addition, organizational factors including geopolitical issues and the pattern of monarchical government greatly affect inadequate work authority, work conflicts, differences in values between employees and leaders who do not want to be dictated or criticized, causing frustration at work.

The authors’ preliminary study was conducted on ten nurses at Sabah Hospital Kuwait. The results showed that information about the problems of Indonesian nurses experiencing stress in the workplace. The stress experienced by Indonesian nurses comes from the use of Arabic (both spoken and written) and English which is not mastered by Indonesian nurses often causing difficulties, especially in arguing when reprimanded by the head nurse or co-workers. In addition, the workload felt by nurses from the demands of the hospital organization was too heavy, working time was urgent, the quality of supervision was low, and the work climate was unhealthy. The environment around the Sabah Hospital Kuwait and infrastructure that is still not optimal makes nurses need to be selective so that accidents do not occur in patients. Some of these things cause significant stress for Indonesian nurses.

All conditions experienced by Indonesian nurses at Sabah Hospital Kuwait cause work stress for nurses, supported by extreme weather and geographical conditions of hot, cold and stifling dust. This climate difference requires a long adaptation plus separation from family in Indonesia adds to the stress burden experienced. In line with previous research surveys which stated that nurses still have the highest prevalence of experiencing work stress and the source of nurse stress comes from work-related stressors, such as individual, environmental and organizational factors (Hackitt, 2012; Greenberg, 2013). This will have an impact that the work stress of nurses can reduce the performance of nurses which leads to a decrease in the quality of health services in hospitals, including Kuwait Sabah Hospital (Rini, 2002; Widyasari, 2010). Nurse work stress is influenced by individual, environmental and organizational factors (Hackitt, 2012; Greenberg, 2013; Moorhead & Griffin, 2013; Kinicki & Fugate, 2016; Susanti, 2016). The purpose of this study was to determine the influence of individual, environmental and organizational factors on the work stress of Indonesian nurses at the Kuwait Sabah Hospital. Based on the above background, the authors are interested in conducting research on the influence of individual, environmental and organizational factors on the work stress of Indonesian nurses at the Kuwait Sabah Hospital.

RESEARCH METHOD
The research method used in this research is descriptive observational cross sectional. The data collection technique was a questionnaire in the form of a Likert scale consisting of 59 question items. This research was conducted in June-July 2022 at Sabah Hospital Kuwait. The population in this study were Indonesian nurses at Sabah Hospital Kuwait. The sampling technique was total sampling with a total sample of 65 respondents.

The independent variables in this study are individual factors, environmental factors and organizational factors and the dependent variable in this study is work stress as the dependent variable, the indicators are psychological, physiological and behavioral. Individual factors includes work experience, social support, personality and control room. Consists of 6 statements, measured with a Likert scale: totally disagree (point 1), disagree (point 2), doubtful (point 3), agree (point 4) and totally agree (point 5). Categorized as weak if the result: 6-17, Moderate: 18-24 and high: 25-30. Environmental factors includes work protective equipment, safe workspace, use of work equipment, healthy workspace and lighting in the

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workspace, Consists of 11 statements measured with a Likert scale: totally disagree (point 1), disagree (point 2), doubtful (point 3), agree (point 4) and totally agree (point 5). Categorized as weak if the result: 11-32, Moderate: 33-44 and high: 45-55. Organizational Factors Includes task demands, leadership, demands between employees and organizational structure. Consists of 7 statements, measured with a Likert scale: totally disagree (point 1), disagree (point 2), doubtful (point 3), agree (point 4) and totally agree (point 5). Categorized as weak if the result: 7-20, Moderate: 21-28 and high: 29-35. And work stress includes physiological, psychological and behavioral symptoms. Consists of 35 statements, measured with a Likert scale: totally disagree (point 1), disagree (point 2), doubtful (point 3), agree (point 4) and totally agree (point 5). Categorized as weak if the result: 35-70, Moderate: 71-123 and high: 124-175.

The data analysis method used is simple regression analysis. Analyzed by multiple linear regression with the stages before testing the effect of normality test, multicollinearity test, heteroscedasticity test, autocorrelation test. Furthermore, these stages were analyzed by partial T-test, simultaneous F-test and looking for the magnitude of the effect through the calculation of Effective Contribution (EC) and Relative Contribution (RC).

RESULTS AND DISCUSSION

Table 1. Demographic Characteristic of Respondents (N=65)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean±SD) (Range)(Years)</td>
<td>(41.74±6.379)(25-55)</td>
</tr>
<tr>
<td>Gender (n/%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28/43.08</td>
</tr>
<tr>
<td>Female</td>
<td>37/56.92</td>
</tr>
<tr>
<td>Education levels (n/%)</td>
<td></td>
</tr>
<tr>
<td>Diploma in Nursing</td>
<td>27/41.54</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>27/41.54</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>11/16.92</td>
</tr>
<tr>
<td>Length of service (Mean±SD) (Range)(Years)</td>
<td>(16.09±6.202)(2-26)</td>
</tr>
<tr>
<td>Individual (n/%)</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>2/3.08</td>
</tr>
<tr>
<td>Moderate</td>
<td>56/86.15</td>
</tr>
<tr>
<td>Strong</td>
<td>7/10.77</td>
</tr>
<tr>
<td>Environmental (n/%)</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>1/1.54</td>
</tr>
<tr>
<td>Moderate</td>
<td>49/75.38</td>
</tr>
<tr>
<td>Strong</td>
<td>15/23.08</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Organizational (n/%)</th>
<th>Weak</th>
<th>1/1.54</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate</td>
<td>41/63.08</td>
</tr>
<tr>
<td></td>
<td>Strong</td>
<td>23/35.38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Stress levels (n/%)</th>
<th>Low</th>
<th>15/23.08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate</td>
<td>49/75.38</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>1/1.54</td>
</tr>
</tbody>
</table>

Based on the research, it is known that the age of the respondents with the mean and standard deviation (41.74 ± 6.379), the most aged in the range of 36-45 years. This age is classified as a young adult stage. The young adult stage is a time when a person has the peak development of physical condition, so that he is able to apply the knowledge and skills he has and the habit of rational thinking will increase (Robbin & Judge, 2008). Based on the results of the study, the gender of the nurses who became the respondents was more than half of the total respondents who were female nurses. Previous research has suggested that nursing emerged as a profession whose history comes from a women's perspective (Robbin & Judge, 2008).

Women's traditional roles as wives, mothers and sisters are always involved in family care, so that women become genders who have the instinct and sense of being called to provide care services in the community. The results show that the educational qualifications of Indonesian nurses at Sabah Hospital Kuwait are dominated by associate degree and bachelor degree of nursing education and some even have masters education. This is in accordance with the provisions of nursing regulations and organizations, namely INNA that the minimum education in the field of nursing is associate degree. Nurses with associate degree nursing education qualifications are higher education levels so that competently from cognitive, affective, and psychomotor aspects, they are expected to be able to carry out their duties and responsibilities in providing nursing services to patients in accordance with applicable standards operating procedures (SOPs) in their work environment (Nivalinda et al., 2013).

Based on the results of the study, the working period with the mean and standard deviation (16.09±6.202), has a relatively experienced working period (6-25 years) so that the experience possessed by nurses is considered very capable enough to work and overcome any problems in their work. Work experience will be able to improve individual concepts, problem solving and one's motor skills. The longer one is in the field of work, the more skilled a person will be in working or working (Faridah et al., 2019). Based on the results of the study, the Al Sabah Hospital was able to apply work opportunities in the health care (nursing) environment of nurses from various countries who wanted to have a career. According to WHO, health workers in the world have the right to have a career anywhere (World Health Organization, 2007).

The nurse's individual factor is a nurse characteristic which in general is part of the nurse's identity that influences the nurse's response in activities such as work (Febriandini, Marufi, & Hartanti, 2016). Identity on individual factors can be in the form of gender, age, years of service and education level (Febriandini et al., 2016). In addition, the individual factors of nurses can be in the form of experience and family support (Nursalam, 2014). The nurse's individual factor is the situation of the relationship between co-workers to the point of saturation of the nurse at work (Eraliesa, 2009).

The results of this study indicate that the average category of individual factors of nurses is in the moderate category experienced by nurses at Sabah.
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Hospital Kuwait in carrying out health services (nursing). Different conditions in each individual can affect a decrease in efficiency and a decrease in work capacity and endurance (Febriandini et al., 2016). Individual factors that do not reach the high category are owned by nurses due to lack of work experience and support systems from people around nurses such as family, friends and loved ones in carrying out their work (Nursalam, 2014). Strong individual factors will shape nurses to survive in work efficiency and increase work capacity so that they do not respond to performance appropriately (Febriandini et al., 2016).

Previous research stated that the average individual factors of nurses were in the moderate category, so that a nurse was potentially less efficient in working and maintaining her work capacity, due to the lack of support from people around the nurse herself (Nursalam, 2014; Febriandini et al., 2016). The average nurse individual factor is in the category that is not maximized due to conflicts or problems between co-workers or individual nurses in carrying out their work (Eraliesa, 2009). Another study explained that the average individual factors of nurses were in the moderate category which was influenced by the lack of harmonization of the work of nurses in hospitals and nurses often experienced work fatigue due to interacting with patients which was sometimes unpleasant or required extra attention, so that individual factors were not optimally owned (Eraliesa, 2009).

The factor of a safe and comfortable work environment is the hope of every nurse in carrying out their duties and responsibilities (Flemming, 2010). Work environment factors that are applied properly can overcome the root causes of work accidents and control them (Amri, 2007). Nurses’ environmental factors are work tools and how to use them as well as a healthy work space and adequate lighting that is safe and comfortable for nurses (Fatma, Hasibuan, & Gusdini, 2022). Nurses must have strong environmental factors and are experienced by nurses to support effective and efficient nurse performance (Amri, 2007; Fatma et al., 2022).

Environmental factors that are designed and the application of the system in hospitals to nurses can have a positive effect on nurse performance (Fatma et al., 2022). Environmental factors shape the safety of nurses in every health care facility, carry out their performance and maintain the safety of recipients or users of health services (patients and families) and maintain the safety of health service equipment used by nurses to remain efficient (Arikhman, 2020). Nurse environmental factors are in the average category of being in this study according to Fatma (2022) and Arikhman (2020) can be hampered due to infrastructure that is still not optimal in hospitals and the system of implementing a good work environment has not been carried out regularly so that it has not reached strong category environmental factors owned by the nurse.

The results of this study are in line with previous studies which stated that there are some that are less safe and comfortable for nurses because the average nurse is in the moderate category of environmental factors in carrying out work, so there needs to be an improvement in the work environment (Amri, 2007; Fatma et al., 2022; Arikhman, 2020). The work environment will have an impact on the performance of nurses so that nurses are less precise in responding to their work (Fatma et al., 2022). The higher positive work environment factors will shape nurses to respond well in their work (Fatma et al., 2022; Arikhman, 2020). The results showed that the average environmental factors were still in the moderate category so that the work equipment and nurse’s workspace in the hospital could be a recommendation to improve the nurse’s environmental factors more positively. The work environment must remain conducive as a form of nurses being able to provide good nursing services to patients and families (Amri, 2007).

Organizational factors can realize plans to optimize nurse performance, for example conducting training and performance development as well as appropriate work assignments in health care facilities such as hospitals (Elpiana et al., 2017). Organizational factors include workload and work clarity which are assessed periodically by the leadership as a personnel decision-making process and feedback to nurses regarding the

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goals of health care facilities (Ibrahim et al., 2017). The results showed that the average organizational factors of nurses were in the Weak category and the high category was sufficient to compensate for the continuity of the work of nurses at Sabah Hospital Kuwait. Previous research stated that high nurse organizational factors will optimize nurse performance and workload demands can be overcome by each nurse (Elphiana et al., 2017; Ibrahim et al., 2017).

Sabah Hospital Kuwait is an international hospital that organizationally demands nurses as the largest health workers to provide complete services. Organization will be an influence for nurses to act and behave negatively or positively, so that the right organization is needed for nurses (Robbins, 2020). Sabah Hospital Kuwait organizationally requires nurses to work very extra carefully and high accuracy will create a nurse response in doing so that the results of the study have an average average and are balanced with a strong category on the organizational factors of nurses in this Kuwait Sabah Hospital.

Organizational factors are also activities to compare the results of achievement and expected results as well as analysis in the provisions of initial planning, monitoring of predetermined performance evaluations (Ibrahim et al., 2017). The results of this study, that the analysis of the gap between organizations as employers and nurses can cause nurses’ organizational factors to be in the weak category, although the percentage is quite Weak and not significant. Organizational factors also play a role in monitoring and maintaining a conducive work environment so as not to cause conflict between nurses and other health workers (Robbins, 2020).

Nurse work stress is a dynamic condition of nurses who are faced with opportunities, limitations or demands in accordance with the expectations that nurses want to achieve in important and uncertain conditions (Febriandini et al., 2016). Nurse work stress is an adaptive response, through nurse characteristics and/or psychological processes directly to the actions, situations and external events concerned (Aiska, 2014). The results of this study indicate that the average work stress level of the Sabah Hospital Kuwait nurses is moderate so that it requires attention so as not to cause a prolonged negative response from the implementing nurses. In line with Febriandini et al. (2016) and Aiska (2014) work stress that is still experienced by Sabah Hospital Kuwait nurses from a moderate average to some who experience high levels of stress due to mismatch of opportunities or demands with nurses’ expectations and the lack of adaptive responses of nurses in maintaining coping mechanisms.

Stress is a reality of everyday life that cannot be avoided by nurses where the demands of nurses must be skilled, make quick and appropriate decisions, causing nurses to sometimes lose motivation, get bored and have an impact on decreasing performance (Murhayati & Kusmato, 2015). Work stress is for the benefit of the organization as an employer and nurses as work recipients, meaning that it is overcome together, not unilaterally (Robbins, 2020).

Nurse work stress that still occurs at moderate to high levels is a form of abnormal nurse performance response (Febriandini et al., 2016; Aiska, 2014). Work stress at Kuwait Sabah Hospital requires countermeasures to reduce work stress. Work stress can occur due to factors that exist within the scope of work (Febriandini et al., 2016; Aiska, 2014; Murhayati & Kusmato, 2015). The scope of work is like the individual in it, the work environment to of course the hospital as an organization in managing each of its employees, including nurses (Aiska, 2014). Work stress is common if it is still in the Weak category as a support for nurses in work, besides that it will have a negative impact on the performance of nurses (Murhayati & Kusmato, 2015).

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Table 2. Partial Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients B</th>
<th>Std.Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>80.540</td>
<td>24.136</td>
<td></td>
<td>3.337</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Individual Factor (X1)</td>
<td>2.765</td>
<td>.929</td>
<td>.387</td>
<td>2.975</td>
<td>.004</td>
<td>.800</td>
</tr>
<tr>
<td>Environmental factor (X2)</td>
<td>-1.184</td>
<td>.447</td>
<td>.375</td>
<td>2.649</td>
<td>.010</td>
<td>.676</td>
</tr>
<tr>
<td>Organizational factor (X3)</td>
<td>-.319</td>
<td>.893</td>
<td>.149</td>
<td>4.137</td>
<td>.002</td>
<td>.727</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.337</td>
<td>.001</td>
<td>1.250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.975</td>
<td>.004</td>
<td>1.480</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.649</td>
<td>.010</td>
<td>1.375</td>
</tr>
</tbody>
</table>

Dependent Variable: Work Stress (Y)

Based on table 2, it can be seen that the Sig value of the individual factor (X1) is 0.004 < Sig. 0.05, environmental factor (X2) 0.010 < Sig. 0.05, and organizational factors (X3 is 0.002 < Sig. 0.05. So the Partial Test is in line with if the value of Sig. <0.05 means that the independent variable (X), namely individual, organizational and environmental factors partially affects the dependent variable (Y) namely work stress or the folowing hypothesis: There is an influence between individual factors on the work stress, there is an influence between environmental factors on the work stress and there is an influence between organizational factors on the work stress of Indonesian nurses at Sabah Hospital Kuwait.

Table 3. Simultaneous Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3095.639</td>
<td>3</td>
<td>1031.880</td>
<td>4.329</td>
<td>.008</td>
</tr>
<tr>
<td>Residual</td>
<td>14540.607</td>
<td>61</td>
<td>238.371</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17636.246</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent Variable: Work Stress (Y)
Predictors: (Constant), Organizational factor (X3), Individual factor (X1), Environmental factor (X2)

Based on table 3, it can be seen that the significance value of the simultaneous influence between individual factors (X1), environmental factors (X2) and organizational factors (X3) with work stress (Y) is 0.008 < Sig.0.05. So the conclusion of the Simultaneous F Test is in line with if the significance value <0.05 means that the independent variable (X) namely individual, organizational and environmental factors simultaneously affects the dependent variable (Y) namely work stress or the hypothesis that is proposed that there is an influence between individual factors, organization and environment on the work stress of Indonesian nurses at Sabah Hospital Kuwait.

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Table 4. Test the Effect of Effective Contribution (EC) and Relative Contribution (RE)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficient</th>
<th>Correlation coefficient</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (Individual factor)</td>
<td>0.387</td>
<td>0.248</td>
<td>45.6 %</td>
</tr>
<tr>
<td>X2 (Environmental factor)</td>
<td>0.375</td>
<td>0.621</td>
<td></td>
</tr>
<tr>
<td>X3 (Organizational factor)</td>
<td>0.149</td>
<td>0.852</td>
<td></td>
</tr>
</tbody>
</table>

**Effective Contribution (EC)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Value Square (partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (Individual factor): (0.387 x 0.248) x 100%</td>
<td>9.6%</td>
</tr>
<tr>
<td>X2 (Environmental factor): (0.375 x 0.621) x 100%</td>
<td>23.3%</td>
</tr>
<tr>
<td>X3 (Organizational factor): (0.149 x 0.852) x 100%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

Total R Square (Simultan) 45.6%

**Relative Contribution (RC)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Value Square (partial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 (Individual factor): (9.6/45.6) x 100%</td>
<td>21.1%</td>
</tr>
<tr>
<td>X2 (Environmental factor): (23.3/45.6) x 100%</td>
<td>51.1%</td>
</tr>
<tr>
<td>X3 (Organizational factor): (12.7/45.6) x 100%</td>
<td>27.8%</td>
</tr>
</tbody>
</table>

Based on table 4, it can be seen that the results of this study indicate that individual factors have a positive effect of 9.6% on the work stress of Indonesian nurses at the Kuwait Sabah Hospital, where the higher the individual factors of a nurse in carrying out their duties, work, the higher the individual factors of a nurse in carrying out their work. nurses' work stress levels. Previous research stated that the highly correlated individual factors were female nurses with a young age and working period of >3 years and a Diploma educational background (Febriandini et al., 2016). The results showed that the characteristics of the respondents were dominated by female nurses and were young and had a working period of >3 years and had a Diploma educational background, so it was in line with Febriandini et al. (2016) that the characteristics of these individual factors affect the work stress of nurses. Previous research has shown that there is a relationship between gender and work stress and female nurses tend to experience work stress more often than men because female nurses perform better than male nurses but experience stress more quickly. In addition, women who are required to work in other works such as household and economics also have the potential to make career women vulnerable to stress (Aiska, 2014).

The results of previous studies stated that in factors of a nurse in carrying out their work. nurses' work stress levels. Previous research stated that the highly correlated individual factors were female nurses with a young age and working period of >3 years and a Diploma educational background (Febriandini et al., 2016). The results showed that the characteristics of the respondents were dominated by female nurses and were young and had a working period of >3 years and had a Diploma educational background, so it was in line with Febriandini et al. (2016) that the characteristics of these individual factors affect the work stress of nurses. Previous research has shown that there is a relationship between gender and work stress and female nurses tend to experience work stress more often than men because female nurses perform better than male nurses but experience stress more quickly. In addition, women who are required to work in other works such as household and economics also have the potential to make career women vulnerable to stress (Aiska, 2014).

Age and work experience will be able to improve individual concepts, problem solving and one's motor skills, where the longer a person is in the field of work, the more skilled a person will be at work or work so that they can overcome negative responses such as work stress (Faridah et al., 2019). In line with Faridah et al. (2019) that the results of the study indicate that age and working period are still in a young stage or have new problem-solving concepts in performance due to lack of experience so that the potential for nurses' work stress is getting stronger, experienced by individual factors with a young age and minimal working period.

The results of previous studies stated that in...
addition to identity, indicators of individual factors that influence nurses' work stress are experience, family support, co-worker harmony and nurse work saturation which based on research results are still in the category of moderate individuals (Nursalam, 2014; Eralsia, 2009). Different conditions in each individual can have an impact on the loss of the ability of nurses to carry out effective and efficient body resistance in responding to work including stress, so there is a need for individual nurse coping mechanisms.

Based on table 4, it has also been shown that environmental factors have a positive effect of 23.3% on the work stress of Indonesian nurses at Sabah Hospital Kuwait, where the higher the environmental factors experienced by nurses in carrying out their work, the higher the level of work stress of nurses. This environmental influence is the highest factor among individual and organizational factors that affect nurses' work stress. The results of this study are in line with previous studies that work environment factors affect nurses' work stress (Noordiansah, 2012). Excessive stress can threaten a person's ability to deal with the environment which ultimately interferes with the implementation of tasks that will affect work performance (Fatma et al., 2022).

The influence of work environment factors on nurses' work stress includes physical and non-physical work environments. The physical work environment is very important to support work activities so that with adequate equipment, facilities and environmental conditions it is hoped that it will not cause work stress for nurses (Noordiansah, 2012). While the non-physical environment is the relationship between employees and one department, employee relations with superiors can create good communication and a solid cooperation system in completing the duties and responsibilities of the company, so that it is expected to minimize work stress (Noordiansah, 2012). The results of this study are also in line with other researchers who state that there is a significant influence between the work environment on the work stress of nurses in hospitals (Rismayanti & Mayasari, 2021). A calm and conducive work atmosphere will make nurses feel safe while in the hospital environment (Rismayanti & Mayasari, 2021). Adequate facilities and in accordance with the needs of nurses can make efforts to fulfill nurse work facilities to prevent nurses' work stress (Rismayanti & Mayasari, 2021). Environmental factors have a significant influence on nurses' work stress (Difayoga & Yuniawan, 2015). Work environment factors are one of the triggers of work stress (Robbins, 2020). The positive influence of environmental factors in terms of improving the quality of the work environment can reduce work stress faced by nurses. Therefore, a good work environment greatly affects employees in carrying out their obligations and at the same time helps reduce nurses' stress levels, and vice versa (Robbins, 2020).

Based on table 4, it has also been shown that organizational factors have a positive effect of 12.7% on the work stress of Indonesian nurses at Sabah Hospital Kuwait, where the higher the organizational factors experienced by nurses in carrying out their work, the higher the level of work stress of nurses. Analysis of the relationship between organizational factors and work stress has a significant relationship, where most of the respondents who experience work stress are respondents who have authority and duties as well as a large workload (Febriandini et al., 2016). Organizational factors regulate the authority and duties and workload of nurses to be proportional, where if the imbalance is felt by nurses it will cause negative responses from nurses such as work stress (Nursalam, 2014).

There is a significant relationship between organization and work stress on nurses, where organizational management as an employer to nurses as work recipients must create quality alignment so as not to cause negative responses such as work stress (Aiska, 2014). The results of this study are in accordance with previous research, it was found that nurses who were managed by organizations with duties, authority and workload, especially in shift work settings were more likely to experience more work stress (Widyasrini, 2013). This is based on the duties or workload of nurses with more shifts than employees or non-shift nurses (Widyasrini, 2013). Every

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The influence of individual, environmental and organizational factors on the work stress among Indonesian nurses in Kuwait

Organization in the hospital has a competitive advantage that cannot be separated from the potential of nurses who are productive and innovative, so that nurses are retained by the organization because of their potential by managing stress and creating a conducive organizational climate (Nursalam, 2014).

Organizational factors are manifestations of nurses' perceptions which are reflected in attitudes and behaviors that are influenced by what is happening or is happening in the organization's internal environment (Allu, 2020). The influence of organizational factors on potential stress occurs because organizations need conducive nurse performance and conducive nurse performance comes from the attitudes and behavior of nurses that come from how the organization treats or manages nurses in hospitals (Nursalam, 2014; Allu, 2020).

Based on table 4, it can be concluded from several discussions of related literature and the results of this study indicate that individual, environmental and organizational factors have a significant effect on the work stress of Indonesian nurses at Sabah Hospital Kuwait which in this study simultaneously has a total effect of 45.6%. Individual factors have an influence of 9.6% with a contribution of about 21% of the total influence on nurses' work stress. The influence of individual factors in dealing with stress from several opinions is to provide alternative implications for suggestions or recommendations for the formation of work rolling for nurses and refreshing activities so that they can reduce the complaints experienced by nurses at work that have the potential to form work stress.

Environmental factors have a magnitude of influence of 23.3% with a contribution of about 51% of the total magnitude of influence on nurses' work stress and is the biggest factor in influencing work stress at Sabah Hospital Kuwait in addition to individual and organizational factors. The influence of environmental factors in dealing with stress from several opinions is to provide alternative implications of suggestions or recommendations so that the hospital is expected to always pay attention to the work environment and work stress experienced by nurses such as updating the provision of existing facilities, in accordance with the needs of nurses and strengthen the relationship between nurses both through communication and other interactions.

Organizational factors have a magnitude of effect of 12.7% with a contribution of about 27.8% of the total magnitude of influence on the work stress of nurses. The influence of organizational factors in dealing with stress from several opinions is to provide alternative implications for suggestions or recommendations in the field of human resources by training nurses or other employees, nurse development programs, providing motivation to nurses by the best nursing figures or cadres in hospitals, managing or managing stress, and create a conducive organizational climate.

CONCLUSION

Based on the results of the study, it can be concluded that the results of this study indicate that the average individual factors of Indonesian nurses at Sabah Hospital Kuwait are in the moderate category of 86.15% with an effect of 9.6% on work stress. The average environmental factors of Indonesian nurses at Sabah Hospital Kuwait are in the Moderate category of 75.38% with the greatest influence between individual and organizational factors of 23.08% on work stress. The average organizational factor of Indonesian nurses in Sabah Hospital Kuwait is in the Moderate category of 63.08% with a 12.7% effect on work stress. The average work stress of Indonesian nurses at Sabah Hospital Kuwait is in the moderate category of 75.38% which is significantly influenced by 45.6% by individual, environmental and organizational factors, while the rest are influenced by other factors.

SUGGESTION

Regular workshops or training on individual coping mechanisms, socialization of organizational strengthening and upgrading the work environment in accordance with changing needs of the times are recommended to be carried out by hospitals. Hospital management is advised to make a regular reporting program about work stress and conduct nursing family meetings to minimize and relax work stress.
Further research is suggested to identify other factors that influence work stress apart from individuals, organizations and the environment and to develop qualitative research methods in order to further explore the factors that affect nurses’ work stress.

REFERENCES


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