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# Analysis of work posture, workload and work stress against nurse burnout syndrome

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**ABSTRACT**

This study aims to examine work posture, workload and work stress on burnout syndrome symptoms experienced by nurses when handling patients with COVID-19, an analytical observational research with a survey study design was used in this study. The sample of this study were 54 nurses in the Special Isolation Room for COVID-19 patients at RSUD Dr. Soetomo Surabaya and RSUD dr. Soebandi Jember, determining the sample using purposive sampling technique. Data were collected using observation sheets and questionnaires. Data were analysed by bivariate test and multivariate test with multiple linear regression analysis and ordinal regression. The results showed that the work posture of nurses handling COVID-19 patients was in the low to moderate risk category and workload, work stress and symptoms of burnout syndrome in nurses handling COVID-19 patients at moderate to high levels. Work posture and workload variables do not have a significant effect on symptoms burnout syndrome ($p < 0.05$) while work stress has a significant effect on symptoms burnout syndrome ($p < 0.05$). The health care system needs to pay attention to the safety and health of nurses by creating a safe and comfortable atmosphere, forming work teams, organizing work and fulfilling the availability of PPE and prioritising mental health aspects by providing psychological counselling for nurses in charge of handling COVID-19 patients.



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# INTRODUCTION

*Coronavirus Disease-2019* pandemic has become a public health problem since December 2019 and has rapidly spread to countries around the world (Tengilimoğlu et al., 2021) . As the world continues to monitor the uncertainty of COVID-19, it has become apparent that the dynamics of the pandemic could easily overwhelm healthcare systems globally and have serious adverse health, economic and social impacts on populations (Farsalinos et al., 2021) . The World Health Organization (WHO) announced that COVID-19 is an infectious disease caused by a type of corona virus that was discovered, which is a type of virus that can cause disease in humans or animals

(Dinisari, 2020; Kharel et al., 2022). The corona virus variant that causes COVID-19 infection has been identified as Severe Acute Respiratory Syndrome-Corona Virus-2 (SARS-CoV-2) (Hong et al., 2021; Lechosa-Muñiz et al., 2021; Zha et al., 2020).

*Burnout* raises *psycho-social risks* and work-related stress (Izzati & Mulyana, 2019). The main problem identified is in the field of occupational safety and health (K3), where the impact is not only on individual welfare, but also on organizational structure, the economy and business as a whole (EU OSHA, 2013). The impact of these factors can be seen in several work-related problems, such as increased risk of heart disease, digestive disorders, fatigue, musculoskeletal accidents, anxiety, depression, absenteeism, work-family conflict and burnout syndrome (Cox T, 2000).

Burnout syndrome is the biggest obstacle experienced by health workers. The results of previous research from the Occupational Medicine Master's Study Program, Faculty of Medicine, University of Indonesia (FKUI) relating to the problem of burnout syndrome reported that as many as 83% of health workers in Indonesia experienced moderate and severe burnout syndrome which psychologically increases the risk of disrupting the quality of life and work productivity in health service system. Apart from that, worrying conditions were found, for example 41% of medical personnel experienced moderate and severe emotional fatigue, 22% experienced moderate and severe loss of empathy, and experienced moderate and severe lack of self-confidence with a percentage of 52%. Also, several problems related to facilities and resources, namely that medical staff did not receive PPE or personal protective equipment with a percentage of 2% and 75% of medical facilities did not carry out swab checks , while 59% of them did not carry out routine rapid tests on their medical staff (Damayanti et al., 2021; Langford et al., 2020; Sujana & Maulida, 2021).

The COVID-19 pandemic caused global panic. As a result, health care providers caring for COVID-19 patients reported experiencing stress, anxiety, and fatigue that were much higher than those felt by health care providers in other departments (Algunmeeyn et al., 2020) . The most obvious risk is the safety aspect of medical personnel, especially those on the front line who are very vulnerable to being exposed to COVID-19 so there is a risk of endangering their lives. Data summarized from health worker organizations in Indonesia found that as of August 4 2021, a total of 1636 medical and health workers had died due to contracting COVID-19. The health and medical personnel who died were 598 doctors, 503 nurses, 299 midwives, 48 pharmacists, 46 dentists and 45 medical laboratory personnel. Of the total figure, the percentage of death rates for nursing staff reached 30.74% and is the second largest death rate for medical personnel in Indonesia. Meanwhile, in East Java Province, the death rate for nursing staff who died due to COVID-19 was 191 people and this is the highest death rate for nursing staff nationally.

Then, *burnout syndrome* has a negative impact. Burnout can affect an individual's physical or psychological health, causing psychosomatic disorders such as headaches, cardiorespiratory disorders, and mucosal changes, etc. As well as, psychopathological disorders such as addiction and depression, anxiety, obsessive-compulsive behavior (Chirico *et al* ., 2016) . From this point of view, the increase in burnout syndrome symptoms experienced by nurses not only affects physical or mental health, but also affects the quality of health services for patients and affects the social lives of nurses.

This research was conducted to analyze the influence of work posture, workload and work stress on the symptoms of burnout syndrome in nurses who treat COVID-19 patients in East Java Province. This study examines the relationship between physical and psychological (mental) aspects of *burnout syndrome symptoms*, which previous research has not done.

# RESEARCH METHOD

This research is a cross sectional study , with a survey research design , with observational methods analytics (Semiawan, 2017; Sugiyono, 2022). *The research* subjects were nurses who handled the second wave of COVID-19 patients (Delta Variant) in the COVID-19 Emergency Room/ Triage care unit, the Special COVID-19 Isolation Room and the COVID-19 Intensive Care

Unit at Dr. RSUD. Soetomo Surabaya and RSUD dr. Soebandi Jember in East Java Province. Determination of the research sample was carried out using a *non-random sampling method* using *purposive sampling technique*. The sample was determined using inclusion criteria, namely: Nurses who handle COVID-19 patients in the ER, RIK (Special Isolation Room) and RICU (Intensive Care Unit) COVID-19 installations; Nurses who handle the second wave of COVID-19 patients (Delta Variant); Nurses who are willing to be research subjects . From the sampling technique used, there were 54 respondents who were willing to be used as research samples and met the inclusion criteria set by the researcher. The data sources obtained from this research come from primary data and secondary data. Primary data was obtained from direct observation of nurses' work posture when caring for COVID-19 patients, and secondary data was obtained through research questionnaires distributed online via *Google forms* and offline manually using a questionnaire sheet. Observe nurses' work posture using the Rapid Entire Body Assessment (REBA) observation sheet . Workload data was collected via the NASA-TLX questionnaire, work stress data was collected via the HSE Management Standards Indicator Tools questionnaire and burnout syndrome symptoms data was collected via the MBI-HSS questionnaire. Data were analyzed using bivariate tests with multiple linear regression and multivariate tests with ordinal regression (Unaradjan, 2019; Yusup, 2018). The research has passed the ethical suitability test from the Health Research Ethics Committee, Faculty of Public Health, Jember University with ethical suitability statement No.115/KEPK/FKM-UNEJ/X/2021. This research also passed the ethical test from the Dr. RSUD Health Research Ethics Committee. Soetomo with number 0399/KEPK/III/2022.

# RESULTS AND DISCUSSIONS

Results Characteristics of respondents (Table 1) examined in this study. The demographic data of respondents in this study consisted of age, gender, length of service and educational background from the research locations at 2 Regional Hospitals in East Java Province. The gender characteristics of the research respondents were almost balanced, where there were 28 male respondents with a percentage of 52%, while there were 26 female respondents with a percentage of 48%. The age characteristics of the respondents studied were mostly in the age range 26 - 35 years amounting to 30 people or 55%, followed by those aged over 35 years amounting to 22 people or 41%, and the least in the age range 20 - 25 years amounting to 2 people or 4%.

The characteristics of the educational level of research respondents consisted of a D3 Nursing education level of 30 respondents or 56% and a Bachelor of Nursing education level of 24 respondents or 44%. The characteristics of the work period of research respondents are that the most work period is 11 - 20 years amounting to 27 people with a percentage of 50%, followed by the work period of 0 - 10 years amounting to 23 people with a percentage of 43% and the least work period over 20 years is 4 people with a percentage 7 %.

The results of observations of work postures (Table 2) of nurses who handle the second wave of COVID-19 patients (Delta Variant) in East Java Province show that the majority of nurses' actions when handling COVID-19 patients are in the medium risk category with 5 nursing actions with a percentage of 71% while 2 nursing actions were in the low risk category with a percentage of 29%.

Results of observations of nurses' work posture and workload (Table 3) during the COVID-19 pandemic at two research locations in East Java Province. Observation data on work postures of nurses when caring for COVID-19 patients in East Java Province. Most of them are included in the medium risk category, namely 5 nursing actions with a percentage of 71%, while the remaining 2 nursing actions are included in the low risk category with a percentage of 29%. Data on the workload of nurses in East Java Province during the second wave of the COVID-19 Pandemic (Delta Variant) where the majority of nurses' workload when handling COVID-19 patients was in the medium category with 28 respondents with a percentage of 52%, followed by the high category with 20 respondents with a percentage of 37% and 6 respondents or 11% in the low category.

Data on the level of work stress and *symptoms of burnout syndrome* are presented in Table 4. The level of work stress for nurses who handle the second wave of COVID-19 patients (Delta Variant) in East Java Province, where the total of each aspect studied shows that the level of work stress for nurses during this period – during COVID-19 the average in the high category was 53%, followed by the medium category at 24% and the low category at 23%. The results of *symptoms of burnout syndrome* in nurses while handling the second wave of COVID-19 patients (Delta Variant) in East Java Province, this data shows the frequency of symptoms of burnout syndrome in nurses while handling COVID-19 patients where the majority of nurses caring for COVID-19 patients experience symptoms of burnout syndrome with a low frequency of 44%, followed by a high frequency of 34% and a medium frequency of 22%.

The results of the bivariate test analysis (Table 5) prove that there is no significant influence between the independent variable and the dependent variable, which is indicated by the significance value $\alpha > 0.05$.

Multivariate analysis (table 6) prove that there is a significant influence between work stress and burnout syndrome with a significance value of 0.019 ($\alpha < 0.05$). Meanwhile, the Ordinal Regression coefficient of determination test shows an R value of 0.306, which means that the correlation of a set of independent variables has a moderate effect on the dependent variable, and an R square value of 0.094 and adjusted R Square of 0.058 indicates that the influence of the independent variable on the dependent variable cannot explain strongly and not significant.

Table 1 below will present the characteristics of research respondents at the research location. The data presented is a tabulation of data collection from the 2 regional hospitals used as research locations.

**Table 1.** Characteristics of research respondents

| Respondent Characteristics | Amount (n=54) | Percentage (%) |
|---|---|---|
| Gender | | |
| Man | 28 | 52 |
| Woman | 26 | 48 |
| Age | | |
| 20 – 25 Years | 2 | 4 |
| 26 – 35 Years | 30 | 55 |
| > 35 Years | 22 | 41 |
| Level of education | | |
| Level of education | | |
| D3 | 30 | 56 |
| S1 | 24 | 44 |
| S2 | 0 | 0 |
| Years of service | | |
| 0 – 10 Years | 23 | 43 |
| 11 – 15 Years | 27 | 50 |
| > 20 Years | 4 | 7 |

Table 2 below is data collected from observations of nurses' working postures when caring for COVID-19 patients. The data presented are several examples of nursing actions for COVID-19 patients taken based on the highest level or frequency when nurses carry out nursing actions for COVID-19 patients.

**Table 2.** Results of work posture observations

| Nursing actions | Score | Category |
|---|---|---|
| TTV examination | 7 | Medium Risk |
| Injection | 6 | Medium Risk |
| Replacing IV fluids and improving IV flow | 6 | Medium Risk |
| Check blood sugar levels (GDA) | 3 | Low Risk |
| Performing Personal Hygiene | 6 | Medium Risk |

| Nursing actions | Score | Category |
|---|---|---|
| Doing Sonde (feeding the patient) | 7 | Medium Risk |
| Regulating Oxygen Flow | 2 | Low Risk |

Table 3 below presents tabulated data from observations of work postures and tabulated results from workload questionnaires. The sample size (n) value for the work posture variable is 7 because the sample was taken based on several nursing actions on COVID-19 patients and the number of nurses used as the research sample was 1 person.

**Table 3.** Tabulation of work posture and workload observation data

| Risk Level Category | Amount | Percentage |
|---|---|---|
| Observation of Work Posture | (n=7) | (%) |
| Low Category | 2 | 29 |
| Medium Category | 5 | 71 |
| High Category | 0 | 0 |
| Workload Category | (n=54) | (%) |
| Low | 6 | 11 |
| Currently | 28 | 52 |
| Tall | 20 | 37 |

Table 4 below is a tabulation of data on work stress variables and burnout syndrome symptoms, each of which was collected through filling out a questionnaire.

**Table 4.** Tabulation of job stress data and burnout syndrome symptoms

| Variable Aspect Work stress | Category Low (%) | Currently (%) | Tall (%) |
|---|---|---|---|
| Job demands | 30 | 21 | 49 |
| Control over work | 21 | 23 | 56 |
| Support from superiors | 18 | 37 | 45 |
| Relationships between coworkers | 19 | 23 | 58 |
| Relations between medical personnel | 46 | 24 | 30 |
| The role of nurses related to work duties | 4 | 13 | 83 |
| **Variable Aspect Symptoms Burnout Syndrome** | **Category Low (%)** | **Currently (%)** | **Tall (%)** |
| Emotional Exhaustion | 50 | 36 | 14 |
| Depersonalization | 76 | 15 | 9 |
| Self-Achievement | 6 | 16 | 78 |

Table 5 below is the result of bivariate statistical test analysis with Multiple Linear Regression on each variable studied.

**Table 5.** Results of bivariate test analysis with multiple linear regression

| | | Burnout | Work Posture | Workload | Work stress |
|---|---|---|---|---|---|
| Pearson Correlation | Burnout | 1,000 | ,062 | ,058 | .028 |
| | Work Posture | ,062 | 1,000 | -.654 | -.395 |
| | Workload | ,058 | -.654 | 1,000 | ,228 |
| | Work stress | .028 | -.395 | ,228 | 1,000 |
| Sig. (1-tailed) | Burnout | . | ,447 | ,451 | ,476 |
| | Work Posture | ,447 | . | ,056 | ,190 |
| | Workload | ,451 | ,056 | . | ,312 |
| | Work stress | ,476 | ,190 | ,312 | . |
| N | Burnout | 7 | 7 | 7 | 7 |
| | Work Posture | 7 | 7 | 7 | 7 |
| | Workload | 7 | 7 | 7 | 7 |

| | Burnout | Work Posture | Workload | Work stress |
|---|---|---|---|---|
| Work stress | 7 | 7 | 7 | 7 |

Table 6 below is the result of a multivariate statistical test using Ordinal Regression where the variables that meet the requirements for this test are workload, work stress and *symptoms of burnout syndrome*.

**Table 6.** Results of multivariate test analysis with ordinal regression

| | | Burnout | Workload | Work stress |
|---|---|---|---|---|
| Pearson Correlation | Burnout | 1,000 | -.049 | ,282 |
| | Workload | -.049 | 1,000 | ,237 |
| | Work stress | ,282 | ,237 | 1,000 |
| Sig.(1-tailed) | Burnout | . | ,363 | .019 |
| | Workload | ,363 | . | ,042 |
| | Work stress | .019 | ,042 | . |
| N | Burnout | 54 | 54 | 54 |
| | Workload | 54 | 54 | 54 |
| | Work stress | 54 | 54 | 54 |

**Nurses' Work Posture When Handling COVID-19 Patients**

Nurses working with COVID-19 patients are particularly vulnerable to musculoskeletal injuries due to their patient care duties. Musculoskeletal dangers from treating COVID-19 patients include non-neutral posture, poor coupling, high loads, instability, demands on time and repetition of movements (Lee et al., 2022) . The results of the assessment (observation) of the work posture of nurses handling COVID-19 patients in East Java Province showed that 5 nursing actions were included in the medium risk category, And, 2 nursing actions are included in the low category. Recent research by Asghari et al., (2019) states that the prevalence of musculoskeletal complaints in nurses is very high, most nurses report these complaints and most feel symptoms of musculoskeletal pain in more than one part of the body. The results of this study are in accordance with this study where nurses who treated COVID-19 patients complained of musculoskeletal pain in several parts of the body. The results of observations of nurses' work posture when handling COVID-19 patients are in line with research by Asghari et al., (2019) that the level of risk experienced by nurses is in the medium to high category.

The results of observing the work posture of nurses caring for COVID-19 patients found that nurses often made twisting movements, bent over and looked up. Apart from that, awkward body posture was also seen when the nurse carried out the TTV (Vital Signs) examination. Injection and replacement of IV fluids. The research results also found that nurses were seen several times carrying out repetitive actions, such as when improving the flow of IV fluids, regulating the number of fluid drops and regulating oxygen flow. The use of personal protective equipment (PPE) also affects the work posture of nurses because physical mobility is disturbed and the discomfort caused by wearing PPE for too long.

The results of the work posture analysis of *burnout syndrome symptoms* showed a significance value of 0.062 where $\alpha > 0.05$, which means that the work posture variable had no effect on the burnout syndrome symptoms that nurses experienced during the COVID-19 pandemic. Even though work posture does not have a significant effect on symptoms of burnout syndrome, in the practice of nursing actions for COVID-19 patients, work posture variables have a significant effect on increasing physical fatigue and complaints of musculoskeletal pain that nurses experienced while caring for Second Wave COVID-19 (Delta Variant) patients. Dimensionally, work posture is part of the physical dimension which causes physical fatigue so that in relation to burnout syndrome there is no direct link found with the psycho-social dimensions of burnout syndrome which include emotional exhaustion, depersonalization and self-efficacy (self-achievement).

**Nurses' Workload When Handling COVID-19 Patients**

Nurses are the largest group in the health care system who have the highest workload and are at the forefront of patient care, especially during the COVID-19 pandemic (Holland et al., 2019) . Based on the results of research on nurses caring for the second wave of COVID-19 patients (Delta Variant) in East Java Province, data was found that the majority of respondents, namely 28 respondents, experienced a workload in the medium category with a percentage of 52%, then 20 respondents experienced a workload in the moderate category. high with a percentage of 37%, and the remaining 6 respondents were in the low category with a percentage of 11%.The results of this research are in line with the research results of Hikmawati et al., (2022) where the workload of nurses who handled patients during the COVID-19 pandemic was on average in the moderate category of 25 respondents with a percentage of 75.8%. A similar thing was also found in research (Dinar Maulani, 2022) where the majority of nurses who handled COVID-19 patients experienced a workload in the medium category, 14 respondents with a percentage of 60.9%.

The results of data collection show that the majority of respondents interpreted that the workload they experienced was a workload in the physical dimension. This understanding changed when researchers explained that there are two dimensions to workload, namely physical and psychological dimensions. Most of the workload experienced by nurses at RSUD dr. Soebandi Jember is a nurse's workload resulting from the many tasks of caring for COVID-19 patients. However, nurses at Dr. Soetomo Surabaya faces both dimensions of workload, namely the physical and mental (psychological) dimensions where nurses are faced with critical patient conditions which result in psychological stress because many patients' lives cannot be saved. The research results obtained were that the score for the physical burden category was higher than the psychological burden category. Nurses who care for COVID-19 patients at the 2 referral hospitals for COVID-19 patients face an excess workload resulting from an imbalance between the number of patients who need to be treated and the number of nurses on duty.

Multivariate analysis carried out showed that workload did not have a significant influence on the symptoms of burnout syndrome experienced by nurses when caring for COVID-19 (Delta Variant) patients in East Java Province with an α value of 0.363 (α > 0.05). This is in line with the results of research by Jalili et al., (2021) where the average daily workload is not related to the burnout status of health workers who treat COVID-19 patients. However, opposite results were found in research by Bruyneel et al., (2021) where increasing workload increased the prevalence of *burnout risk* in ICU nurses caring for the first wave of COVID-19 patients in Belgium.

**Nurses' Work Stress When Handling COVID-19 Patients**

Nurses experience higher levels of work stress than health workers and doctors who treat COVID-19 patients. The main stressors for nurses are the fear of being infected with COVID-19, fear of social isolation, discomfort due to using personal protective equipment and the workload in treating COVID-19 patients (Kuo et al., 2020) . This research shows that the percentage of work stress for nurses who handle the second wave of COVID-19 patients (Delta Variant) in East Java Province where the total of each aspect studied shows that the level of work stress for nurses during the COVID-19 period is mostly included in the categorization High with a percentage of 53%, followed by the medium category with 24% and the low category with 23%. The research results show that the increase in work stress related to caring for COVID-19 patients is in line with the increase in burnout symptoms experienced by nurses. This research produces facts that agree with the results of research by Tengilimoğlu et al., (2021) which shows that the workload, ethical conditions and thoroughness faced when selecting patients to be treated increase the level of stress experienced by health workers.

Other research from Son et al., (2022) states that organizational support is a key factor that increases nurses' willingness to treat COVID-19 patients, also supporting the results of this study. Research data shows that nurses are motivated by the appreciation given by their superiors when they complete their patient care responsibilities well. Apart from that, nurses are also supported

morally if there is conflict between medical personnel when dealing with work-related problems. The research results prove that work stress has a significant effect on the occurrence of burnout syndrome symptoms in nurses who treat COVID-19 (Delta Variant) patients in East Java Province. Research by Zare et al., (2021) states that work stress has a significant influence on *burnout* in nurses who care for COVID-19 patients. This research produces facts that are in line with this research which illustrates that work stress is the most significant determining factor in the symptoms of *burnout syndrome* experienced by nurses during the second wave of the COVID-19 pandemic in East Java Province.

**Burnout Syndrome in Nurses Who Handle COVID-19 Patients**

Burnout is the most common consequence for staff in health services and is closely related to significant outcomes, such as patient safety (Dewa et al., 2017; Hall et al., 2016) . Nurses who handle COVID-19 patients have the highest risk of being infected with COVID-19 among other medical workers. From interviews with nurses, data was obtained that nurses who handle COVID-19 (Delta Variant) patients do not care if they are exposed to COVID-19. However, they feel afraid if they accidentally bring the virus home and transmit it to their children and wives. The nurses also stated that the COVID-19 problem created ambiguity about how they handle patients when they are unwilling to be quarantined in the hospital or uncooperative during regular medical examinations due to panic or lack of knowledge about the COVID-19 disease and a lack of personal protective equipment. (APD) also contributes to mental health disorders in medical staff. The interview results also found that 2 out of 3 nurses interviewed experienced moderate to severe emotional exhaustion and 2 out of 4 nurses stated they experienced symptoms of depersonalization in the form of withdrawing from their work environment.

The results of these interviews are relevant to the results of interviews conducted by Chen et al., (2020) on 13 hospital medical staff in China during the COVID-19 pandemic. Research by Sahashi et al., (2021) on 4386 health service personnel in Japan also found that the consequences of being infected with COVID-19, limited social contact and lack of personal protective equipment (PPE) were the most concerning problems felt by nurses during the pandemic. COVID-19. The heavy workload, fear of contracting COVID-19 or spreading it to family, and the lack of a support system for health staff are frequent complaints. This is informal data obtained by researchers as complementary data and its relationship to the symptoms of burnout syndrome was not studied in more depth. However, each of these things can be a potential factor that can be used as the subject of future research.

The results of research on nurses who handle COVID-19 patients in East Java Province show data that the ratio of nurses with symptoms of emotional exhaustion is mostly in the medium category with a percentage of 54% and symptoms of depersonalization (cynicism) in the low category with a ratio of 58% and the majority of nurses shows positive personal accomplishment (self- efficacy) in the high category with a ratio of 77%. The results of this study agree with the research of Jalili et al., (2021) where the average burnout score experienced by professional health workers at six universities in Tehran, Iran, was respectively 26.6 for emotional exhaustion, 10.2 for depersonalization and 27.3 for lack of personal accomplishment. Another study by Huo et al., (2021) found that the average score on each sub-scale of burnout was 11.94 for emotional exhaustion, 10.27 for cynicism and 19.25 for personal efficacy. The results of these two research studies are in line with this research, namely that the main symptom of burnout in nurses caring for COVID-19 patients is emotional exhaustion. However, the difference that can be seen from this research is that nurses who handle COVID-19 patients in Indonesia have positive personal accomplishment (self-efficacy) compared to nurses in Iran and China.

Results of analysis in this research shows that work stress has a significant effect on burnout syndrome. The increase in nurses' work stress when dealing with COVID-19 is directly proportional to the increasingly high (severe) symptoms of burnout syndrome. Meanwhile, statistical analysis shows that workload does not influence the increase in burnout syndrome

symptoms felt by nurses of COVID-19 patients. However, facts on the ground show that the increasingly high workload and increasingly fast time demands also exacerbate the work stress experienced by nurses. So, qualitatively the workload also contributes to an increase in burnout syndrome symptoms. Finally, statistical analysis shows that work posture does not affect the symptoms of burnout syndrome experienced by nurses of COVID-19 patients. Statistical data also shows that there is no close relationship between work posture and work stress.

This research has limitations, namely that the work posture variable data cannot meet the minimum number of samples required for analysis, so it does not show significant results.

# CONCLUSION

The findings in this research are that work stress is the main factor that triggers the symptoms of burnout syndrome experienced by nurses of COVID-19 patients in East Java Province. Meanwhile, although workload was not found to be related to symptoms of burnout syndrome, it was closely related to increased work stress in nurses which indirectly contributed to an increase in symptoms of burnout syndrome. On the other hand, working posture is not related to symptoms of burnout syndrome in nurses who handle COVID-19 patients, but awkward working posture has an effect on increasing musculoskeletal symptoms and increasing physical fatigue in nurses.

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