

## **RESILIENCE AMONG NURSES IN A TEACHING HOSPITAL, KELANTAN, MALAYSIA**

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## **DAYA TAHAN DALAM KALANGAN JURURAWAT DI HOSPITAL PENGAJAR KELANTAN, MALAYSIA**

### **ABSTRAK**

Daya tahan ditakrifkan sebagai proses menyesuaikan diri dengan baik apabila berhadapan dengan kesusahan, trauma, tragedi, ancaman, atau sumber stres yang signifikan dari pengalaman yang sukar. Menurut sifat khusus profesion kejururawatan, jururawat memerlukan kemahiran yang tinggi, bekerja dalam situasi yang menekan, memberikan penjagaan dua puluh empat jam, memikul beban emosi yang besar, dan berkomunikasi dengan pesakit dan teman mereka dengan pelbagai pencetus stres. Oleh itu, kajian ini bertujuan untuk menentukan tahap daya tahan dalam kalangan jururawat di Hospital Universiti Sains Malaysia (USM). Satu kajian keratan rentas deskriptif dilakukan dengan teknik persampelan rawak mudah terhadap 198 orang jururawat. Soal selidik yang digunakan dalam kajian ini adalah soal selidik yang terdiri daripada maklumat sosiodemografi dan tahap daya tahan. Data dianalisis menggunakan ujian chi-square Pearson untuk hubungan antara tahap daya tahan dan faktor-faktor sosiodemografi yang dipilih. Hasil dari kajian ini menunjukkan bahawa majoriti jururawat mempunyai tahap daya tahan yang tinggi. Tahap daya tahan tidak berhubung secara signifikan dengan status perkahwinan dan tidak terdapat korelasi antara daya tahan dan tahun pengalaman bekerja. Walau bagaimanapun, terdapat korelasi antara daya tahan dan umur dalam kalangan jururawat. Kesimpulannya, kajian tentang tahap daya tahan dalam kalangan jururawat menunjukkan tahap daya tahan yang tinggi dalam kalangan jururawat di Hospital USM. Walau bagaimanapun, tahap daya tahan dalam kalangan jururawat perlu dikekalkan kerana mereka lebih cenderung menghadapi tekanan dan keletihan. Oleh itu, program pendidikan boleh dijalankan untuk mengekalkan tahap daya tahan mereka.

**Kata kunci:** Daya tahan, Jururawat, Hospital pengajar

## **ABSTRACT**

*Resilience is defined as the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress from difficult experiences. According to the specific nature of the nursing profession, nurses require high skill, working in stressful situations, providing twenty-four-hour care, having a great emotional burden, and communicating with patients and their companions under a variety of stressors. Thus, this study aimed to determine the level of resilience among nurses at Hospital Universiti Sains Malaysia (USM). A descriptive cross-sectional study was conducted by a simple random sampling technique on 198 nurses. The questionnaire used in this study was a self-administered questionnaire consisting of socio-demographics and level of resilience. Data were analysed using the Pearson chi-square test for the relationship between the level of resilience and the selected sociodemographic factors. The finding from this study shows that the majority of the nurses have a high level of resilience. Level of resilience is not significantly associated with marital status and there is no correlation between resilience and years of working experience. However, there is a correlation between resilience and age among nurses. In conclusion, the study of the level of resilience among nurses shows the high level of resilience among nurses in Hospital USM. However, the level of resilience among nurses needs to be maintained as they are more prone to face stress and burnout. Hence, educational programs can be conducted to maintain their resilience level.*

**Keywords:** Resilience, nurses, teaching hospital

## **Introduction**

Registered nurses confront a great amount of stress, such as limited care time for patients, heavy workloads, and psychosocial issues that can give an impact to a major patient safety concern associated with poor patient outcome (Chun et al. 2019). The excessive demands of workload such as being busy or staffing ratios negatively impact the well-being of patients, nurses, and organizations. Besides that, registered nurses with stress can lead to substance abuse, depression, and anxiety, decreased job satisfaction, disengagement, reduced organizational loyalty, and increased intent to leave nursing practice (Rushton et al. 2015). Nurses reported that their professional expectations relied on protective aspects and reaching self-expectations, which helped them maintain their optimism and reject doubting their work value (Lin et al., 2019).

Resilience is defined as a “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure, or even positive change, progress, and increased responsibility” (Noraini Othman & Aizzat Mohd, 2011). It is also defined as the capacity of an individual to adjust to a significant adversity, maintain balance, preserve his/her composure, take control over unfavourable environment, and proceed with his/her work in a positive manner and

minimize damage of normal functioning (Ihara et al., 2010). Nurses with high resilience usually feel naturally motivated, energized, and capable of taking on more responsibilities. Professional resilience becomes increasingly important for nurses to deal with adverse work situations (Chun et al. 2019). Nurses can be empowered to cope with stress at work and prevent burnout if they demonstrate resilient behaviour (Benade et al. 2017).

Resilience has been related to internal and external protective factors - resources, attributes, and skills – that minimize the debilitating effects of stress (Lin et al. 2019). Resilience is generally defined as the capacity of an individual or organization to survive and to adapt to adversity (Kim & Windsor, 2015). Thus, nurses with high resilience reduced the slope of the stress–negative emotion relationship.

According to Noraini Othman and Aizzat Mohd, (2011), to promote high work engagement in the nursing management, nurses as boundary-spanners of healthcare organizations need to have higher psychological capital. Resilience is one of the psychological capital or PsyCap which is an individual's positive psychological state of development and its characterized (Noraini Othman & Aizzat Mohd, 2011). The previous study by Lin et al. (2019) states that in 2016, 7.7 million visits to the emergency room were reported in a population of 23 million as a huge cost to the government. Thus, there is far less is known about resilience in the nursing profession, specifically in the Emergency Department, and even less is known about the role of protective factors for RNs confronting Emergency Department overcrowding. Nurses can be assisted to “survive” and “thrive” in the workplace by building their personal resilience (Benade et al. 2017).

However, there is no specific study shows that the strengths and coping abilities nurses use while caring for the patient and no recommendations to strengthen resilience among nurses could be found in the literature. This situation gave rise to the researcher to conduct this study. The previous study was conducted by Benade et al. (2017), only four focus group interviews were conducted, including nurses from five of the seven facilities but data saturation was obtained during the fourth focus group and the sample size was small. Hence, the results should be generalized with caution to similar contexts. However, few nurses can develop resilience by increasing their awareness of their own protective skills and learning how to operationalize these protective skills when coping to minimize stress (Shin et al., 2018). Considering the inherently stressful nature of the nursing environment, resilience is arguably an important factor as an attribute of a nurse (Kim & Windsor, 2015).

Based on the statement above, it is meaningful to explore the resilience among nurses. Therefore, this study was conducted to determine the level of resilience among nurses in Hospital Universiti Sains Malaysia (USM).

## **Methods**

The cross-sectional study design was conducted from February 2020 until March 2020 among nurses at Hospital USM. The participants were selected based on the inclusion includes male and female nurses who are working at Hospital USM and working for more than one year and exclusion criteria includes nurses that currently in Post Basic training, attachment to another ward, maternity or annual leave, registered nurses that working at clinic and student nurse. A simple random sampling was used in this study. The study protocol was approved by the Human Research Ethical Committee (HREC), Universiti Sains Malaysia (USM/JEPeM/19110778) and the permission for data collection was permitted from the Director of Hospital USM. Written informed consent was obtained from the participants before the data collection.

Data for this study was obtained by using a set of self-administered questionnaires. The instrument employed in this study was adopted from Ihara et al. (2010) to assess the level of resilience among nurses in Hospital USM. The questionnaire consists of two main sections: Section A and Section B. Section A is socio-demographic data which includes age, gender, marital status, level of education, and years of working experience. Section B consists of 22 questions to identify the level of resilience among nurses in Hospital USM and was divided into four domains which are positivity in nursing, interpersonal skill, having an anchor in personal life, and response to novelty. Besides that, the questionnaire also included agreement or disagreement on 22 items, with a 5 Likert Scale from 1 for those who strongly disagree to 5 for those who strongly agree. The respondent was asked to choose one correct answer. A higher score reflects a high level of resilience.

The level of resilience was determined by summing up the total score of the answer of each individual response together. The score range is from 22 to 110. Those who scored more than 67 of the answers were labeled as having a high level of resilience while those who are total scored exactly in the range of 45 to 66 were labeled as having a moderate level of resilience and those who scored 22 to 44 were considered as a poor level of resilience.

## **Data analysis**

The descriptive analysis was employed to analyse the socio-demographic characteristics of the participants and the Pearson chi-square test was used to analyse the relationship between the level of resilience and the selected sociodemographic factors.

## **Results and Discussion**

### ***Socio-demographic Data***

A total of 198 nurses were invited to this study. The mean age of the participants in this study is 32.98 (6.825). The majority of the participants are married (80.3%), followed by single (18.7%) and divorced (1.0%). In terms of level of education, the majority of respondents are at diploma level with 89.9%, followed by degree level 10.1% and there is no respondents from the master level. The mean years of working experience of the participants are 10.03 (6.612) (Table 1).

**Table 1.** Socio-Demographic Characteristics of participants (n= 198)

Variable	Mean (SD)	Frequency (Percentage)
Age	32.98 (6.825)	198 (100)
Gender		
Male		30 (15.2)
Female		168 (84.8)
Marital status		
Single		37 (18.7)
Married/ Divorced		161 (81.3)
Level of education		
Diploma		178 (89.9)
Degree		20 (10.1)
Master		0 (0)
Years of working experience	10.03 (6.612)	198 (100)

#### *Level of Resilience Among Nurses*

Table 2 shows the level of resilience among nurses in Hospital USM. Based on the table, it shows that the majority of nurses in Hospital USM have a high level of resilience with a percentage of 94.9%. A recent study by Liu et al (2018) shows a similar finding, that nurses from three hospitals in Taiwan have high resilience with mean and standard deviation of 65.58 (10.65) respectively. Another study done by Guo et al (2017), said that the average total score for resilience was 63.77 (SD 12.80), and the mean scores for tenacity, strength and optimism were 32.12 (SD 7.20), 21.89 (SD 4.51), 9.76 (SD 2.42), respectively, suggesting that, generally, nurses had a moderate level of resilience. Thus, according to several studies, it shows that the majority of nurses have a high level of resilience.

**Table 2:** Level of Resilience among Nurses (n= 198)

Level of Resilience	Score	Frequency (Percentage)	Mean ± SD
Poor	22-44	1 (0.5)	
Moderate	45-66	9 (4.5)	2.94 ± 0.251
High	67-110	188 (94.9)	

*Association between selected socio-demographic factors (marital status) and the level of resilience among nurses in Hospital USM.*

Based on Table 3, there is no association between the level of resilience and selected socio-demographic factors (marital status) among nurses in Hospital USM ( $p=0.400$ ) which is the majority of nurses with the marital status of married/divorced have a high level of resilience 154 (95.7%). This finding corresponded to another study conducted by Mealer, Jones & Moss (2012) that shows there is no association between the level of resilience and marital status among nurses with  $p$  value  $>0.005$ . Most of their respondents with married status (69%) have high resilience, compared to single status (23%) and others status (8%).

**Table 3.** Association Between Marital Status and Level of Resilience and Among Nurses (N=198)

Marital status	Resilience		p-value
	High, n (%)	Moderate/ Poor, n (%)	
Single	34 (91.9)	3 (8.1)	0.400
Married/ Divorced	154 (95.7)	7 (4.3)	

**\*Fisher's Exact Test**  
 Significant at  $p < 0.05$

*Correlation between selected socio-demographic factors (age, years of working experience) and the resilience among nurses.*

In this study, there is a correlation between age and resilience among nurses in Hospital USM ( $p=0.012$ ,  $r=+0.179$ ). This shows that there is a weak positive correlation between age and resilience among nurses (Table 4). The finding from another study by Pierce & Britley (2018) shows similar findings that there is a correlation between selected age and resilience among registered nurses. From their study, the finding shows the analysis age group remained significant. The result shows  $p > 0.002$ ,  $r=+0.048$ . This shows that there is a weak positive correlation between age and resilience among registered nurses.

In this study, there is no correlation between years of working experience and resilience among nurses in Hospital USM ( $p=0.104$ ,  $r=+0.116$ ). This shows that there is a weak positive correlation between years of working experience and resilience among nurses in Hospital USM. Another study done by Kutluturkan et al. (2016) supports that there is a correlation between years of working experience and resilience among nurses with  $p < 0.000$ ,  $r=+0.049$ . This shows that there is a weak positive correlation.

**Table 4.** Correlation between socio-demographic factors (age, years of working experience) and resilience among nurses (n=198)

	Resilience Score	
	r	p value
Age	0.179	0.012

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**\*Spearman's Rank Order Correlation Test**

## Conclusion

In conclusion, the study of the level of resilience among nurses shows the high level of resilience among nurses in Hospital USM. However, the level of resilience among nurses needs to be increased and improved as they are more prone to stress and burnout. Besides, there is no significant association between the level of resilience and marital status among nurses in Hospital USM and there is no correlation between resilience and years of working experience among nurses in Hospital USM. However, there is a correlation between resilience and age among nurses in Hospital USM. Strengthening the level of resilience is an effective way to maintain nurses' psychological health level. Thus, the results may provide the importance of resilience among nurses in taking care of the patient. The results of this study can be used for further and advanced research because there was a limited number of studies about resilience among nurses in Malaysia. Further research should be conducted in a large sample size to compare the level of resilience among nurses in a different hospital to explore whether the level of resilience among nurses was different or not. It also finds out the other factors that affect the level of resilience among nurses.

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