

Analysis of The Effect of Competence, Workload and Occupational Health and Safety (OHS): Promotion on The Safety Behavior of Health Workers at X Karawang Hospital

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ABSTRACT

Hospitals as a place for health services can be dangerous and high-risk places for work safety. Work accidents are generally caused by two main things, namely unsafe behavior, and unsafe conditions, it is estimated that work accidents occur due to unsafe work behavior. The purpose of the study was to determine the effect of Competence, Workload, and OHS Promotion on the safety behavior of health workers at X Karawang Hospital. The research method used is causal associative research with quantitative techniques using a cross-sectional approach. The research population amounted to 417 people. Samples were taken using a purposive random sampling technique and obtained 179 samples of health workers. The results showed that Competence, Workload, OHS Promotion can affect the safety behavior of health workers. The conclusion of the study shows that Competence, Workload, OHS Promotion together can significantly affect the safety behavior of health workers, partially competence and health promotion variables have a significant effect on safety behavior, while the workload variable does not affect safety behavior. The implications of the research are expected to be input for the OHS committee and management on achieving zero accidents by ensuring all levels of management and all employees follow the OHS policy without exception, providing adequate facilities and resources so that health and safety policies can be implemented properly including regular OHS training, evaluation of implementation, reward and punishment.

Keywords: Competence, OHS Promotion, Safety Behavior, Workload.

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I. INTRODUCTION

Safety behavior is a basic behavior-based method. To realize the behavior, it is necessary to look for the things that encourage safe behavior and must identify and eliminate the causes that hinder the safe behavior. According to the behaviorist theory by Gage and Berliner (1984), pleasant, fast, and definite consequences (rewards) will keep employees working with safe behavior. Unsafe acts are prevented with a quick and definite negative effect (punishment). Management's goal is to create a system to control causes and consequences so that workers' safe actions increase.

Occupational Health and Safety (OHS) is an effort to create a workplace that is safe, healthy, and free from environmental hazards and pollution so that it can reduce and or be free from Occupational Illness (OI) and Work Accidents (WA) which can then increase effectiveness, work efficiency and work productivity. The application of OHS in Indonesia is regulated in Undang-Undang Republic of Indonesia No.13 of 2003 concerning employment, while Hospital Occupational

Health and Safety (HOHS) set with KEPMENKES Republic of Indonesia No. 1087/MENKES/SK/VIII/2010. The implementation of HOHS is expected to create zero accidents in the hospital where it is carried out. UU RI No.36 of 2014 concerning health workers, and this study only includes doctors, nurses, midwives, and laboratory personnel. X hospital has implemented the HOHS control system since its inception. The goal is to implement the Hospital Occupational Health and Safety Management System (HOHSMS) program to achieve a zero accident rate. X Hospital employs 417 health workers who are divided into medical teams, medical support, and nursing. According to the HOHS report for 2019, 2020 and 2021, there are still cases of OI and WA.

Work accidents involving sharp objects and gauze such as needles, knives, and similar sharp objects, will reach 20 cases in 2021. Transmission of infection through blood and body fluids (Blood Borne Pathogens). This can lead to infectious diseases of the category of blood-borne pathogens, namely hepatitis B, hepatitis C, and HIV. Occupational diseases are dominated by low back pain and eye problems

due to chemical contact. This is a special concern for management that those who experience accidents and occupational diseases which are dominated by doctors and nurses, the incidence of needle sticks after being investigated by the OHS team is caused by individual factors who are negligent in implementing SOPs at work. For the factors that caused the employee's unsafe behavior, based on the results of tracing the work accidents victims, information was obtained that competence had met the standards in knowing about OHS and SOPs, some stated that it was due to fatigue due to increased BOR (Bed Occupation Ratio) and many additional tasks came together. This causes a lack of focus so that attention is paid to procedures and does not pay attention to work safety signs in the work area.

The competence of health workers is sufficient, but there will be a lack of OHS training (only done once for 1 year), and refresher on OHS and socialization of OSH is still not optimal. And the workload in each work unit is quite high and the number of visits increases with additional additions that come together, this can also occur due to the negligence of individual factors that do not apply safety behavior properly it can result in increased work accidents and occupational illness in the workplace. OHS promotions and programs in hospitals have been running, but there is no control over the implementation of OHS, there is no reward and punishment for the implementation of OHS and the lack of optimal implementation of OHS in accordance with the OHS Law/SOP consistently and the low commitment of management and workers to the implementation of OHS. Based on this background and phenomenon, the authors are interested in conducting further research on personal safety behaviors that are important for the successful implementation of Hospital Occupational Health and Safety Management, especially in the application of Occupational Health and Safety standards.

Ajzen (2005) suggests that the perception of behavioral control is determined by individual beliefs about the availability of resources in the form of equipment, compatibility, competence, and opportunities (control belief strength) that support or inhibit the behavior to be predicted and the magnitude of the role of these resources (power of control factor). In realizing this behavior. The greater or stronger the belief in the availability of resources and opportunities possessed by individuals related to certain behaviors and the greater the role of these resources, the stronger the perception of individual control over these behaviors. That is why Ajzen (2005) suggests that this behavioral control along with the intention is closely related to doing or not doing a behavior.

Individual differences in personality and cognitive ability variables, in combination with learning experiences, lead to variability in knowledge, skills, and work habits that mediate the effects of personality and cognitive abilities on job performance. A very important aspect of this theory is that it predicts that the types of knowledge, skills, work habits, and traits associated with task performance are different from those associated with contextual performance. Task performance is an activity related to the implementation and maintenance of the core technical processes within an organization, contextual performance maintains the broader

organizational, social and psychological environment in which the technical core functions.

The relationship between noncognitive abilities, cognitive abilities, and procedural knowledge. In this sense, procedural knowledge, or understanding of the social and psychological context in which business processes are applied, is a direct antecedent of contextual performance. In this study, the dimensions and indicators of safety behavior that are relevant to the above theory are used, namely the dimensions of task performance and contextual performance.

Task Performance (Safety Compliance) with indicators following work safety standards and wearing personal protective equipment.

Contextual Performance (Safety Participation) with indicators of volunteering in work safety activities and assisting colleagues in issues related to workplace safety.

Competence is the ability to carry out work or tasks based on skills and knowledge and supported by work attitudes determined by the job. Competence shows certain knowledge, skills and attitudes of a profession in certain skill characteristics, which characterize a professional.

According to Spencer and Spencer (1993) Competence is a fundamental characteristic of an individual that is causally related to the referenced criteria, effective and or superior performance in a job or situation. Competence is an individual's ability to carry out a job correctly and has advantages based on matters relating to knowledge (Knowledge), skills (skills), and attitudes (attitude).

Based on the above understanding, it can be concluded that competence is the ability to work by integrating knowledge, skills, abilities, and personal values based on experience and learning in the context of carrying out their duties professionally, effectively, and efficiently.

Which states that competence is an individual's ability to carry out a job correctly and has advantages based on matters relating to knowledge, skills, and attitudes.

Dimensions and indicators of competence include:

1. Skills, Efforts to carry out activities as well as responsibilities are given properly and maximally in accordance with existing regulations. The indicator is being able to use, manage and maintain all facilities that support safety behavior in the workplace properly.
2. Knowledge, Information are owned by a health worker who performs tasks according to safety behavior. The indicators are understanding work, understanding work-related rules, having knowledge according to the field occupied, and thinking creatively in carrying out work.
3. Attitude is the pattern of behavior in doing work and responsibilities with safety behavior. The indicator is carrying out work according to SOPs, complying with rules related to OHS, and completing work according to procedures.

The workload is a response to the physical and psychological about a person (worker). If a person is able to adapt to these demands then this does not become a workload, but if the effort to adapt himself is not successful then this will become a workload. The amount of work a person does is determined in the form of company labor standards, depending on the type of work.

Hart (1991) states that the optimal workload is a situation where a person feels comfortable with the given task, can carry out tasks reliably, and maintain good performance.

Based on the understanding of the workload above, it can be concluded that the workload is a response to the physical and psychological aspects of a person (worker). If a person is able to adapt to these demands then this does not become a workload, but if the effort to adapt himself is not successful then this will become a workload. The amount of work a person does is determined in the form of company labor standards, depending on the type of work. A three-employee workload can occur in three situations. First, the standard workload. Second, the workload is too high (overcapacity). Third, the workload is too light (less than capacity). Workloads that are too heavy or too light affect work inefficiency.

The author concludes that there is a possibility that the heavy workload has changed the behavior of nurses from previously safe behavior to unsafe behavior. This can affect patient safety. So unsafe behavior can cause the nurse to make mistakes (Safitri, 2019). Galy *et al.* (2018) state that workload is a response to both the physical and psychological aspects of a person.

Based on the description above, it can be concluded that the workload is the amount of work owned by a position/organizational unit and is the product of the work volume and the time norm. This study refers to the theory of Hart (1991) which suggests that the optimal workload is a situation where a person feels comfortable with the given task, can carry out tasks reliably, and maintain good performance. The workload indicator used adopts the workload indicator according to Galy *et al.* (2018) entitled Measuring mental workload with the NASA-TLX needs to examine each dimension rather than relying on the global score: an example with driving, Ergonomics states that the dimensions and workload indicators are as follows

Kotler (2022) states that promotion is a marketing strategy process as a form of communication with the market through the composition of the marketing mix. Promotion is a way of communication made by the company to consumers or the target market, with the aim of conveying information about the product/company so that they want to buy. Promotion consists of advertising, direct marketing, personal selling, sales promotion, and public relations.

II. RESEARCH METHODS

This research was conducted in the X Karawang Research Hospital starting from January 2022 to February 2022. The research used was causal associative research with quantitative techniques. The population in this study were employees of Medical Services, Medical Support, and Nursing who served in the X Hospital environment amounting to 417 people. Of the total population of health workers, 417 people were re-selected based on permanent employee status or working period of more than one year, bringing the total population according to the criteria above to 179 people.

In this study, the researcher wanted to know whether there was an effect of Competence, Workload, and OHS Promotion

on Safety Behavior in Health Workers at Hospital X Karawang. As shown in Fig. 1, the independent variables are Competence, Workload, and OHS Promotion, and the dependent variable is Safety Behavior.

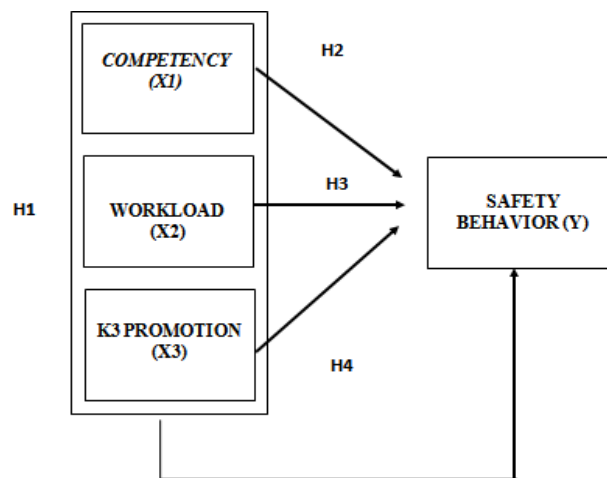


Fig. 1. Research Constellation Framework.

III. RESEARCH HYPOTHESIS

Based on the constellation of research, the hypotheses of this study are as follows:

- H1: There is an effect between X1, X2, X3 against Y
- H2: There is an effect between X1 on Y
- H3: There is an effect between X2 on Y
- H4: There is an effect between X3 on Y

IV. RESULT

Characteristics of respondents are general descriptions of research respondents, where in this study the respondents were employees of Medical and Nursing Services/Supports who served in the X Karawang Hospital. Based on the data collected from the questionnaire, an overview of the respondents in this study was obtained from gender, age, education, years of service, and marital status.

One of the characteristics of human differences is the difference in gender which is divided into two, namely male and female. Gender can indicate the physical condition of a person. Based on gender, it can be seen that from 179 respondents there were 68.9% female respondents, and 30.2% were male respondents. From the data above, it is known that the majority of Medical and Nursing Services/Support working at X Karawang Hospital are women. This is more due to the nature of the work which is more related to the tasks of caring for the sick which require patience and thoroughness.

V. DISCUSSION OF RESPONDENTS CHARACTERISTICS

The research results obtained data from hypothesis testing as described below:

1) Relationship of Competence, Workload, OHS Promotion to Health Workers' Safety Behavior

The results of the analysis show that H01 is rejected and Ha1 is accepted. So it can be concluded that the model used

is accepted. This means that competence, workload, OHS promotion have a significant influence on the safety behavior of health workers. It can be concluded that H1 is accepted

2) Influence of Competence (X1) on Safety Behavior (Y) of Health Workers at X Karawang Hospital.

Based on the results of the analysis, it can be concluded that work competence has an influence on work safety behavior. This means that the level of competence will have an impact on workplace safety behavior, so it can be concluded that work competence has a positive and significant influence on the safety behavior of health workers at X Karawang Hospital. It can be concluded that H₂ is accepted. These results provide an illustration that in general, the competence of the Service/Medical Support personnel at X Karawang Hospital is Medium.

3) Effect of Workload (X2) on Health Workers' Safety Behavior (Y)

Based on the results of the analysis, it can be concluded that the workload has an influence on the safety behavior of health workers at X Karawang Hospital. It can be concluded that H₃ is rejected. It means that the size of the workload will have an impact on the safety behavior of health workers.

VI. RESEARCH FINDING

From the research conducted, the researcher got several findings after proving the hypothesis, which is as follows:

- a) Competence, workload, OHS promotions influence the safety behavior of health workers at X Hospital. The competence variable has the greatest influence, while the OHS promotion variable has less effect and the workload variable has no influence on safety behavior
 - b) Senior employees (all respondents) with longer work experience tend to be less concerned about HOHS at work.
 - c) The HOHS team has not been optimal in controlling and monitoring program implementation in the field, as evidenced by themany found damaged safety signs in severalwork units.
 - d) Good communication has not been created with colleagues to support each other's safety behavior together in the workplace.
 - e) Supervisors do not routinely supervise the implementation of HOHSMS so safety procedures are often neglected.
 - f) No safety talk before starting work.
 - g) Rewards and punishments that have not been clearly regulated by the HOHS team for achievements or OHS violations by employees at work.
1. Competence affects the safety behavior of health workers at X Karawang Hospital. Employee competence is in the medium category. High employee competence will be an advantage for the implementation of the HOHS program in order to prevent OI and WA.
 2. The workload partially has no effect on the safety behavior of health workers at Hospital X Karawang. This means that the size of the workload does not have an impact on the safety behavior of health

workers.

3. OHS promotion affects the safety behavior of health workers at X Karawang Hospital. The OHS promotion is quite sufficient. This means that some employees have been exposed to messages in OHS promotions which are part of the HOHS program but need evaluation, and maximum control including rewards andpunishments.

VII. IMPLICATIONS

Based on the research results that have been obtained, the efforts that can be made theoretically and managerially implication are as follows:

A. Theoretical Implications

The results of this study are in accordance with the theory of Motowildo *et al.* (2017) which suggests that behavior is related to non-cognitive abilities, cognitive abilities, and procedural knowledge. In this sense, procedural knowledge, or understanding of the social and psychological context in which business processes are applied, is a direct antecedent of contextual performance. The results show that personal factors (OHS knowledge, OHS training, workload, fatigue) and OHS management have a significant positive effect on unsafe actions.

This study supports the theory proposed by Ajzen (2005) that the perception of behavioral control is determined by individual beliefs about the availability of resources. Competence supports the theory of Edison *et al.* (2016, p.142), workload supports Hart's theory (1991) and OHS Promotion supports Kotler's theory (2022).

The more available competent resources. optimal workloads and well-executed OHS

promotions, the more individuals will be directed towards safety behaviors that help achieve the HOHS program in general.

This research is also expected to be used as a reference for similar research by looking at other factors that support the success of HOHSMS.

B. Managerial Implications

Efforts that can be made by the management and leadership of the hospital are as follows:

In terms of task performance, health workers are quite good, especially in following work safety standards and wearing personal protective equipment. However, there are still those who neglect or ignore the OHS recommendations.

The existence of efforts to increase the knowledge of health workers will help a lot when on duty. Related to the competence of health workers, it is expected that when on duty they are always proactive in seeking information about patient needs so that they can provide appropriate services according to patient needs.

The availability of service facilities and infrastructure that are in accordance with standards will reduce the burden of psychological pressure on health workers in providing services. Complete infrastructure is expected to support the quality of service.

The frequency of promotion of promotional media needs to be intensified because it is proven by the increasing

frequency of promotions, the awareness of health workers to behave safely is higher. It is necessary to socialize more intensively regarding health checks especially for Occupational illness when this incident occurs to minimize the impact of Occupational Illness and accelerate the recovery of employees affected by occupational illness (OI).

VIII. SUGESTION

A. For Hospitals

Hospital management needs to provide support in the implementation of safety behavior. The most recommended management support based on the Three Box Method obtained is:

- a) To improve safety behavior, it is expected that employees are regularly explained the meaning and function of OHS signs in the work area.
- b) Regarding the competence of health workers, it is expected that when on duty they are always proactive in seeking information about patient needs other than those already known, then adjusting to the services to be provided.
- c) Management meets the availability of service facilities and infrastructure that are in accordance with standards and conducts periodic checks on these working equipment to improve service quality.
- d) Special health examinations for Occupational Illness are carried out when an incident occurs to minimize the impact of Occupational Illness and accelerate the recovery of employees affected by Occupational Illness (OI).

B. For the Next Researcher

- a) Future research should be able to examine other factors including work stress, leadership style, or communication style that can affect the safety behavior of health workers.
- b) For future research, they should be able to use research questionnaire questions specifically for medical personnel according to their profession.
- c) The research still has limitations, among others, in terms of the number of respondents, data collection by using questionnaires where the answers given by respondents make it possible not to show the actual condition of the respondents.

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