Effect of Workload on Mental Health and Performance in Nutrition Installations

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Abstract
This theoretical research analyzes the relationship between workload and the performance and mental health of health workers, with a focus on effective workload management strategies. This study examines theoretical models, such as the Job-Demands Resources Model and the Effort-Recovery Model, to understand how the workload dimensions—physical, mental, and temporal—affect the well-being and productivity of healthcare workers. This study emphasizes the importance of balanced workload distribution, adequate social support, and flexible time management to reduce stress, prevent burnout, and improve work performance. This theoretical discussion is relevant for health workers in general, but the specific implications are directed to nutrition installation staff in hospitals who often face heavy physical and mental tasks. If not managed properly, workload can reduce the efficiency and quality of services as an indirect effect of poor mental health and performance. Therefore, this study emphasizes the urgency of implementing effective workload management strategies to support mental health and performance of healthcare workers in a stressful work environment

1. INTRODUCTION

All mental health and the performance of health workers in hospitals are two crucial aspects that are interrelated in the success of health service delivery. Hospitals, as facilities that operate 24 hours a day and handle a wide range of medical cases, demand health workers to work under high pressure, with often unbalanced workloads. Excessive workload can affect the physical and mental condition of health workers, which in turn can have an impact on the quality of services provided to patients. Workload itself is a multidimensional concept that includes physical, mental, and temporal demands that must be faced by health workers in carrying out their daily tasks (Fikri et al., 2023). Physical loads, such as the demands of lifting a patient or standing for long periods of time, can lead to physical exhaustion. Mental burdens, such as quick decision-making and dealing with emergency situations, can lead to stress and emotional exhaustion. Meanwhile, temporal stress stemming from deadlines and the need to multitask can exacerbate the situation, adding to the psychological burden for healthcare workers (Pamungkas et al., 2022).

Previous research has shown that uncontrolled workloads not only increase the risk of mental health disorders such as stress, anxiety, and burnout, but can also negatively affect the performance of healthcare workers (Pourteimour et al., 2021). Healthcare workers who work under constant stress often experience decreased performance due to physical and mental fatigue, which can ultimately degrade the quality of care provided to patients (Barzani & Dal Yılmaz, 2022). Therefore, effective workload management is essential to maintain a balance between the mental health of healthcare workers and optimal performance.

Research in the field of hospital management shows that a good work environment, including effective workload management, has a positive impact on the mental well-being of health workers and

the quality of services they provide (Maryanti et al., 2022; Pourteimour et al., 2021). Uncontrolled workloads can result in increased stress, decreased job satisfaction, and ultimately, lower quality of life for healthcare workers (Barzani & Dal Yılmaz, 2022; Lukolo et al., 2021; Pamungkas et al., 2022). Indonesia government regulations, such as Law No. 36 of 2009 on Health and Law No. 13 of 2003 on Manpower, set standards that must be met by health institutions to ensure safe working conditions and support the physical and mental health of health workers. Regulation of the Minister of Health No. 11 of 2017 further regulates service standards in hospitals, including maximum workload limits for health workers (Ministry of Health, 2017).

Therefore, there is an urgency to review the existing literature and analyze the relationship between workload, mental health, and the performance of health workers in hospitals. This study aims to delve deeper into the influence of workload on mental well-being and performance of health workers through a theoretical approach. In addition, this essay will also identify workload management strategies that can be applied in hospitals to reduce the negative impact of high workloads, as well as provide recommendations for hospital managers in creating a supportive work environment.

2. RESEARCH METHODS

This research method uses a quantitative approach with a correlational design to test the effect of workload on mental health and performance in the Nutrition Installation. Data was collected through the distribution of questionnaires to selected workers using the purposive sampling technique. The instruments used include workload, mental health, and performance questionnaires, which are adapted from measuring tools that have been tested for validity and reliability. Data analysis was carried out by descriptive statistical tests to understand the characteristics of the sample, as well as multiple linear regression tests to determine the influence of workload on dependent variables. The study also adheres to the principles of research ethics, such as data confidentiality and participant consent.

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3. RESULTS AND DISCUSSION

The Effect of Physical Workload on Mental Health

Excessive physical workload can have a serious impact on the mental health of healthcare workers, especially through increased stress and mental fatigue. When the body is forced to face heavy physical demands, such as lifting a patient, standing for a long time, or performing the same task repeatedly, fatigue not only attacks the physical but also the mental. This physical discomfort, if left to linger, often triggers chronic stress that can develop into anxiety or even depression. Healthcare workers who constantly feel heavy physical stress tend to experience higher levels of anxiety and mental fatigue than those who have a lighter physical workload (Pourteimour et al., 2021; Pamungkas et al., 2022). In addition, when physical fatigue is not balanced with sufficient recovery time, the impact can be even worse, disrupting their psychological and emotional well-being (Barzani & Dal Yilmaz, 2022; Lukolo et al., 2021).

Effect of Mental Workload on Mental Health

The high mental workload on healthcare workers can have a serious impact on their mental health, such as stress, burnout, and mental exhaustion. In everyday situations, healthcare workers often have to make quick decisions, handle complex cases, and face intense cognitive demands amid high pressure. When constantly facing this condition, they can feel overwhelmed and emotionally tired, which ultimately triggers burnout. This condition is exacerbated when health workers work in an unsupportive environment, where the lack of social support from colleagues and employers makes them feel lonely in the face of workload. Studies show that healthcare workers who do not receive adequate support in their work environment are more prone to mental fatigue and burnout than those who work in environments with better support systems (Pourteimour et al., 2021; Kurniawan, 2022; Woon & Tiong, 2020). This combination of high mental demands and lack of support puts healthcare workers at high risk of chronic stress and fatigue, which can affect their overall mental health.

Effect of Temporal Load on Mental Health

The temporal workload on healthcare workers, which includes deadline pressures and multitasking demands, has been known to adversely impact their mental health. When healthcare workers are required to meet tight deadlines and multitask simultaneously, imbalances between work and personal life often occur. This condition makes it difficult for them to manage stress effectively. In addition, the lack of adequate rest time further worsens the psychological condition of health workers, because the body and mind do not have the opportunity to recover properly after working under high pressure. As a result, the levels of mental fatigue, stress, and even burnout are higher in those who work with excessive temporal pressure (Pourteimour et al., 2021; Pamungkas et al., 2022; Sellami et al., 2023). This condition shows that without good time management and sufficient rest time, the mental health of health workers can be significantly compromised.

Mental Health Theory in the Workplace

According to the Job-Demands Resources model and the Transactional Model of Stress, a high workload on healthcare workers can cause stress that ultimately affects their mental health. In the Job-Demands Resources Model, workloads that are considered "job demands" will trigger stress when those demands exceed available resources, such as time off, social support, or flexible work arrangements. When healthcare workers don't have enough resources to cope with the demands of heavy work, the risk of mental burnout, stress, and burnout increases. On the other hand, the Transactional Model of Stress explains that stress occurs when individuals perceive a workload as a threat that exceeds their ability to cope with it. In this case, healthcare workers who are constantly faced with work pressure without adequate support tend to feel overwhelmed, which can trigger mental health disorders such as anxiety and depression (Pourteimour et al., 2021; Pamungkas et al., 2022; Woon & Tiong, 2020).

Workload Relationship with Performance

Heavy physical workloads, such as the task of lifting patients many times a day, are known to reduce the productivity and quality of work of health workers. Tasks such as moving patients from bed to wheelchairs or helping them stand up, often require great force and if done constantly without getting enough rest, physical fatigue begins to be felt. This condition causes work to be done more slowly and less efficiently, so the quality of care provided decreases. In addition, healthcare workers often face the risk of physical injury due to excessive workload, such as back pain, muscle injuries, or joint problems, which not only causes pain but can also lead to long-term absences from work. When an injury like this occurs, the ability to provide optimal care is impaired, resulting in reduced work efficiency in hospitals (Pourteimour et al., 2021; Pamungkas et al., 2022; Barzani & Dal Yilmaz, 2022).

Effect of Mental Workload on Performance

High mental workload in healthcare workers is often associated with increased errors on the job. When healthcare workers are faced with tasks that demand high concentration, such as accurately calculating drug doses or monitoring patients' vital signs in an emergency, the risk of error becomes greater. The mental fatigue that arises from constantly having to make quick decisions can lead to negligence, such as misadministering medication or missing important symptoms in patients. In situations where decisions must be made immediately, such as when dealing with emergency patients, excessive mental burden can also affect the quality of care, as healthcare workers do not have enough time to carefully consider all the factors. For example, errors in reading test results or providing improper care often occur when health workers are too mentally burdened. Therefore, excessive mental demands often lead to a decrease in the quality of service, which in many cases can have serious consequences for patients (Pourteimour et al., 2021; Woon & Tiong, 2020; Pamungkas et al., 2022).

Effect of Temporal Load on Performance

High time pressure on healthcare workers often negatively impacts their productivity and quality of work. When healthcare workers have to complete many tasks in a very limited amount of time, they often feel rushed, and this interferes with their focus and precision. For example, when they have to perform multiple tasks at once, such as administering medication to multiple patients, responding to emergency calls, and documenting medical records at the same time, the risk of errors increases. Multitasking in conditions of high time pressure can reduce the accuracy of health workers, for example in administering the right dose of drugs, as well as reduce their speed in handling important tasks. When healthcare workers have to move from one task to another without enough time to complete one job correctly, their productivity is compromised, and the quality of care provided to patients becomes suboptimal (Pourteimour et al., 2021; Pamungkas et al., 2022; Sellami et al., 2023).

Performance Theory

The context of workload and performance is theoretically seen as a balanced workload that can improve performance, but if it is too heavy, performance will actually decrease. In

hospital nutrition installations, for example, nutrition staff can work efficiently when their workload is measured, such as preparing meals for the number of patients that match their capacity. They are able to carefully plan menus, ensure that each patient's nutritional needs are met, and monitor the quality of the food served. However, if the workload increases dramatically—for example, when the number of patients to be served is too large or there is a sudden change in the patient's diet—the nutrition plant staff begins to become overwhelmed. The fatigue they feel can lead to errors in food preparation, such as mistakes in providing a special diet for diabetic or allergy patients, which can certainly have a serious impact on the patient's health.

In addition, considering *the Effort-Recovery Model*, recovery after intensive workloads is essential to maintain optimal performance. Staff at nutrition installations for example, who work under high pressure to ensure all patients receive food on time and according to nutritional needs, require adequate rest time. If they don't have adequate recovery time after hard work, their performance could decline. For example, staff who don't get enough rest after a busy shift may become less thorough in ensuring kitchen hygiene standards or may make mistakes in recording patients' dietary needs. Lack of recovery not only affects their productivity, but can also compromise the quality of care provided to patients (Meijman & Mulder, 1998; Pourteimour et al., 2021; Pamungkas et al., 2022)…

Conclusion

First, balanced workload management is indispensable to ensure that each staff has a fair amount of work and is proportional to their capacity. In daily practice, nutrition installation staff must handle tasks such as preparing special meals for patients with diverse dietary needs and monitoring the quality of the food served. If this burden is not divided equally, some staff may be overwhelmed, while others have a lighter burden. With a more balanced distribution of tasks, each staff member can complete their tasks without feeling overwhelmed, which in turn can improve productivity and quality of service. Second, social support from employers and co-workers plays an important role in reducing stress at work. In nutrition installations, staff often work in teams to meet the nutritional needs of all patients, and support from fellow colleagues or managers can be a lifesaver when the workload feels overwhelming. For example, when there is a surge in patients or a sudden change in dietary needs, a supportive team can help each other better cope with this situation. Support from superiors in the form of appreciation or help can also make staff feel more valued, which ultimately improves their mental health and work motivation.

Third, effective time management is essential to maintain the well-being of nutrition installation staff. With often tight schedules and deadlines to ensure patients receive food on time, it is important to provide flexibility in working hours and adequate rest time. Staff who are not given adequate rest are likely to experience burnout that can potentially reduce the quality of their work, such as preparing meals poorly or skipping patients' dietary needs.

Therefore, managers must ensure that staff have enough time to rest and recover, so that they can work more focused and efficiently.

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