

Burnout in terms of work stress and workload

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Abstract. The purpose of this study was to find out the effect of work stress and workload on burnout on hospital physiotherapy health workers. Cipto Mangunkusumo. The population in this study was the health care of physiotherapy hospitals. Cipto Mangunkusumo, which numbered 50 respondents using the sampling method is a saturated sampling technique. The data retrieval method in this study used 3 scales of measuring tools, namely: work stress, workload and burnout. The burnout scale validity test data collection consists of 27 items declared valid and 5 items declared dead, the burnout scale rehabilitation of 0.879. The work stress scale validity test consisted of 20 items declared valid and 4 items declared dead, the work stress scale rehabilitation test by 0.807. And the workload scale validity test consisted of 18 items declared valid and 6 items declared dead, the workload scale rehabilitation test of 0.822. So that the results of data retrieval methods there is an effect of work stress on burnout in hospital physiotherapy health workers. Cipto Mangunkusumo, there is an effect of workload on burnout in hospital physiotherapy health workers. Cipto Mangunkusumo and there is an effect of work stress and workload on burnout on hospital physiotherapy health workers. Cipto Mangunkusumo.

Keywords: *Burnout, Work Stress, Workload*

Abstrak. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh stres kerja dan beban kerja terhadap *burnout* pada tenaga kesehatan Fisioterapi RS. Cipto Mangunkusumo. Populasi dalam penelitian ini adalah tenaga kesehatan Fisioterapi RS. Cipto Mangunkusumo, yang berjumlah 50 responden dengan menggunakan Metode pengambilan sampel yaitu teknik sampling jenuh. Metode pengambilan data dalam penelitian ini menggunakan 3 skala alat ukur yaitu: stres kerja, beban kerja dan *burnout*. Pengambilan data uji validitas skala *burnout* terdiri dari 27 item dinyatakan valid dan 5 item dinyatakan yang gugur, reabilitas skala *burnout* sebesar 0,879. Uji validitas skala stres kerja terdiri dari 20 item dinyatakan valid dan 4 item dinyatakan gugur, uji reabilitas skala stres kerja sebesar 0,807. Dan uji validitas skala beban kerja terdiri dari 18 item dinyatakan valid dan 6 item dinyatakan gugur, uji reabilitas skala beban kerja sebesar 0,822. Sehingga hasil metode pengambilan data terdapat pengaruh stres kerja terhadap *burnout* pada tenaga kesehatan fisioterapi RS. Cipto Mangunkusumo, terdapat pengaruh beban kerja terhadap *burnout* pada tenaga kesehatan fisioterapi RS. Cipto Mangunkusumo dan terdapat pengaruh stres kerja dan beban kerja terhadap *burnout* pada tenaga kesehatan fisioterapi RS. Cipto Mangunkusumo.

Kata kunci: *Burnout, Stres Kerja, Beban Kerja*

Health workers are those who have the ability and authority to carry out health actions. Health workers are one of the professions in hospitals that play an important role in efforts to maintain the quality of health services in hospitals. In the standard on evaluation and quality control, it is explained that health care services ensure the existence of high-quality health care by continuously involving themselves in quality control programs in hospitals, this is indicated by the sincere concern of a health worker for patients who are treated in the hospital which took a lot of energy. This can have an impact on the high demands of work and competition in hospitals so that the feeling of fed up with work in the physiotherapy health workers of Cipto Mangunkusumo Hospital.

According to the Ministry of Health (2013), physiotherapy is a form of health service aimed at individuals and/or groups to develop, maintain, restore body movement and function throughout the life span by using manual handling, movement improvement, equipment training function (physical, electrotherapeutic and mechanical), and communication. A physiotherapist can assist individuals/communities in improving their health status and achieving the highest quality of life, through promotive, preventive, curative, habilitative and rehabilitative services. Physiotherapist can practice physiotherapy services independently or work in health care facilities.

Physiotherapy is collaborative and not supervised, safety for patients and physiotherapists is the working principle of physiotherapy which based on prudence, evidence-based practice of physiotherapy and professional ethics. Quality services are obtained with direct access so that hospital quality goals will be more easily achieved. This relates to the response time of handling, effectiveness and efficiency of service to patients. This can cause health workers to experience work stress due to the workload experienced by physiotherapists of Cipto Mangunkusumo Hospital, if work stress is intense, it can lead to burnout for health workers.

According to Pangistiti et al. (2011) the term burnout was first proposed by Freudenberg, a clinical psychologist in 1974, burnout is a new nickname in the world of work that is used to designate one type of stress. Burnout is a condition of being squeezed out and losing psychic and physical energy, usually it is caused by a work

situation that is not supportive or does not match the needs and expectations. Burnout is usually experienced in the form of intense physical, mental, and emotional exhaustion. Burnout has a psychobiological nature (psychological burden shifts to physical appearance, for example easy dizziness, can't concentrate, gets sick easily) and is usually cumulative, therefore sometimes problems are not so easy to solve.

According to Kiekkas et al. (2010) stated that burnout has three dimensions, namely emotional and physical exhaustion (emotional involvement that causes energy and resources to be drained by one job), depersonalization (negative attitudes and feelings towards patients or other people), and perceived inadequacy of professional accomplishments (negative self-assessment and feelings of dissatisfaction with job performance). Burnout is often found in human service professions such as police, health workers (include doctors and nurses), counselors, and social workers.

Health workers are one of the professions that are human service so that the burnout which is experienced by physiotherapists of Cipto Mangunkusumo Hospital can be caused by several factors, according to Amalia et al., (2018) one of the factors that cause burnout is individual outcomes, which can produce various psychological consequences, including anxiety, frustration, fatigue, lowered self-esteem, aggression, and depression. In addition, psychological outcomes can include, for example, increased heart rate, increased blood pressure, and increased gastric acid production. Furthermore, individual outcomes can cause burnout which is a psychological process as a result of work stress.

According to Spielberger.DC (in Amalia et al., 2018) burnout is the effect of prolonged work stress and the pressure felt by employees because work tasks cannot be fulfilled, so that stress arises when employees are unable to fulfill what is demanded by job demands, for example, lack of time to complete tasks, as well as conflicting workloads. According to Amalia et al. (2018) work stress exists due to an imbalance between the personality characteristics of employees and the characteristics of aspects of their work tasks. In addition, according to Aditama (in Mariyanti and Citrawati., 2011) work stress is caused by the high pressure of work demands and competition in the workplace which can have an effect on negative emotions.

The results of previous research conducted by Satriyo (2014) found a direct significant effect between work stress on lecturer burnout. Then, this study found a direct significant effect of burnout on lecturer performance. Furthermore, this study found a direct significant effect of work stress on lecturer performance. So, it can be proven that there is an effect of work stress on burnout.

In addition to work stress that affects burnout, there are also situations of work demands and tasks in work that are too overloaded, which can be known as workload. According to Riad and Fournet (in Amalia et al., 2018) the complex and ideal tasks of health workers can turned to be a heavy workload in carrying out their health workforce duties and have the opportunity to create stress. According to Arie (in Atmaja and Suana, 2018) the high workload experienced by employees has an impact on the emergence of burnout, because workload is a worker's perception of a set of activities that must be completed within a certain time limit, both in the form of physical and psychological workloads. Excessive workloads can include working hours, the number of patients to be served, responsibilities that must be carried, routine and non-routine work, and other administrative work that exceeds the capacity and ability of the individual

According to Melati and Surya (in Atmaja and Suana., 2018) excessive workload can include quantitative terms in the form of the number of jobs and qualitative which is the level of difficulty of the work that must be handled, the workload of health workers is part of the development of health workers which is calculated based on the amount of time required to provide services to patients each day. According to Luh et al., (2016) the workload of health workers is influenced by the conditions of patients which are always changing, the average number of hours of health workers needed to provide direct services to patients, the lack of good cooperation between co-workers and the number of additional tasks that must be done at the same time.

The results of previous research conducted by Luh et al., (2016) showed that there was a significant relationship between workload and burnout for health workers at IRD Sanglah Hospital with a p value of 0.006 (p value <0.05), with a total of 34 participants/(64,2%). In addition, based on the proportion of workload, most of the

respondents experienced a high workload, namely 38 people (71.7%). Therefore, work stress and workload can affect burnout that can occur in physiotherapists at Cipto Mangunkusumo Hospital

The problems experienced by physiotherapist where Cipto Mangunkusumo Hospital is a National General Central Hospital (NGCH) which means it is a referral center hospital from various hospitals so that there are always a large number of patients in HCM. Similarly, the number of physiotherapy patients. With the large number of patients undergoing treatment, of course, there are various kinds of patient characteristics that trigger a feeling of fed up for health workers at work.

Examples of the phenomena above include, patients who do not want to obey and listen to the instructions of health workers during therapy, patients who can't wait for queue, patient administration problems, coworkers who like to choose patients, coworkers who are not punctual in attendance, chronology of patient history that likes to be exaggerated, lack of cooperation between fellow physiotherapists and lack of enthusiasm from patients to recover which can slow down the progress of treatment.

Thus, this is a demand that can be a workload for physiotherapy health workers of Cipto Mangunkusumo Hospital which can also be a source of work stress and if it lasts for an intense period of time, it will have an impact on burnout for physiotherapist at Cipto Mangunkusumo Hospital.

Based on the phenomena that have been presented above, the authors are interested in conducting research with the title "The Effect of Work Stress and Workload on Burnout in Physiotherapy Health Workers at Cipto Mangunkusumo Hospital". The purpose of this study is to determine the effect of work stress on burnout in physiotherapy health workers at Cipto Mangunkusumo Hospital, knowing the effect of workload on burnout in physiotherapists at Cipto Mangunkusumo Hospital, and knowing the effect of work stress and workload on burnout in physiotherapists of Cipto Mangunkusumo Hospital.

According to Greene (in Maslach, 2003) burnout is a psychological syndrome that occurs in the long term caused by stress factors at work. In addition, burnout is also an imbalance between workers and their workplace. The measurement of burnout in this

study uses measurements based on the theory of burnout dimensions according to Maslach, (2003). Dimensions of burnout according to the theory proposed by Maslach, et al, (2003) there are several dimensions, namely: a. Emotional Exhaustion (Emotional Fatigue) b. Cynicism (cynic) c. Ineffectiveness (Not effective).

Work stress according to Muchlas (in Nurmallasari, 2015) it is necessary to know that stress is not only about anxiety. Anxiety operates only in the emotional and physiological scopes, where stress also operates in these scopes and in a psychological context. Stress is also not just nervous tension, such as anxiety, the tension can be caused by stress, but the two are not the same. Many people unconsciously show stress and some of them can cover up the feeling of stress and not show it through nervous tension. The measurement in this study uses work stress symptoms according to the theory of Robbins and Judge, (2017). Which divides the three types of symptoms caused by work stress, among others, are: a. Physiology Symptoms (Physiological Symptoms), b. Psychology Symptoms (Psychological Symptoms), c. Behavior Symptoms (Symptoms of Behavior).

According to Nabawi (2019), workload is a concept that arises due to limited capacity in accessing information. When faced with a task, individuals can complete the task at a certain level. If the limitations possessed by the individual slows down/hinder the achievement of work results at the expected level, it means that there has been an intentional difference between the expected level of ability and the level of capacity possessed. The measurement in this study uses the workload dimension. The workload dimension according to Hart, SG and Staveland, (2009) is to divide the physical and mental workload into six dimensions, the size of the physical workload includes physical demand, and effort. And the measure of mental workload includes: mental demand, temporal demand, frustration level, and performance.

Research hypothesis **Ha1**: There is an effect of work stress on burnout in physiotherapists of Cipto Mangunkusumo Hospital.

Ha2: There is an effect of workload on burnout in in physiotherapists of Cipto Mangunkusumo Hospital.

Ha3: There is an effect of work stress and workload on burnout in in physiotherapists of Cipto Mangunkusumo Hospital.

METHOD

Based on the description above and the formulation of the research hypothesis, the variables in this study are: 1. The dependent variable Y: Burnout, 2. Independent variable X₁: Job stress, 3. Independent variable X₂: Workload. In this study, researchers take subjects based on the fulfillment of characteristics which are physiotherapists at hospital X, amounting to 50 respondents. The data collection method used in this study uses a scale method, which consists of a burnout scale that has been compiled based on the concept of dimension theory from Maslach, (2003) which are emotional exhaustion, cynicism, & ineffectiveness. The work stress scale that has been compiled is based on the concept of work stress symptoms theory according to the theory of Robbins and Judge, (2017), are physiological symptoms, psychological symptoms, and behavior symptoms. The workload scale that has been compiled based on the theory of the concept of workload dimensions according to Hart, SG & Staveland, (2009) are Physical demand, effort, Mental Demand, Temporal Demand, Frustration Level, & Performance

The validity method of the burnout scale consists of 32 items with 27 items being declared valid and 5 items being declared invalid. The *Alpha if Item Deleted* method ranges from 0.562 to 0.740, and the reliability coefficient is 0.879. Thus, the burnout scale is a reliable measurement. The work stress scale consists of 24 items with 20 valid items and 4 invalid items. With the *Alpha if Item Deleted* method, it ranges from 0.513 to 0.690, and the reliability coefficient is 0.807. Thus, the work stress scale is a reliable measurement. The workload scale consists of 24 items with 18 items being declared valid and 5 items being declared invalid. The *Alpha if Item Deleted* method ranges from 0.274 to 0.917 and the reliability coefficient is 0.822. Thus, the workload scale is a reliable measurement. Based on data on the validity and reliability of the burnout scale, work stress and workload, it can be concluded that the burnout, work stress, and workload scales are valid and reliable, so they are feasible to use in research.

RESULTS

The results of the study consist of: The results of this study indicate that there is an effect of work stress on burnout in physiotherapy health workers at Cipto Mangunkusumo Hospital. Based on the results of simple linear regression data analysis using the enter method, the correlation/influence (R) value is 0.472. From the output, the coefficient of determination (R square) is 0.223, which implies that the effect of work stress on burnout is 22%. At the ANOVA output, the calculated F value is 13,758, and the regression coefficient b value is 0.616 and p: 0.01 ($p < 0.05$), then H_{01} = There is no effect of work stress on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital was rejected, and H_{a1} = there is an effect of work stress on burnout for physiotherapists at Cipto Mangunkusumo Hospital, accepted. So, it can be concluded that there is an effect of work stress on burnout in physiotherapists at Cipto Mangunkusumo Hospital, meaning that the higher the work stress, the higher the burnout for Physiotherapy health workers at the Hospital of Cipto Mangunkusumo.

The results of this study indicate that there is an effect of workload on burnout on Cipto Mangunkusumo Hospital physiotherapists. Based on the results of simple linear regression data analysis using the enter method, the correlation/influence (r) value is 0.456. From the output, the coefficient of determination (R Square) is 0.208, which implies that the effect of workload on burnout is 20%. At the ANOVA output, the calculated F value is 12,605, and the regression coefficient b value is 0.731 p: 0.01 ($p < 0.05$), then H_{02} = There is no effect of Workload on Burnout on Cipto Mangunkusumo Hospital physiotherapists, was rejected, and H_{a2} = There is an effect of workload on burnout on Cipto Mangunkusumo Hospital physiotherapists, accepted. So, it can be concluded that the higher the workload, the higher the burnout for Physiotherapy health workers at the Hospital of Cipto Mangunkusumo.

The results of this study indicate that there is an effect of work stress and workload on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital. Based on the results of multiple linear regression analysis using the enter method at the output of the summary model, the R value of 0.606 and R square of 0.367 which means that the effect of work stress variables (X1) and workload (X2)

simultaneously on burnout (Y) is 36,7%. At the ANOVA output, the calculated F value is 13,637 with a significance of 0.000 (< 0.05). This shows that H_{03} = there is no influence between work stress and workload on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital, is rejected, and H_{a3} = there is an effect of work stress and workload on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital, is accepted. So, it can be concluded that there is an effect of work stress and workload on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital, meaning that the higher the work stress and the workload, the higher the burnout of the Physiotherapy health workers at Cipto Mangunkusumo Hospital. The coefficient of determination or R square is $0.367 \times 100\%$ which means that work stress and workload contribute 36.7% to burnout, the remaining $100\% - 36.7 = 63.3\%$ is contributed by not examined other factors.

Based on the output of the stepwise method, the dominant variable is work stress with R Square Change = 0.223, while the second dominant variable is workload with R Square Change = 0.208. The coefficient shows that work stress contributes to burnout by $0.223 \times 100\% = 22.3\%$, while workload contributes to burnout by $0.208 \times 100\% = 20.8\%$, the rest $100\% - 44.1\% = 55.9\%$ contributed by other not reasearched factors.

Based on the results of the normality test using the Kolmogrov-Smirnov table, both burnout, work stress, and workload are normally distributed at 0.200 because $p < 0.05$. Hence, it can be concluded that the population of work stress, workload and burnout data is normally distributed.

DISCUSSION

Acceptance of the hypothesis in this study reveals that work stress can affect burnout. The results of this study are supported by previous research conducted by (Priyantika, 2018) which states that work stress has a positive effect on burnout. Thus, this explains that the higher the work stress level, the higher the burnout level of the employee the PT Pelindo Marine Service engineering department.

Acceptance of the hypothesis in this study reveals that workload can affect burnout. The results of this study are supported by previous research conducted by Fitria (2013) the effect of workload on burnout, the workload variable (X1) has a positive influence on employee burnout, thus there is a partial effect of workload on employee burnout at PT WOM Finance in Tenggarrong was accepted and proven to be true.

CONCLUSION

Based on the results of the data analysis and discussion that has been described, it can be concluded that: There is an effect of work stress on burnout on physiotherapy health workers at Cipto Mangunkusumo Hospital in a positive direction. Which means the higher the work stress on physiotherapists at Cipto Mangunkusumo Hospital, the higher burnout feeling experienced by them.

There is an influence between workload on burnout in the hospital of Cipto Mangunkusumo physiotherapy health workers in a positive direction. Which means the higher the workload experienced by hospital of Cipto Mangunkusumo physiotherapists, the higher the burnout experienced by them

There is an influence between work stress and workload on burnout in the hospital of Cipto Mangunkusumo physiotherapists in a positive direction.

Suggestion

It is hoped that further research can develop by conducting research with other factors that can affect burnout apart from work stress and workload variables. Other recent factors such as health personnel anxiety variables and social support that can affect burnout. In addition, further research is expected to correct and complement the deficiencies that exist in this study, such as those related to sampling. It is hoped that it can expand the respondents and the latest phenomena with more diverse characteristics, as well as the number of respondents who can be more than Physiotherapy health workers so that there will be a lot of description about the phenomena that will be discussed.

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