



FACTORS AFFECTING WORK STRESS IN CLEANING SERVICE WORKERS

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ABSTRACT

Work-related stress and depression accounted for 44% of all work-related health problems and 56% of absenteeism from the office due to illness. Some cleaning service respondents said that having a lot of work, feeling exhausted, feeling dizzy, personal problems brought to work, and being offended by what colleagues said, allowing them to experience work stress. The purpose of the study was to determine the factors that affect work stress in cleaning service workers at RSUP H. Adam Malik Medan. This study used a cross-sectional design, with the subjects of 115 workers and selected using the starfield random sampling method. The analysis used is the Pearson rank correlation test and the one way test. The results showed that there was an influence of age on work stress with a very weak level of influence not unidirectional ($p = 0.007$, $r = -0.248$), no influence of sex on work stress ($p = 0.037$), there was an influence of working period on work stress with a weak level of unidirectional influence ($p = 0.015$, $r = -0.227$), no shift influence against work stress ($p = 0.273$). There is an effect of workload on work stress with very strong and unidirectional influences ($p = 0.000$, $r = 0.951$). The conclusion of the research results, factors that affect work stress are age, length of work, and workload, while factors that do not comply with work stress are gender and work shifts.

Keywords: cleaning service; work stress; workload

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INTRODUCTION

In Law Number 13 of 2003 concerning Manpower, it is stated that according to article 1 paragraph 2, labor is an individual who has the capacity or ability to perform tasks, either inside or outside the context of work, with the aim of producing goods or services for personal or community needs. Each type of work has its own challenges and burdens that can have an impact on the mindset, behavior, and stress level experienced by workers. (Yuliani & Putri, 2020) According to a 2018 International Labour Organization (ILO) report, the number of worker deaths due to occupational accidents and work-related diseases reaches 2.78 million every year. About 2.4 million (86.3%) of the total deaths were due to work-related diseases, while more than 380,000 (13.7%) were caused by occupational accidents. Every year, there are almost a thousand times more non-fatal work accidents than work accidents that are fatal. Nonfatal accidents affect an estimated 374 million workers each year, and most of these accidents have a serious impact on workers' ability to generate income (Organization, 2018).

Work stress is a condition in which an employee feels depressed and causes physiological reactions due to excessive work demands and or not according to the employee's ability. (Luh Listu Ayu Padmawati et al., 2024) Work stress is also a person's response to conditions that are felt both physically and psychologically excessive due to a work demand internally or externally so that this stressful condition can experience dissatisfaction at work and reduce performance. Work stress can have both positive and negative influences. Positive stress, such as personal motivation, stimulation to work harder, and increased inspiration for a better life by changing the perception of employees and their work so as to achieve good career achievements (Aprilia et al., 2023)

Work stress or work pressure is considered a significant problem that is still often complained by employees in various industrial sectors or organizations around the world. The survey conducted by the Health and Safety Executive (HSE) stated that work-related stress and depression in 2017/2018 was 595,000 cases with a prevalence rate of 1,800 per 100,000 workers. Work-related stress and depression also accounted for 44% of all work-related health problems and 57% of absenteeism from the office due to illness (HSE, 2018). Furthermore, statistical data released by HSE UK showed a significant increase in work stress levels during the period 2001-2020. Based on these data, at the end of 2019-2020, around 2500 workers per 100,000 people reported experiencing stress. A burgeoning research institute of occupational behavior and occupational health has established work stress as one of the most common health problems in organizations in Europe and globally. A 2014 study showed that 77% of the U.S. population experiences job stress, while a national survey in Japan revealed that more than half of the working population feels job pressure on a daily basis. (Mensah, 2021).

Data from Basic Health Research (Riskesdas) in 2018 shows that the prevalence of the Indonesian population in the population aged ≥ 15 years who experience mental, emotional or stress disorders is 6.0% or around 37,728 people (Ministry of Health, 2018). Mercer Marsh Benefit (MMB) in 2021 conducted a survey of more than 1,000 workers in Indonesia and found that 2 out of 5 workers experience work-related stress (Suherndarlan et al., 2022). Some studies say that severe work stress as many as 55 people (69.6%) and those who have low work stress as many as 24 people (30.4%). (Putri Samri et al., 2023) Then there is a significant relationship between workload and work stress with a significance value between workload and work stress of 0.019, which means a p-value of < 0.05 (Priharwanti et al., 2024). In addition, there was a significant relationship between age, sex, and length of work and work stress. Other studies also mention a relationship between (Saputri et al., 2024) shift work and work stress. (Saputera et al., 2022) Based on some of these studies that the factors that affect work stress are internal factors, individual characteristics, and external or workload.

Cleaning Service is a service provided to the cleanliness of a building or other building, which is carried out carefully and thoroughly with the help of non-machine machine cleaning tools and chemicals (chemicals) carried out by an officer or cleaning nurse. (Haryanto et al., 2020) Cleaning service personnel are also people who have the responsibility to maintain cleanliness and maintenance in office environments or institutions, both government and private. They perform these tasks at full risk, especially in high-rise buildings where they need to clean window glass and exterior walls. In addition, they often have to work overtime when there are special events held by the agency. A high level of loyalty and responsibility is strongly emphasized in the cleaning service profession, especially in places that serve the general public. Usually, the main job of a cleaner is to maintain and maintain cleanliness in

the assigned area according to the placement and procedures set by the superior. (Aulia Manurung et al., 2023)

H. Adam Malik Central General Hospital (RSUP) is a Class A Hospital according to the primary data obtained by researchers, H. Adam Malik Hospital has 262 cleaning service officers stationed in each building where the building consists of 26 buildings. Cleaning service officers of RSUP H. Adam Malik also have work shifts, namely 180 morning shifts (06.00-14.00), 56 day shifts (14.00-22.00), 26 night shifts (22.00-06.00) and female gender is more than men. Then based on initial observations made to some cleaning service respondents, they said that they had a lot of work, then in times of fatigue they felt dizzy, personal problems were brought to work, and some workers said they liked to be offended by what colleagues said that it allowed them to experience work stress. The purpose of this study was to determine the factors that influence work stress in cleaning service workers at RSUP H. Adam Malik Medan.

METHOD

This study used a descriptive quantitative type with a cross-sectional design. This study was conducted at H. Adam Malik Central General Hospital Medan, with a population of 262 respondents. The number of samples used is part of the population, which is 115 samples using the Lemeshow formula (1997). The sampling technique used is the stratified random sampling method. Data collection conducted through interviews and questionnaires used were workload and work stress questionnaires derived from research (Sagala, 2020) with Likert scale: Sangan Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1) to respondents, especially cleaning service workers at RSUP H. Adam Malik Medan. The Pearson rank correlation test is used to assess the degree or strength of the relationship between independent variables such as age, length of service, shift work, workload and the dependent variable i.e. work stress. Then to determine the effect between sex and shift work on work stress using the one-way anova test.

RESULTS

Table 1, the age distribution of cleaning service workers at RSUP H. Adam Malik Medan is as follows: 20-29 years old (53 respondents, 46.1%), 30-39 years old (28 respondents, 24.3%), 40-49 years old (26 respondents, 22.6%), and 50-59 years old (8 respondents, 7%). Gender distribution is 30 males (26.1%) and 85 females (73.9%). Work periods are < 5 years (24 respondents, 20.9%), 5-10 years (42 respondents, 36.5%), and > 10 years (49 respondents, 42.6%). Work shifts are morning (79 respondents, 68.7%), afternoon (25 respondents, 21.7%), and night (11 respondents, 9.6%). Workload levels are low (32 respondents, 27.8%), medium (63 respondents, 54.8%), and heavy (20 respondents, 17.4%). Work stress levels are low (31 respondents, 27.0%), medium (59 respondents, 51.3%), and heavy (25 respondents, 21.7%).

Table 1.
Characteristics of Cleaning Services Worker Respondents

Characteristic	f	%
Age		
20-29 year	53	46,1
30-39 year	28	24,3
40-49 year	26	22,6
50-59 year	8	7,0
Gender		
Man	30	26,1
Woman	85	73,9
Period of Service		
< 5 year	24	20,9
5-10 year	42	36,5
> 10 year	49	42,6
Shift Kerja		
Morning	79	68,7
Noon	25	21,7
Night	11	9,6
Workload		
Low	32	27,8
Currently	63	54,8
Heavy	20	17,4
Job Stress		
Low	31	27,0
Currently	59	51,3
Heavy	25	21,7
Variable	Mean ± SD	Min – Max
Age	32,90 ± 8, 96	20 – 50
Years of service	9,43 ± 3, 06	1 – 22
Workload	44,65 ± 9,82	25- 56
Job Stress	45,98 ± 9,69	26- 58

Table 2.
Effect of Age, Work Period, and Workload on Work Stress in Cleaning Service Officers at H. Adam Malik General Hospital, Medan

Variable	N	Job Stress		
		r	p	The Power of Relationships
Age	115	-0,248	0,007	Very weak
Years of service	115	-0,227	0,015	Very weak
Workload	115	0,951	0,000	Very strong



Figure 1. Box Plot and Scatter Plot Work Stress Based Age

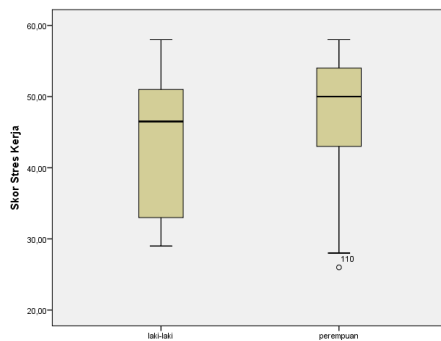


Figure 2. Box Plot by Gender

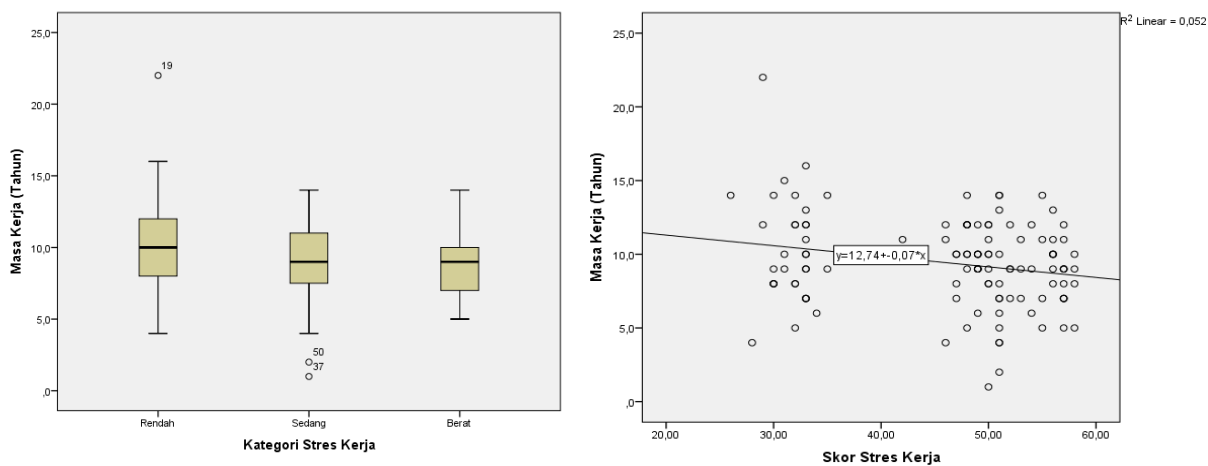


Figure 3. Box Plot and Scatter Plot of Work Stress Based on Length of Service

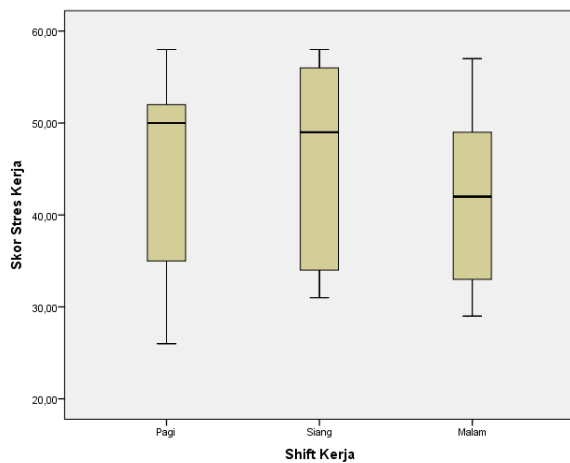


Figure 4. Box Plot Based Work Shifts

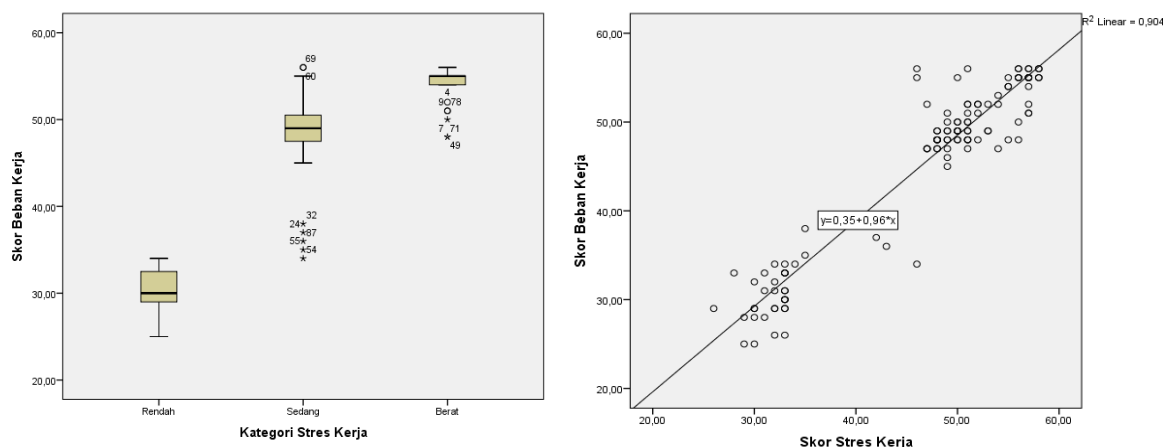


Figure 5. Box Plot and Scatter Plot Work Stress Based Workload

DISCUSSION

Based on table 2, the results of the *Pearson rank* correlation test show an age (p) value of 0.007 (<0.05) and a regression coefficient (r) of -0.248 which means that age has a significant relationship with work stress but the level of influence is very weak and not unidirectional which can be seen in the *scatter plot* graph above. This means that the higher the age of the respondent, the lower the stress level. The results of this study are in line with (Paskaliani, 2024) the *chi-square* statistical results obtained a p -value of 0.03 (< 0.05), meaning that there is a significant relationship between age and work stress in teachers of SMK Persada Husada Indonesia in Jatiasih Bekasi which means that younger people tend to experience more stress than older ones. Research (Awalia et al., 2021a) says that age factors are difficult to analyze separately because there are still many factors in other individuals that affect work stress. In addition, with age, experience and knowledge will improve and a greater sense of responsibility where everything will be able to make up for the lack of adaptation.

Based on the results of the *one-way* anova test showed a value (p) of 0.052 (>0.05), which means there is no significant influence between sex on work stress and the level of influence is very weak. Even if they don't have a significant relationship, it doesn't mean that no one experiences work stress. In this study the number of female respondents was more than men, so respondents who were female experienced more work stress than men. The results of this study are in line with research based (Adiba & Bahri, 2022) on the results of statistical tests using the *chi-square test*, from the results of the questionnaire data obtained a p -value value of $0.568 > \alpha = 0.005$ so that H_a was rejected which means there is no significant relationship between sex and work stress in production workers at PT. Tri Teguh Manunggal Sejati Tangerang City in 2021. The results of this study are not in line with research (Awalia et al., 2021) that the results of statistical analysis obtained p -values of $0.014 < 0.05$ which means there is an influence between sex and work stress. In relation to stress, women have a greater tendency to experience greater stress where hormonal changes in a woman's body occur such as menstrual cycles, pregnancy, and menopause, which can also affect their energy levels and fitness. While men tend to be better able to handle heavy and difficult work which is usually a challenge for women. This is due to differences in body size and muscle strength, where men generally have larger bodies and stronger muscles than women.

Based on table 2, the results of the *Pearson rank* correlation test show a value (p) of 0.015 (< 0.05) and a regression coefficient (r) of -0.227 which means that working period has a significant relationship with work stress but the level of influence is very weak and has a non-directional influence which can be seen on the *scatter plot* graph above. This means that the

higher the working period of the respondent, the lower the level of work stress. The results of this study are in line with the research obtained the results of bivariate analysis with (Mualim & Adeko, 2020) the *Chi-square* Test obtained a meaning value $p = 0.01 < 0.05$ so that it can be concluded that H_a is accepted and H_o is rejected meaning that there is a relationship between work period and work stress in *PT dryer* workers . Bukit Angkasa Makmur in Central Bengkulu Regency. The results of this study are not in line with the study, it was found that the probability value of 0.307 means that at a 5% confidence level there is no relationship between working time and work stress in security and cleaning officers. (Tsamarah, 2020) With the passage of time in a long workplace, a person can get used to the work environment and have the ability to cope with problems that arise, so stress tends to occur more often at the beginning of a new working period.

Based on the results of the *one-way* anova test showed a value (p) of 0.273 (>0.05) which means that *shift* work does not have a significant relationship with work stress, this means that there is no influence between *shift* work and work stress. Although it does not have a significant relationship, it does not mean that none of the morning, afternoon, and night shift workers do not experience stress. In figure 4. The *box plot* above shows that *day shift cleaning service* workers experience more work stress. The results of this study are in line with the research (Salim et al., 2023) of statistical test results using the *Chi-Square* test showing a p -value of 0.513 (>0.05) indicating that there is no relationship between *shift* work and work stress of administrative officers at Hospital X Pekanbaru. Shift (Belete et al., 2020) workers have higher stress levels than fixed-time workers, and this may be due to the fact that shift work affects normal human circadian rhythms and can cause a variety of psychological and physiological problems.

As explained that the work shift for *cleaning service workers* at H. Adam Malik Medan Hospital is divided into three work periods, namely morning, afternoon, and night with the division of workers of each *shift* such as in the *morning and afternoon shifts* the number of *cleaning services* More due to the activity of patients or visitors and other workers such as health workers more in the morning and afternoon, but fewer workers in the *day shift* and the duration of work until night. While the *night shift* is not much cleaning service because they do not have so much work so they have enough rest.

Based on table 2 of the *Pearson rank* correlation test results show a value (p) of 0.000 (>0.05), it means that there is a significant relationship between workload and work stress and also the value of the regression coefficient (r) of 0.951 is positive, which means that workload has a very strong influence on work stress and in the same direction that can be seen on the *scatter plot* graph above. This means that the more workload increases, the work stress will remember. The results of this study are in line with the research (Puspitasari et al., 2021) of the results of the spearman rank correlation statistical test showing that workload has a positive and significant effect on work stress. This is indicated by a regression coefficient of 0.983 which is positive and a significant value of 0.000. Positive influence means that workload has a unidirectional influence on the work stress of Puri Mataram Resto & Wahana Wisata Yogyakarta employees. The results of this study are in accordance with the theory of Hurrel et al 1998 where one of the factors that affect work stress is workload. Workload and work stress have a related influence.

According to (Sari et al., 2024) workload refers to the number of tasks and responsibilities that a person must handle in the work environment. While work stress is an emotional, physical, and mental reaction to excessive pressure or demands at work. A high level of

workload can cause increased work stress. When a person is faced with multiple tasks, tight deadlines, or unrealistic expectations, they may feel pressured and have difficulty coping with the pressure.

CONCLUSION

From the results of the study, it can be concluded that the most or dominant age of cleaning service at RSUP H. Adam Malik Medan aged 20-29 years is 53 people (46.1%), female is 85 people (73.9%), with a maximum working period of >10 years is 49 people (42.6%), and shifts morning as many as 79 people (68.7%). While the workload level was the most with the medium category of 63 people (54.8%) and the level of work stress with the medium category was 59 people (51.3%). Obtained from the results of research on factors that affect work stress in cleaning service at RSUP H. Adam Malik Medan there is an influence between age on work stress ($p = 0.007$) and a very weak level of influence not in the same direction ($r = -0.248$), there is no influence between sex on work stress ($p = 0.052$), there is an influence between work period on work stress ($p = 0.015$) and the level of influence is very weak and not unidirectional ($r = -0.227$), there is no effect between shift work on work stress ($p = 0.273$), there is an influence between workload and work stress ($p = 0.000$) and the effect is very strong and unidirectional ($r = 0.951$). Thus, factors that affect work stress in cleaning services at H. Adam Malik Medan Hospital include age, working period, and workload, while factors that do not comply with work stress are gender and work shifts.

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