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Factors Related to Stress Levels In Elderly Nurses In Facing Competency Exams

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Abstract

Background: Stress is a physiological and psychological response to pressure or demands that exceed a person's ability to cope or adapt. Stress is influenced by several factors, namely work environmental factors and personal factors. This study aims to determine the factors that influence the stress level of elderly nurses when facing competency exams in Fukuoka, Japan.

Methods: This research design uses descriptive correlation, with a cross sectional approach. The research sample used Total Sampling with a sample size of 30 respondents. In this study, data on stress levels was collected using the Depression Anxiety Stress Scales (DASS42) measurement questionnaire, while environmental factors, work factors and personal factors used a questionnaire that had been tested for validity and reliability. The research used the Sperm Rank Test with a confidence level of 95% or a significance level of 5%.

Results: Based on the research results, it can be seen that the results of environmental factors are 0.004, work factors are 0.019 and personal factors are 0.000, so the P-value < α (0.05).

Conclusions: it can be concluded that there is a significant relationship between environmental factors, work factors and personal factors and the stress level of elderly nurses in facing competency exams in Fukuoka, Japan.

Keywords: stress levels, elderly nurses, competency exams

Introduction

Elderly is a natural process that occurs continuously in humans, where when someone ages they will experience several changes which will ultimately affect the state of function and ability of the whole body (Fatmah, 2010). Japan is the first Asian country with the largest elderly population in the world. According to data from the United Nation Population Division in 2024, the number of people aged 65 and over in Japan has reached 36.2 million, or around 30.2% of the total population (Godstat, 2024). Based on these statistics, it is predicted that in 2050 as many as 38.8 percent of Japan's population will be elderly. With this large number of elderly people, Japanese society is known as an aging society, and the problem of the elderly is a major problem in Japan. The large number of elderly people living in nursing homes is inseparable from the increasing life expectancy of Japanese people.

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Demographic changes with increasing elderly people and decreasing birth rates have caused a reduction in the workforce in Japan. Based on the news of the Kompas online newspaper on April 26, 2016, the Japanese government began to feel poetic about the conditions of its geography so that policy makers looked for ways to attract as many foreign workers as possible to work in Japan. The lack of Japanese workers due to the large number of elderly people has caused job opportunities for other countries, including Indonesian nurses, to work in Japan. (Puirnomo, 2020)

With increasing desireelderly people living in nursing homes, the demand for elderly nurses to care for the elderly in nursing homes has also increased. Through the cooperation of the Indonesia Japan Economic Partnership Agreement (IJEPA) which began in 2008, Indonesia began sending Indonesian migrant workers (TKI) as nurses and care workers (elderly nurses) to Japan. According to data from BNP2TKI (National Agency for the Placement and Protection of Indonesian Migrant Workers), the number of placements of Indonesian migrant workers (TKI) as nurses and care workers from 2008 to 2016 was 1,792 people, consisting of 593 nurses and 1,199 care workers. Health workers (nurses) in Indonesia who participate in this opportunity, of course, are expected to be equipped with training in terms of language and actions in caring for the elderly. Later, they will be placed in hospitals and several elderly homes in Japan. After arriving in Japan, they will receive Japanese language training again for as long as possible, will work while interning/practicing at each receiving institution, with the aim of passing the National Nursing Licensure Examination while in Japan. (Albyn, 2023).

NurseElderly or caregiver is someone who is tasked with providing assistance to clients who have limitations caused by age in carrying out daily activities. Indonesian nurses as one of the active immigrants to the Japanese market remain important stakeholders in maintaining the human resource base for health in Japan. However, the perspective of nurses who have succeeded in the Japanese National Nursing Licensing Examination has not been fully understood. Indonesian nurses as one of the active immigrants to the Japanese market remain important in maintaining the supply of human resources for health in Japan. However, the characteristics of nurses who succeed in the Japanese National Nursing Licensure Examination are not fully understood. (Dopeipreiss, 2022) Nurses who work in Japan have the ability to pass the competency exam

to obtain national certification for nurses in Japan. This causes the trigger for the level of stress of nurses facing the Caregiver competency test in Japan to be several factors both from outside and from within themselves. Someone experiences stress usually because the burden faced is too heavy. Nurses also cannot avoid stress caused by many responsibilities such as heavy workloads and an environment that is less supportive so that it is easy to experience stress. Based on data from the Ministry of Health of the Republic of Indonesia in 2022, the number of Indonesian nurses working in Japan in 2022 was 593 nurses working in hospitals and 1,199 elderly nurses, of which 127 nurses were placed in hospitals and 330 elderly nurses had passed the Japanese national exam. From the graduate study conducted by researchers by interviewing 10 nurses, 10 nurses said they experienced stress in facing the nursing competency exam

Methods

This study uses descriptive correlation, with Cross Sectional correlation to identify factors that influence stress levels. This study was conducted at the Fukuoka Prefecture Elderly Home in Japan. The research was conducted in November - December 2024. The population in this study were 30 Indonesian nurses who worked as elderly nurses in Fukuoka Prefecture. The researcher used the total population as the research sample, namely 30 Indonesian nurses who work as elderly nurses in Fukuoka Prefecture.

Data analysis in this study used the Spearman Rank correlation test. The Spearman Rank is intuitive in analyzing factors related to stress levels in elderly nurses in facing competency tests in Fukuoka, Japan.

Results

This research was conducted November – December 2024. at the Preifeiktuir Fuikuioka Jeipang Elderly Home. The respondents in this study totaled 30 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 environmental factors, work factors and personal factors, and stress levels while bivariate analysis was used to see the relationship between each research variable and stress levels.

Univariate Analysis

Table 1. Environmental Factors

	Freq	%
Conducive	21	70
Not Conducive	9	30
Total	**30**	**100**

Based on the table1 shows that the number of respondents is based onEnvironmental Factors thatAs conducive as possible70%, while Unconducive is 30%..

Table 2. Job Factors

	Freq	%
Tall	13	43.3
Low	17	56.7
Total	**30**	**100**

Table 2 shows that the number of respondents is based on Employment Factors namely factor beautiful work namely56.7%, and the factor jobs high as 43.3%.

Table 3. Personal Factor

	Freq	%
Good	19	63.3
Not Enough	11	36.7
Total	**30**	**100**

Table 4. Stress Level

	Freq	%
Light	14	46.6
Currently	9	30
Heavy	5	16.6
Very Heavy	2	6.66
Total	**30**	**100**

Based on table 4. it shows that the number of respondents based on stress level is light at 46.7%, moderate at 30.0%, heavy at 16.7% and very heavy at 6.7%.

correlation				Stress levels
			Environmental Factors	
Speiarman'srho	Factor Environment	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 environmental Factor variables and the Stress Level.

Correlations				Stress Level
Speiarman'srho	Employment Factors	Core-enactment Co-efficient	1,00	,424*
		Sig. (2-tailed)	.	,019
		N	30	30
	Stress Level	Core-enactment Co-efficient	,424*	1,000
		Sig. (2-tailed)	,019	.
		N	30	30

it is known that the significance value or Sig. (2-tail d) of the Job Factor is 0.019 because the Sig. (2-tail d) value of 0.019 < is smaller than 0.05, which means that there is a significant relationship between the Job Factor variable and the Stress Level.

Correlations				Stress Level
Speiarman's rho	Personal Factors	Core-enactment Coefficient	1,000	,597**
		Sig. (2-taileid)	.	,000
		N	30	30
	Stress Level	Core-enactment Coefficient	,597**	1,000
		Sig. (2-taileid)	,000	.
		N	30	30

it is known that the significance value or Sig. (2-taileid) of the Personal Factor is 0.000 because the Sig. (2-taileid) value of 0.000 < is smaller than 0.05, which means that there is a significant relationship between the Personal Factor variables and the Stress Level.

Discussion

Based on the results of the study on descriptive variables, that the number of elderly nurse respondents in Fukuioka, Japan based on Environmental Factors is in a Conducive condition of 70%, while Not Conducive is 30%. Environmental factors affect the level of stress because a comfortable environment without noise, good lighting and a supportive work environment can increase psychological responses which means preventing stress levels. In the environmental factor variables in this study are still in a conducive condition provided in a place to learn Japanese, the learning environment in the workplace is quite conducive.

The results of the study are in line with Fraseir's opinion in (Badri, 2020), a work environment that involves a lot of physical abilities and special skills can be a source of work stress in nurses up to 74% of cases. Therefore, a conducive work environment design is needed so that nurses feel comfortable while working (Tarwaka, 2011). Each employee is expected to be able to carry out work according to the position held and adapt to the environment and work colleagues who have different characters. Interaction between individuals in the work environment can cause negative impacts that trigger conflicts and problems in work and positive impacts, namely the creation of dynamic work environment conditions (Anatan, 2009).

Research assumptions that nurses prepare themselves in facing the competency exam there are several obstacles. Weather conditions that easily change every season so that the temperature in the room changes, causing learning conditions to be disturbed, for that reason the researcher hopes that the elderly home will provide more by preparing adequate learning rooms such as adequate lighting, providing room heaters during the winter, other facilities such as nursing rooms for the elderly and adequate study time in preparing the competency exam.

Based on descriptive results on respondents related to personal factors are Good as much as 63.3%, Less as much as 36.7%. Personality is a whole way in which individuals react and interact with other individuals. The existence of problems within the individual outside the organization can be a potential stressor that covers all aspects of life. Issues regarding family problems, life crisis events, financial difficulties, conflicting personal and organizational beliefs, conflicts between family and company goals, all of which can be stressors for individuals in their work, just as stress at work has a negative impact on family and personal life. Nurses working in health services are not only single or married women but also those who are already married.

Based on the descriptive results of the variables on the Job Factor are the most beautiful job factor, which is 56.7%, and the high job factor is 43.3%. Nurses experience job stress in the form of variables in the form of workload, including workload as the dominant

variable that influences the work stress of nurses in the hospital.

The results of this study are in line with the research conducted by Kuirniawan & Kristianingsih, 2021, that in their study showed a workload of 23 people (69.7%), while other studies in line were conducted by Andrianti; Ikhsan; nui laini; Sardaniah (2018), where the results of this study showed a workload of 59.6%. Excessive workload (overload) will be a source of work stress in nurses, both at a light and severe level, this depends on the coping mechanisms that each individual has towards themselves (deiwi et al., 2015).

The researcher's assumption is that elderly nurses working in Fukuoka, Japan are included in the beautiful category, such as there are 4 shifts every day, each shift works for 9 hours with a 1 hour break time, each shift has 2-3 elderly nurses working. The Wayn with researchconducted by Fita (2017) that Nurses who work and have been married, they will live the world of work at the same time, as a worker as well as a housewife, it is not easy. Where they must be able to balance time, energy and thoughts between family and work. Female nurses who are married and have children have more roles and responsibilities than women who are not married. Personal factors in this study are good because each elderly nurse works according to their job description and helps each other in caring for the elderly.

Research assumptionsthat the results of the study conducted on elderly nurses working in Fukuoka, Japan in the good category are supported by intuitive self-motivation to try to learn in preparing for the competency exam so that they can get the results of the examination. After the examination, elderly nurses will get a certificate so that they can become employees. It is known based ondescriptive results on the variable Stress Level that the number of respondents Stress Level is Mild as much as 46.7%, moderate as much as 30%, severe as much as 16.7%, while Very Severe as much as 6.7%. Stress is considered as a mother's response because stress is a nonspecific mother's response to any motherhood, regardless of its nature. Acute stress that cannot be controlled, experiences an increase and lasts for a long time will balance into chronic stress (Tauifiquirrohman, 2015). Chronic stress occurs over a long period of time, caused by intuition and pressure that is

continuously mechanical and difficult to overcome. Chronic stress can cause damage to the body, mind, and soul of the person who experiences it. In the descriptive data results of stress levels in elderly nurses in Fukuoka, Japan, some have mild stress levels. The researcher assumes that every month there are 9 mandatory days off for elderly nurses and every elderly nurse works according to job description (APA, 2016). The results of this study are in line with the theory of meinuiruit (Muibin, 2023), stressors can originate fromfrom several aspects of daily life and can vary for each individual. Environmental stressors, This includes situations or physical conditions around you. which can trigger stress, such as noise, social stressors, difficult social interactions, conflict in the home, problems in the family, or pressure from the social environment.

(e.g., pressure from friends, colleagues, or society) that can be stressors. Job stressors, high workload, tight deadlines, conflict with colleagues or superiors, lack of support at work, or job uncertainty are examples of stressors that occur in the work environment. Personal stressors These include life events such as the loss of a loved one, divorce, major family changes (such as moving house or country), personal health problems, or changes in life stages that trigger stress. The results of this study are also in line with the research of Zakiyatuil (2017) which shows that nurses with light workloads experience high work stress (36.7%). Based onresearch results, it is known that the significance value or Sig. (2 - taileid) of the Environmental Factor is 0.004 because the Sig. (2-taileid) value of 0.004 < is smaller than 0.05, which means that there is a significant relationship between the Environmental Factor variable and the Stress Level in elderly nurses facing the competency test in Fukuioka Jeipang. Meinuiruit Asmarany, Anuigriaty Indah. (2024) Workload influenced by nurses based on their experiences was shown to be accompanied by a divine response as a feeling of being overwhelmed accompanied by a high workload, ineffectiveness in patient outcomes, and physical discomfort. Nurses also felt that stress at work affected their home life, causing recurrence of negative thoughts, and making it difficult to sleep. The stress experienced by nurses can be caused by the burden of nurses' work during the day because they are responsible for caring for several patients at the same time.

whose absence on certain days causes physical and psychological damage, and ultimately affects the quality of life of an individual.the pricelt can be concluded that work environment factors have an impact on elderly nurses.in facing the competency exam in Fukuoka, Japan. Seiring with the research conducted by Keiigo et al, (2019). From 607employees (470 women, 137 men) based on the percentage of high stress workers in the first category are in the elderly care work (caregiver) with a percentage of 29.4%, 3 in the second category are hospital nurses 27.3% followed by hospital staff 26.1% nurse assistants 19.4% physiotherapy 9.37% genital affairs 8.62% social workers 5.78% doctors 14.22% nutritionists 7.75% pharmacists 9.41% health analysts 5.35% and the smallest percentage is in psychology 6.6% Based on Fahruiddin's research (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 the discussion, it was stated that the factors that could influence were age, education, gender, workload, environmental adaptation, socio-culture such as interpersonal communication skills in Japanese influencing stress levels.

Researchers assume that the environment has a great influence on stress levels. The more the work environment is loved by employees, the better the health of the employees.Teafour jobs that I miss, with managementGood work environment, open communication, and recognition of achievements can increase employee satisfaction and productivity. Conversely, a stressful workplace, with high workloads or noisy relationships with co-workers can cause stress, anxiety, and worsen mental health. Based on outputt In the research, the significance value or Sig. (2-tailled) is known. The Employment Factor is equal to 0.019 because of the Sig value. (2-tailed) 0.019 < smallerof 0.05, it means that there is a significant relationship between the variables of the Job Factor and the Stress Level in elderly nurses facing the competency test in Fukuoka, Japan. Stress is a process of an unpleasant psychological response to the environment. Stressors are also influenced by several factors, namely the nature of the

stressor, the number of stressors, the duration of the stressor, past experience, and the level of balance. If individuals can adapt to their environment, then over time they will not consider such an unpleasant situation to be a threat. Meireika will be better able to control her stress levels if faced with the same situation repeatedly.

This is in line with research conducted by Hamadi et al., (2017) revealed that, stress is more experienced by students who work. This is because the density of school and work activities makes students who work have a higher level of fatigue than students who do not work. This can also happen to elderly nurses facing competency exams in Fukuoka, Japan. From the results of statistical analysis on the work status variable, it shows that there is no significant relationship between work status and the level of stress in elderly nurses. High work stress also has an impact on the performance, satisfaction, productivity, and caring behavior of nurses. Supported by Riza's research, (2015) that, The higher the work stress, the better the performance, satisfaction, productivity, and caring behavior of nurses. If nurses experience work stress and are not managed properly, it can eliminate the sense of caring for patients, increase the occurrence of errors in patient care and endanger patient safety (Sharma, 2014; Jeinnings, 2008). There is also the researcher's assumption that job satisfaction is strongly related to job stress. So when a nurself the elderly experience difficulties in their work, it will have an impact on the emergence of stress.

In general, symptoms of work stress experienced by a person can be seen from various changes, both psychological, physiological, and behavioral Potteir & Peirry. (2015). In this study, personal factors can be a source of stress for elderly nurses facing competency tests in Fukuoka, Japan. Personal characteristics of stress responses are the result of integrated neuroindocrine responses and there are individual differences in responding to the same stressor (Potteir & Peirry, 2015). Innate personality characteristics according to Robbin in Guiridno (Robbins & Juidgei, 2021) The most important individual factor influencing stress is a person's basic personality traits. This means that the symptoms of stress expressed in the job

actually come from within the person's personality.

The results of this study are in line with the results of the study (Haeirani & Siringoringo, 2017) which stated that nurses who have family problems are likely to experience severe work stress. The researchers assume that nurses who have family problems are likely to experience stress because the problems faced in the family sometimes cannot be resolved, causing stress. The existence of problems within the individual outside the organization can be a potential stressor that covers all aspects of life. Issues regarding family problems, life crisis events, financial difficulties, conflicting personal and organizational beliefs, conflicts between family and business goals, can all be stressors for individuals in their work, just as stress at work has a negative impact on family and personal life. The researcher's assumption is that every nurse has the normal ability to complete the tasks assigned to her, besides that burden of burden A intuitive key to identifying the causes of potential stress in hospitals in nursing homes, because stress will affect nurses, and each nurse has a different way of dealing with stress depending on the duration, type and frequency of stress experienced.

Conclusion

Based on research which was conducted on Indonesian nurses who worked as elderly nurses during November 2024, the researchers obtained conclusions that can be drawn from this study regarding factors related to stress levels in Indonesian nurses who worked as elderly nurses in the Fukuoka Prefecture, Japan. Environmental factors for Indonesian nurses working as elderly nurses in the Fukuioka prefecture, Japan are conducive. Occupational factors of Indonesian nurses working as elderly nurses in Fukuoka Prefecture, Japan, namely Reindah. Personal factors of Indonesian nurses working as elderly nurses in Fukuoka Prefecture, Japan are Good. The stress level of Indonesian nurses working as elderly nurses in Fukuoka Prefecture, Japan is mild. There is environmental factors and stress levels in Indonesian nurses working as elderly nurses in Fukuoka Prefecture, Japan. There work factors and stress levels in Indonesian nurses working as elderly nurses in Fukuoka Prefecture, Japan. There personal factors and stress levels in Indonesian nurses

working as elderly nurses in Fukuoka Prefecture, Japan.

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