



## ORIGINAL RESEARCH

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# Relationship Between Work Culture, Work Load and Stress Level In Indonesian Nurses Working as Elderly Care

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[Jokoarif1910@gmail.com](mailto:Jokoarif1910@gmail.com)**Abstract**

**Background:** This research is important because according to the National Institute Occupational Safety and Health (NIOSH) it shows that jobs related to hospitals or health have a high tendency to experience work stress or depression. The main stress related area among the study nurses was the time factor as most of them reported lack of time to perform tasks, high workload, work culture in the workplace can influence the stress level in nurses. This research is to determine the relationship between work culture, workload and stress levels in Indonesian nurses who work as elderly nurses.

**Methods:** This research uses a quantitative descriptive approach with a correlation research design and uses a cross sectional method. The sample in this study was 40 elderly nurses with research instruments using questionnaires.

**Results:** The results of the work culture research were 57.5% good, 42.5% poor, the results for light workload were 52.5%, moderate 40.5%, heavy 7.5% while the results for stress levels were 30.0%, moderate 62.5%, heavy 5.0%, very heavy 2.5%. Correlation test using the Spearman rank correlation test with a p-value of 0.05.

**Conclusions:** There is a significant relationship between work culture, workload and stress levels in Indonesian nurses who work as elderly nurses in Yamaguchi Prefecture, Japan

**Keywords:** Work culture, workload, stress level**Introduction**

Nurses are health workers who work professionally, have the ability, authority and are responsible for implementing nursing care, Dewi (2017). The Japanese government is committed to the Indonesian government in the field of labor services, namely providing opportunities for Indonesia to send skilled workers such as nurses, care workers, workers in the hotel, tourism and maritime sectors to Japan. The sending of Indonesian nurses to Japan is motivated by Japan's increasing need

for workers, due to the increasing number of elderly people in Japan. In addition to educational background, the most important requirement that must be met by prospective nurses and caregivers is Japanese language proficiency which is proven by a JLPT (Japanese Language Proficiency Test) certificate of at least level 4 (N4). For that reason, before being sent to Japan, prospective nurses and caregivers must undergo Japanese language training in advance.

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Quantitatively, it can be seen from the number of nursing tasks that must be done, and qualitatively, it can be seen from the tasks that must be done by adding expertise. The National Institute of Occupational Safety and Health (NIOSH) shows that jobs related to hospitals or health have a high risk of job stress or depression (Mariana & Ramiei, 2021). The American National Institute for Occupational Health (ANAHO) study of job stress in nurses ranks at the top of the list of stress cases in workers (Rhamdani & Wartono, 2019). Stress is a physical reaction or response to psychosocial stressors. Work stress is a condition in which an individual is faced with opportunities, limitations or deception of expectations in accordance with the results they want to achieve in critical and unpredictable conditions.

High workload on nurses can trigger the emergence of emotions in nurses. This of course can interfere with nurse productivity. Excessive workload can cause stress in nurses. The workload of nurses includes physical workload and mental workload. Physical workload such as lifting patients, helping patients to the bathroom, bathing patients, tidying up patient beds, pushing health equipment. While the mental workload such as working in shifts, working in special skills in caring for patients, the complexity of the work (preparing the mental and spiritual of patients and families especially in critical conditions), responsibility for patient recovery and having to establish good communication with patients.

Nurses feel that the number of nurses available is not comparable to the amount of work that must be completed and also the number of patients is greater than the number of elderly nursing staff. In addition to the high workload, work culture can also affect work stress on nursing staff and other health, Hariyanti, et al (2013). Work culture is a special pattern of assumptions, values, and shared norms that shape the activities, language, symbols, and socialization events of employees in the company.

## Methods

The type of research used in this study is descriptive quantitative with correlation research design and using cross-sectional method. Cross-sectional is a research design that aims to conduct research or observation at the same time (once upon a time) (Aziz, 2011). Cross-sectional research is a study where the independent and dependent variables are collected in the same period and the impact is measured according to the presence at the time of the study. This study was conducted at the

Prefecture Yamaguichi Elderly Home in Japan. The research time was conducted in August 2024 - February 2025. The sample is part of the population to be studied or part of the number of characteristics possessed by the population. The sample to be studied in this study was 40 Indonesian nurses who worked as elderly nurses in the Yamaguichi Prefecture of Japan. In this study, the researcher used a data collection technique through a questionnaire.

Data analysis in this study used the Spearman Rank correlation test. The Spearman Rank is intuitive to analyze the relationship between workload variables, work culture with stress level variables of Indonesian nurses working in the Yamaguichi prefecture elderly home in Japan.

## Results

This research was conducted on builan agustuis 2024 - february 2025 In Yamaguichi Prefecture Japan. Respondents in this study totaled 40 respondents, namely all Indonesian nurses who work as elderly nurses. The results of this study were analyzed based on univariate analysis to see each variable of work culture, workload and stress level and bivariate analysis to see the relationship between each research variable.

### Univariate Analysis

**Table 1. Description of the frequency of work culture variables in Indonesian nurses working as elderly nurses**

	Freq	%
Good	23	57.5
Less	17	42.5
<b>Total</b>	<b>40</b>	<b>100</b>

Based on table 4.1, it is known that the work culture category shows the highest perception in the good work culture category at 57.5%, and poor work culture at 42.5%.

**Table 2. Description of the frequency of workload variables in Indonesian nurses working as elderly nurses**

	Freq	%
Light	21	52.5
Medium	16	40.5
Heavy	3	7
<b>Total</b>	<b>40</b>	<b>100</b>

Based on table 4.2 above, it is known that the workload category shows the highest prevalence in the light workload category of 52.5%, the medium workload category of 40.0%, and the heavy workload category of 7.5%.

**Table 3. Description of the frequency of stress level variables in Indonesian nurses**



	Freq	%
Light	12	30
Currently	25	62.5
Heavy	2	5
Very Heavy	1	2.5
<b>Total</b>	<b>40</b>	<b>100</b>

category shows the highest prediction in the moderate stress level category of 62.5%, the mild stress level category of 30.0%, and the severe stress level category of 5.0%, and the very severe stress level category of 2.5%.

**Table 4. Relationship between Work Culture and Stress Levels in Indonesian Nurses Working as Elderly Nurses**

Variable	r calculate	p-value
Ma'ampo wer torja	Stress levels	
Good	23 (57.5%)	-
Not enough	17 (42.5%)	-
Light	-	12 (30.0%)
Currently	-	25 (62.5%)
Heavy	-	2 (5.0%)
Very heavy	-	1 (2.5%)
Total	40 (100%)	40 (100%)

Based on table 4. it is known that the significance value or Sig. (2-tailed) of Work Culture is 0.020 because the Sig. (2-tailed) value of 0.020 < is smaller than 0.05, which means that there is a significant relationship between the variables of Work Culture and the Stress Level.

**Table 5. Workplace Stress Levels in Indonesian Nurses Working as Elderly Nurses**

correlation	Stress levels
Environment al Factors	
Speiar man'sr ho	Factor Environ ment
	Core-enactment Coefficient
	1,000
	,512**
	Sig.(2-taileid)
	.
	,004
	N
	30
	30
Stress Level	Core-enactment Coefficient
	,512**
	1,000
	Sig.(2-taileid)
	,004
	.
	N
	30
	30

It is known that the significance value or Sig. (2-tailed) of the Environmental Factor is 0.004 because the Sig. (2-tailed) value of 0.004 < is smaller than 0.05, which means that there is a significant relationship between the

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environmental Factor variables and the Stress Level.

**Table 6. Workplace Stress Levels in Indonesian Nurses Working as Elderly Nurses**

Variable	r	p-
	calculat	valuee
	e	
Betire torja	Stress level	
Light	21 (52.5%)	12 (30.0%)
Currently	16 (40.5%)	25 (62.5%)
Heavy	3 (7.5%)	2 (5.0%)
Very heavy	-	1 (2.5%)
Total	40(100%)	40(100%)

Based on table 6, it is known that the workload with the stress level, the significance value or Sig. (2-tailed) of the Workload is 0.025 because the Sig. (2-tailed) value of 0.025 < is smaller than 0.05, which means that there is a significant relationship between the Workload variables and the Stress Level.

## Discussion

Based on the table of research results, the work culture category, which shows the highest percentage in the good work culture category is 57.5%, and the poor work culture is 42.5%. In a study entitled "Relationship between work culture, work burden and stress levels in Indonesian nurses working as elderly nurses in the Yamaguchi prefecture of Japan 2024", it was categorized as a good work culture. Meinuiruit Deissleir (2015), and Mondy (2015) that work culture is an effort to improve the quality of human resources. Staff organizations, both new and existing, follow work culture because of work culture changes due to changes in the work environment, policies, etc.

This study is in line with the study of Usastawaty Cik Ayui Saadiah Isnainy, et al. (2019) that as many as 95 (61.7%) respondents have good work culture, as many as 117 (76.0%) respondents have been working for a long time. While Buidi Paramita in Ndraha (2005) stated that work culture is a group of basic thoughts or a program of thinking that can be used to consider the efficiency of work and cooperation, humans owned by a group of people. One of the work cultures in Japan is the work culture of shitsukei (Diligent). This work culture emphasizes the level of employee productivity in doing their work.

Researchers assume that work culture emphasizes employee performance in a company, or other workplace. A good work



culture can influence the values and quality of work as well as employee loyalty for the company or nursing home.

#### *Workload*

Based on the table of research results, it shows the category of workload, where the highest percentage is in the light workload category of 52.5%, the medium workload category of 40.0%, and the heavy workload category of 7.5%. It can be concluded that there is a relationship between workload and stress levels in Indonesian nurses who work as elderly nurses in the Yamaguchi prefecture of Japan in 2024 in the light workload category. The causes of work stress include, workload that is felt to be too heavy, stressful work hours, poor quality of work supervision, unhealthy work climate, inadequate work authority, work conflicts and differences in values between employees and leaders (Manguinegara, 2013). Potential sources of stress include, environmental factors, organizational (workload, work conditions/culture) and personal factors (experience/length of work, etc.) (Robbins, 2014).

In line with the research conducted by Wagui (2017) the relationship between workload and work stress on nurses in the inpatient ward of Heirmana Leimbeian Hospital. Based on the results of the study conducted at Heirmana Leimbeian Hospital on nurses in the Inpatient ward with a total of 44 nurses, it can be concluded that there is a relationship between workload and work stress of nurses in the Inpatient ward of Heirmana Leimbeian Hospital through data testing using the chi-square statistical test where  $p = 0.000$  ( $p \leq 0.05$ ) then  $H_0$  is rejected. Researchers assume that there is an influence of workload on the quality of work of elderly nurses. The results of the study indicate that the workload is light so that the workload is mentally good such as working in shifts, working in special skills in caring for patients, the complexity of the work (preparing the mental and spiritual of patients and families especially in critical conditions), responsibility for patient recovery and must establish good communication with patients so that they can work well in helping nurses.

#### *Stress Level*

Based on the table of research results that, shows the category of stress level, where shows the highest percentage in the category

of moderate stress level 62.5%, mild stress level category 30.0%, and severe stress level category 5.0%, very severe stress level category 2.5%. In the study entitled "Relationship between work culture, work burden with stress level in Indonesian nurses working as elderly nurses in the prefecture of Yamaguchi Japan 2024", categorized with mild stress level, In line with the research conducted by Fahruidin (2020), caregivers working in Japan experienced a low stress level of 6 respondents (17.1%), a moderate stress level of 24 respondents (68.6%) and a high stress level of 5 respondents (14.3%). In his discussion, he stated that the factors that can influence are age, education, gender, workload, environmental adaptation, socio-culture influencing stress levels. The behavior of work that is less professional will be seen in the service that will be provided to patients (Nur'aini, 2013; Zainaro, 2017).

Researchers assume that the influence of work stress on elderly nurses has an effect on the professionalism of nurses in serving patients. When this stress indication has appeared in nurses, then they will have poor performance in terms of the quality of patient care, such as lack of concentration, easy fatigue and sometimes even less professional behaviors appear, so that services to clients become less than optimal.

#### *Job Cultivation and Nursing Work Stress*

The results of the statistical test obtained a  $p$ -value = 0.020 which means  $p > \alpha = 0.05$  <smaller than 0.05 ( $H_0$  is rejected and  $H_a$  is accepted), so it can be concluded that there is a relationship between workload and stress levels in Indonesian nurses who work as elderly nurses in the Yamaguchi prefecture of Japan in 2024. The workload data obtained a value of 57.5%. Good, indicating that good organizational culture has a 3 times greater chance of not being stressed when compared to respondents who said that organizational culture was less good. This research is in line with Ndaha's theory (2015) Organizational culture has a very strategic role to encourage and improve the effectiveness of organizational performance, especially management performance and economic performance, both in the short and long term. Everyone must have hopes when they start working in a company or organization. However, many ideals and career balances are not realized. Fatdina's research





(2016) Organizational Support Roles Perceived by Employees as Mediators of Procedural Justice Influencing Organizational Citizenship Behavior. The results show that procedural justice has a very significant and positive effect on perceived organizational support (direct effect = 0.44), while procedural justice has a negative effect on organizational citizenship through perceived organizational support as a mediator (indirect effect = -0.11). Hospital management should understand that work culture based on aspects of fairness, precision and creativity as behavioral guidelines in working through efforts to instill fairness and precision in other ways such as holding religious spiritual showers, training seminars on emotional and spiritual intelligence. This is because a good work culture in this research will reduce work stress in nurses. The researcher assumes that intuitive efforts to optimize nursing creativity can be done through discussions before and after providing services to patients, with this activity so that good ideas and suggestions to the head of the room or other nurses' work colleagues can be explored more deeply spontaneously, so that it can reduce work stress caused by organizational culture.

#### *The burden of work and the stress of a nurse's work*

The results of the statistical test obtained a p-value = 0.025 which means  $p > \alpha = 0.05 <$  ( $H_0$  is rejected and  $H_a$  is accepted), so it can be concluded that there is a relationship between workload and stress levels in Indonesian nurses who work as elderly nurses in the Yamaguchi prefecture of Japan in 2024. From the workload data, a value of 52.5% was obtained. Light, meaning that respondents with a light workload have a 6 times greater chance of not experiencing work stress when compared to respondents with a heavy workload. This study is in line with previous research conducted by Siringoringo (2015) with the title of factors related to work stress of ICU nurses showing that 13 people (43.3%) had mild stress and 17 people (56.7%) had severe stress. The results of the bivariate analysis of independent variables with the following: Intrinsic work factors ( $p = 0.001$ ), Extrinsic work factors ( $p = 0.005$ ), Individual factors ( $p = 0.004$ ). Multivariate analysis shows that intrinsic job factors are the factors that are most related to work stress in ICU nurses. It is concluded that

there is a relationship between intrinsic job factors, extrinsic job factors, and individual factors with the occurrence of work stress in ICU nurses. It is expected that improving intrinsic job factors such as workload, work routines and work environment can be used as a program to prevent work stress for ICU nurses. Based on the research results, it is known that each person has different characteristics in managing work stress, so that it is necessary for the hospital to carry out further evaluation of nurses who experience work stress so that this does not reduce the quality of the services provided. Researchers assume that nursing homes or other workplaces that workload can affect stress levels in elderly nurses, therefore it is necessary to carry out activities that are intended to reduce work stress, nursing homes can provide recreation time for nurses so that work stress can be reduced, so that nurses can work well in providing services to patients.

#### **Conclusion**

Based on research conducted on Indonesian nurses who worked as elderly nurses during November 2024, researchers obtained conclusions that can be drawn from the study, namely: The relationship between work culture, workload and stress levels of Indonesian nurses who work as elderly nurses in the Yamaguchi Prefecture, Japan, is as follows. Work culture of Indonesian nurses working as elderly nurses in Yamaguchi, Japan in the category of good work culture. The workload of Indonesian nurses working as elderly nurses in Yamaguchi, Japan is in the light workload category. The stress level of Indonesian nurses working as elderly nurses in Yamaguchi, Japan is in the moderate stress level category. There is a cultural diversity of work at various levels among Indonesian nurses who work as elderly nurses in Yamaguchi, Japan. There is a cultural diversity of work at various levels among Indonesian nurses who work as elderly nurses in Yamaguchi, Japan.

#### **Limitation**

This research has been attempted and carried out by following scientific procedures, however, in carrying out the research, there are still shortcomings experienced by the researcher. During the research, several limitations were found, namely: A busy work schedule, working hours that differ from those of respondents,



making it difficult to match the time when distributing questionnaires. During the data collection process, the questionnaire is very subjective, so that the accuracy of the data is very dependent on the honesty of the respondents. In addition, the questionnaire that the researcher created was not asked but was in the form of a questionnaire where the respondents filled it out themselves with answers that imitated the respondents accordingly.

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