

Review of Occupational Disease Prevention With The Implementation of Occupational Safety And Health In Medical Records At Dr. Ha Rotinsulu Lung Hospital, Bandung

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Abstract

Occupational Diseases (OCD) in medical recorders can be influenced by biological exposure, ergonomic factors, and work environment conditions, so that effective implementation of Occupational Safety and Health (OHS) is needed. This study aims to analyze the implementation of OHS as an effort to prevent OCD in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung. The study used a mixed method with a descriptive approach, where the qualitative approach was the main method and the quantitative as a supporting method. The quantitative population consisted of all 23 medical recorders selected using total sampling techniques, while qualitative informants were selected using purposive sampling. The research instruments included questionnaires, interview guidelines, observation sheets, and documentation checklists. Quantitative data were analyzed descriptively using percentages, while qualitative data were analyzed through data reduction, data presentation, and conclusion drawing. The results showed that the level of compliance with OHS implementation reached 88.26% with a very good category. OHS implementation was supported by the use of PPE, hand hygiene, OHS training, regular supervision, and the provision of supporting facilities, although obstacles were still found in the form of ergonomic factors, workload, and potential exposure to infectious diseases. It was concluded that the implementation of K3 has played an important role in efforts to prevent PAK in medical recorders, but continuous improvement of ergonomic aspects, supervision, and work facilities is still needed.

Keywords: *Ergonomics, Medical Record Officer, Occupational Disease, Occupational Health And Safety and Workplace Safety.*

I. INTRODUCTION

Occupational Diseases (OCD) are health disorders arising from work or the work environment that can affect the physical, mental, and social conditions of workers (International Labour Organization (ILO), 2024). In hospital settings, the risk of OCD is high because healthcare workers are exposed to various hazards every day, including biological, physical, chemical, ergonomic, and psychosocial risks (World Health Organization (WHO), 2022). If Occupational Safety and Health (OSH) is not optimally implemented, these factors can increase the morbidity rate among healthcare workers, reduce work productivity, and impact the quality of healthcare services provided to the public (Sagala, 2020). Therefore, hospitals are required to implement a comprehensive Hospital Occupational Safety and Health (OSH) program as a form of protection for all healthcare workers from various potential hazards that arise during the work process. These risks can include musculoskeletal disorders, infectious diseases, respiratory disorders, work stress, and fatigue due to continuous work activities (TAMBA, 2021).

Medical recorders are among the healthcare workers at risk of developing PAK, even though they are not directly involved in clinical procedures. Prolonged computer processing of medical records, static sitting positions, and repetitive work can increase the risk of ergonomic disorders, such as muscle pain, back pain, fatigue, and postural disorders (Demissie et al., 2024). Furthermore, registration staff interact directly with patients, potentially exposing them to infectious diseases through droplets, airborne droplets, indirect contact with documents, and the hospital environment (Abbas & Herawati, 2024). Research by Ardhini (2021) indicates that ergonomic factors are a major cause of PAK in medical record staff, primarily due to poor ergonomic working positions and prolonged repetitive work activities (Ardhini, 2021).

The implementation of OHS is a crucial strategy for preventing occupational health problems (PAK) in medical record workers through the use of Personal Protective Equipment (PPE), hand hygiene, adherence to safe work procedures, and the application of ergonomic principles during work. These efforts are expected to minimize the risk of exposure to disease and health problems resulting from work activities in medical record facilities. However, previous research has focused more on the application of OHS to clinical healthcare workers, particularly nurses, focusing on occupational safety policies, OHS implementation, and PAK prevention efforts in hospitals (TAMBA, 2021; Helga, 2020; Sagala, 2020). This situation indicates that studies on the application of OHS to medical record workers are still limited, even though this profession also faces various health risks that require special attention.

The results of initial observations conducted on May 12, 2026, at the Medical Records Installation of Dr. HA Rotinsulu Lung Hospital in Bandung showed that the implementation of OHS has been carried out through the use of PPE, hand hygiene, and the availability of various OHS support facilities in the work environment. During the observation, no medical record officers were found to experience PAK due to disease transmission from patients. However, potential health risks related to ergonomic aspects were still found, such as prolonged sitting positions while working using a computer or laptop which can potentially cause back pain and pain, as well as continuous use of screens which can cause eye fatigue and visual impairment. These findings indicate that health risks in medical recorders do not only come from biological exposure, but are also influenced by work conditions and patterns. This condition indicates the need for research that examines the implementation of OHS as an effort to prevent PAK in medical recorders in a more comprehensive manner.

Based on these conditions, this study aims to determine and analyze the implementation of Occupational Safety and Health (K3) in efforts to prevent Occupational Diseases (PAK) in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung, including the implementation of K3, the level of officer compliance, supporting and inhibiting factors, and PAK prevention efforts carried out in the work environment. This study is important because the results are expected to be the basis for increasing protection for medical recorders, creating a safe and healthy work environment, and supporting the improvement of the quality of hospital services. The novelty of this study lies in the focus of the study on the implementation of K3 as an effort to prevent PAK in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung, with an emphasis on the level of officer compliance, supporting and inhibiting factors in the implementation of K3, and efforts to prevent PAK in non-clinical health workers who have not been widely discussed in previous studies.

II. METHODOLOGY

This study uses a mixed method, namely a combination of qualitative and quantitative approaches with the qualitative approach as the dominant method (Creswell & Plano Clark, 2018). According to Sugiyono (2017), a research method is a scientific way to obtain data to achieve research objectives through a rational, empirical, and systematic process. The qualitative approach was chosen because this study focuses on an in-depth understanding of the implementation of Occupational Safety and Health (OHS) in medical recorders in an effort to prevent Occupational Diseases (PAK) at Dr. HA Rotinsulu Lung Hospital, Bandung. Through this approach, the study examines the practice of implementing OHS, medical recorders' understanding of occupational safety procedures, and various factors that influence the implementation of OHS in the medical record installation.

This study uses a descriptive design to provide an overview of the implementation of OHS principles by medical recorders, including compliance with hand hygiene, use of Personal Protective Equipment (PPE), compliance with Standard Operating Procedures (SOP), and safe management of medical record documents as an effort to prevent PAK. Qualitative data were obtained through interviews, observations, and documentation so as to be able to describe the real conditions in the work

environment and identify various supporting factors and obstacles in the implementation of OHS. Meanwhile, a quantitative approach was used as a supporting method through the distribution of questionnaires. The combination of these two approaches produces complementary data so as to provide a more comprehensive understanding of the phenomenon studied (Creswell & Creswell, 2023). and to determine the level of compliance of medical recorders with the implementation of OHS, such as the use of PPE, compliance with hand hygiene, and implementation of work safety procedures. The combination of these two approaches produces in-depth descriptive data as well as numerical data that can be used to strengthen the research results.

A population is a generalization area consisting of objects or subjects that have certain characteristics to be studied and conclusions drawn (Sugiyono, 2017). The quantitative population in this study was all Medical Records and Health Information (PMIK) personnel working in the medical records installation of Dr. HA Rotinsulu Lung Hospital, Bandung, including officers in the patient registration, assembly, medical record analysis, coding, and filing sections. All officers were selected because they were directly involved in medical record management and had potential exposure risks in the hospital environment. The qualitative population consisted of the head of the medical records installation and medical records officers who had knowledge and experience regarding the implementation of K3 and prevention of PAK in the medical records installation.

The quantitative sample was determined using a total sampling technique, where all members of the population were used as research respondents because the number of medical recorders was relatively limited (Sugiyono, 2017). This technique was used to obtain a comprehensive picture of the implementation of K3 and PAK prevention efforts in medical recorders. Meanwhile, the qualitative sample was selected using a purposive sampling technique, namely selecting informants based on the consideration that they have relevant knowledge and experience regarding the implementation of K3, the use of PPE, as well as supporting factors and obstacles in PAK prevention in medical record installations.

The research instruments used included a questionnaire, interview guide, and observation sheet. The questionnaire was used to collect quantitative data regarding the implementation of OHS and prevention of PAK using a five-category Likert scale, namely Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree (Sugiyono, 2019). The interview guide was used to obtain in-depth information regarding the understanding, experience, obstacles, and supporting factors of OHS implementation, while the observation sheet was used to directly record the work activities of medical recorders, such as the use of PPE, hand hygiene practices, and compliance with SOPs (Notoatmodjo, 2018). In addition, a documentation checklist was used to verify supporting documents, such as the OHS SOP, hospital policies, evidence of training, and documents related to PAK prevention (Notoatmodjo, 2018).

Data analysis was conducted using a mixed methods approach. Quantitative data were processed through editing, coding, tabulation, and descriptive analysis using percentages to illustrate the level of OSH implementation in preventing PAK in medical record installations. Meanwhile, qualitative data were analyzed through data reduction, data display, and conclusion drawing to obtain a comprehensive picture of OSH implementation, supporting factors, and barriers to PAK prevention in medical record installations.

The research procedure began with the development of a research design and the selection of respondents and informants according to the research criteria. Quantitative data was then collected by distributing questionnaires to all medical recorders in the medical records installation. Qualitative data were obtained through interviews, direct observation of work activities, and documentation studies of documents related to the implementation of Occupational Health and Safety (K3) and the prevention of PAK. These data collection techniques were used to obtain information that corresponds to actual conditions in the field and supports the achievement of the research objectives (Siti et al., 2025).

The collected data was then processed and analyzed according to the data type. The results of the quantitative analysis were used to describe the level of OHS implementation, while the results of the qualitative analysis were used to explain in depth the implementation of OHS, supporting factors, obstacles, and prevention efforts for PAK in medical recorders. Furthermore, the results of the two approaches were integrated to produce a complete picture of the implementation of Occupational Safety and Health as an effort to prevent Occupational Diseases in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung.

III. RESULTS AND DISCUSSIONS

Implementation of Occupational Safety and Health (K3) in Medical Records in Efforts to Prevent Occupational Diseases

Based on the results of interviews with six informants consisting of the Head of the Medical Records Installation, registration officers, storage officers, reporting officers, and implementing medical recorders, it was found that the implementation of Occupational Safety and Health (K3) in the medical records installation of Dr. HA Rotinsulu Bandung Lung Hospital has been implemented as part of the effort to prevent Occupational Diseases (PAK). This implementation is carried out through hospital policies that are integrated with the K3RS team program and applied to all employees, including medical recorders.

Interview results indicate that the most dominant forms of OHS implementation are the use of Personal Protective Equipment (PPE), hand hygiene, OHS training and outreach, and regular monitoring of officer compliance. The use of PPE, particularly masks, is implemented according to the level of job risk and the intensity of patient contact. In units with a higher risk of exposure, such as registration and the emergency department, mask use is routinely carried out. In certain conditions, such as the treatment of MDR-TB patients, additional PPE is used according to hospital procedures. In addition, officers are still required to wear work clothes as part of safety standards while on duty.

Hand hygiene is also a crucial part of the OHS implementation in medical records facilities. Interviews revealed that staff have implemented handwashing with soap and hand sanitizer before and after patient contact, after handling medical records, and before engaging in other activities such as eating. These practices are reinforced through education and training on handwashing procedures tailored to the medical records workers' work activities. This demonstrates that occupational disease prevention efforts focus not only on physical protection through PPE but also on controlling the risk of transmission through safe work practices.

The implementation of OHS in the medical records installation is also supported by policies and SOPs from the hospital's OHS team. Although some informants stated that there are no SOPs specifically designed for the medical records profession, the general OHS SOPs in effect at the hospital have become guidelines for implementing occupational safety. The implementation of these policies is tailored to the characteristics of each work unit, including direct patient care, file storage, and data processing and reporting.

In relation to the prevention of Occupational Diseases (OCD), interview results indicate that the risks faced by medical recorders come not only from exposure to infectious diseases, but also from ergonomic and work environment risks. The risk of infectious diseases is primarily experienced by officers who interact directly with patients through droplets or indirect contact through the work environment. Meanwhile, other risks that are quite frequently found include musculoskeletal disorders such as back and waist pain due to prolonged sitting positions, work fatigue, eye complaints due to continuous computer use, exposure to dust in file storage areas, and psychological stress due to workload.

As a preventive measure against these risks, the hospital has implemented various supporting programs such as regular OHS training and outreach through in-house training, routine evaluations by the OHS team, provision of supporting facilities such as masks, hand sanitizer, first aid facilities, im-

plementation of Medical Check-Ups (MCU), vaccinations, and installation of a reminder application to do stretching during working hours. The program demonstrates that prevention of occupational diseases is carried out through a promotive, preventive, and risk control approach in the work environment.

Interviews also revealed that staff compliance with OHS implementation is quite good. Most informants stated that the use of PPE and implementation of safety procedures have become part of their daily work routine. This compliance is supported by regular monitoring and evaluation by the OHS team through inspections and reminders when non-compliance with procedures is found.

However, there are still several obstacles in the implementation of K3, including the possibility of officers forgetting to apply procedures due to high workloads, limited certain supporting facilities, hospital environmental conditions that still have the potential for exposure to infectious diseases, as well as ergonomic factors and work environment comfort. Therefore, several recommendations submitted by informants include increasing routine inspections, strengthening education, providing adequate supporting facilities, noise control, improving workplace ergonomics, and improving work environment cleanliness.

Overall, it can be concluded that the implementation of K3 in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung has been running and contributing to the prevention of Occupational Diseases through the use of PPE, the implementation of hand hygiene, training and socialization, regular supervision, and the provision of supporting facilities for occupational safety. Nevertheless, continuous improvement is still needed so that all occupational risks, whether physical, biological, ergonomic, or psychosocial, can be optimally minimized.

Level of Medical Record Compliance with the Implementation of Occupational Safety and Health (K3)

1. Use Likert Score

Table 2. Likert Scores

No	Likert Scale	Score
1	SS (Strongly Agree)	5
2	S (Agree)	4
3	R (Doubtful)	3
4	TS (Disagree)	2
5	STS (Strongly Disagree)	1

Based on the results of processing the questionnaire on 23 respondents with 20 statement items, the total score obtained was 2,030 out of a maximum score of 2,300, resulting in a percentage of 88.26%. These results indicate that the level of compliance of medical recorders with the implementation of Occupational Safety and Health (K3) at Dr. HA Rotinsulu Lung Hospital, Bandung is in the very good category. This indicates that the majority of medical recorders have implemented the use of Personal Protective Equipment (PPE), maintained hand hygiene, understood Standard Operating Procedures (SOP), participated in K3 training, and implemented work safety procedures as an effort to prevent Occupational Diseases (PA)

a. Category Interpretation

Table 3. Category Interpretation

Presentation	Category
81 – 100%	Very good
61 – 80%	Good
41 – 60%	Enough
21 – 40%	Not enough
0 – 20%	Very less

With a percentage of 88.26%, the level of medical recorders' compliance with the implementation of K3 is included in the Very Good category.

b. Measurement Results of Each Indicator

Table 4. Measurement Results of Each Indicator

No	Indicator	Mean	Category
1	Use of PPE	4.30	Very good
2	Hand hygiene and Biological Risk SOP	4.56	Very good
3	K3 Training	4.40	Very good
4	Work environment	4.19	Very good
5	Implementation of K3	4.39	Very good

c. Data Integration

Table 5. Data Integration

No	Indicator	Quantitative Results	Qualitative Results
1	Use of PPE	86.00% (Very Good)	Most officers wear PPE as required by their jobs. Masks and PPE are readily available and used as protection against the risk of occupational diseases.
2	Hand hygiene and Biological Risk SOP	91.20% (Very Good)	Staff have implemented hand hygiene before and after work and understand the importance of SOPs in reducing the risk of disease exposure in the hospital environment.
3	K3 Training	88.00% (Very Good)	Officers are aware of K3 procedures and most of them have participated in outreach or training that helps improve understanding of occupational safety.
4	Work environment	88.20% (Very Good)	The work environment is considered to support the implementation of K3 with the availability of supporting facilities such as PPE and hand hygiene facilities, although periodic evaluation is still required.
5	Implementation of K3	87.80% (Very Good)	The implementation of K3 has become part of daily work activities and is considered to help reduce the risk of Occupational Diseases (PAK) in medical recorders.

Based on the results of the integration of quantitative and qualitative data, it was found that all indicators of Occupational Safety and Health (OHS) implementation were in the very good category. The results of interviews and observations supported the questionnaire results, which indicated that the use of PPE, hand hygiene, OHS training, work environment conditions, and OHS implementation had been implemented well as an effort to prevent Occupational Diseases (OCD) in medical recorders.

Supporting and Inhibiting Factors in the Implementation of Occupational Health and Safety in Preventing Occupational Diseases.

Based on the results of interviews with six informants, several factors were obtained that support and hinder the implementation of Occupational Safety and Health (K3) in efforts to prevent Occupational Diseases (PAK) in medical recorders.

1. Supporting factors

The implementation of K3 is supported by policies, SOPs, and K3RS programs that serve as guidelines for all staff in carrying out their work safely. Furthermore, the hospital routinely conducts K3 training and outreach to improve staff knowledge and compliance. The availability of supporting facilities such as PPE, hand sanitizer, health services, Medical Check-Ups (MCU), vaccinations, and an incident reporting system also support the implementation of K3. Staff awareness in using PPE, maintaining hand hygiene, and adhering to SOPs are also important factors. Regular supervision and evaluation by the K3RS team helps maintain staff compliance, while the implementation of Electronic Medical Records (EMR) supports the prevention of PAK by reducing contact with physical files and dust exposure.

2. **Meanwhile, the inhibiting factors**

Some of the obstacles still encountered include the high workload, which sometimes results in officers being inconsistent in implementing OHS procedures. Furthermore, there are still limitations in some supporting facilities, such as the availability of tissues and checking first aid kits. The risk of exposure to infectious diseases from the service environment, especially due to the continued lack of compliance of patients or their families with masks, is also a challenge. Ergonomic factors, such as prolonged sitting, uncomfortable lighting, noise, and exposure to dust in file storage areas, also affect working conditions. Furthermore, there are still differences in the level of concern among some officers regarding consistently implementing OHS.

Based on the research results, it can be concluded that the success of implementing OHS in preventing Occupational Diseases in medical recorders is influenced by hospital policy support, facility availability, supervision, and staff compliance. Meanwhile, workload, work environment conditions, limited facilities, and behavioral factors remain barriers that require continued improvement to increase the effectiveness of OHS implementation.

Efforts to Prevent Occupational Diseases through the Implementation of K3 in Medical Records

Based on the results of interviews with six informants, it was found that efforts to prevent Occupational Diseases (PAK) in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung, were carried out through the implementation of Occupational Safety and Health (K3) which had become part of daily work activities. These efforts included the use of Personal Protective Equipment (PPE) according to the level of work risk, the implementation of hand hygiene using soap or hand sanitizer, as well as periodic K3 training and socialization through in-house training to improve officers' knowledge and compliance with work safety procedures. The implementation of K3 was also supported by supervision and evaluation from the K3RS team through periodic monitoring and inspection activities.

In addition, the hospital provides various supporting facilities, such as PPE, hand sanitizer, first aid facilities, health services, Medical Check-Ups (MCU), and vaccinations for staff. Preventive measures are also implemented through ergonomic and work environment risk control. Dr. HA Rotinsulu Lung Hospital Bandung has implemented Electronic Medical Records (EMR) which helps reduce the use of physical medical record files, thereby reducing the risk of dust and contamination exposure. The hospital also implements reminders for staff to stretch during work hours and maintains cleanliness, lighting, and comfort of the work environment to support staff health and safety. In addition, controlling the risk of exposure to infectious diseases is carried out through regulating patient service flows, using physical barriers in certain areas, and educating patients and families about the use of masks.

Based on the research results, it can be concluded that efforts to prevent Occupational Diseases in medical recorders are carried out through the application of PPE, hand hygiene, OHS training and outreach, regular supervision, provision of supporting facilities, and control of ergonomic risks, the work environment, and exposure to infectious diseases. These various efforts support the creation of a safe and healthy work environment for medical recorders in carrying out their service duties.

Observation Results

Based on observations conducted at the medical records facility, the implementation of Occupational Safety and Health (K3) has generally been successful. This is evident from the fact that most aspects on the observation sheet received a Good (BK) rating.

Regarding the use of Personal Protective Equipment (PPE), staff were seen wearing masks during work, particularly during activities involving direct patient interaction and when providing services in certain areas with a higher risk of exposure. Furthermore, PPE use was also adjusted to the needs of the job and the work environment the staff faced.

The availability of OHS support facilities also appears to be adequate. Handwashing facilities and hand sanitizer are available in the work area for staff to use as part of hand hygiene practices. Observations indicate that staff also perform hand hygiene before and after work activities to prevent disease transmission within the hospital environment.

In terms of compliance with work procedures, staff were seen carrying out their work in accordance with the hospital's SOPs. Although no OSH SOP specifically addressed the medical records installation, OSH implementation still adhered to the hospital's general policies, which were implemented across all work units. Furthermore, OSH-related information media served as reminders and educational tools for staff on maintaining occupational safety and health.

In terms of work environment conditions, the medical records room generally appears clean and well-organized. However, several conditions were identified that require further attention, such as workspace comfort, dust control in certain areas, and ergonomic factors that could impact staff health in the long term. Therefore, this aspect is categorized as Poor (KB) compared to other aspects.

In efforts to prevent Occupational Diseases (OCD), hospitals have also demonstrated support through the provision of PPE, implementation of OHS education and outreach, and activities that support the occupational health of staff. Overall, observations indicate that OHS implementation in the medical records facility has been running well and supports OHS prevention efforts. Although several aspects of the work environment could be improved to optimize OHS implementation.

Discussion

Based on the results of research through interviews with six informants consisting of the Head of the Medical Records Installation, registration officers, storage officers, reporting officers, and implementing medical recorders, it is known that the implementation of Occupational Safety and Health (K3) on medical recorders in an effort to prevent Occupational Diseases (PAK) at Dr. HA Rotinsulu Lung Hospital Bandung has been implemented as part of the hospital policy integrated with the K3RS team program. This implementation is applied to all employees including medical recorders through various forms of activities that support occupational safety.

Interview results indicate that the dominant forms of OHS implementation include the use of Personal Protective Equipment (PPE), hand hygiene, OHS training and outreach, and regular monitoring of staff compliance. The use of PPE, particularly masks, is implemented according to the level of job risk and the intensity of patient contact. In high-risk units such as registration and the emergency department, PPE use is more stringent, including the use of additional protection in certain cases, such as MDR-TB patients, in accordance with hospital procedures. Furthermore, staff are still required to wear work clothes as a safety standard.

Hand hygiene is also a crucial part of preventing occupational diseases. Staff wash their hands with soap and hand sanitizer before and after patient contact, after handling medical records, and before engaging in personal activities such as eating. This practice is reinforced through training and education on appropriate hand hygiene practices relevant to medical recorders' work activities. This demonstrates that prevention focuses not only on PPE but also on safe work practices.

The implementation of OHS is also supported by policies and SOPs from the hospital OHS team. Although there is no specific SOP for the medical recorder profession, the general OHS SOP for hospitals remains a reference in work implementation. Implementation is tailored to the characteristics of each unit, including direct service, file storage, and data processing and reporting. From an occupational risk perspective, medical recorders face not only biological risks such as exposure to infectious diseases, but also ergonomic and work environment risks. These risks include musculoskeletal disorders such as back pain due to prolonged sitting, work fatigue, eye strain from computer use, exposure to dust in storage areas, and psychological stress due to workload. This condition indicates that the risk of OHS is multidimensional.

Preventive measures are implemented through various supporting programs, such as regular in-house K3 training, routine evaluations by the K3RS team, provision of PPE, hand sanitizer, first aid facilities, medical check-ups (MCU), vaccinations, and the use of stretching reminder apps while working. These programs demonstrate a promotional, preventative, and risk-control approach in the workplace.

The level of officer compliance with the implementation of OHS based on the results of the questionnaire to all medical record installation officers showed a very good category with a percentage of 88.26%. The maximum score of the study was 2,300, while the total score obtained was 2,030. This indicates that the implementation of OHS has become part of the daily work habits of the majority of medical recorders. The results of the measurement of each indicator also showed a very good category, namely the use of PPE with an average value of 4.30, hand hygiene and biological risk SOPs 4.56, OHS training 4.40, work environment 4.19, and general OHS implementation 4.39. These results are supported by the integration of qualitative data which shows that all indicators have been implemented well as an effort to prevent PAK. The integration of quantitative and qualitative data shows the conformity of the results, that the implementation of OHS has been running well in the medical record installation. The use of PPE, hand hygiene, training, work environment, and the implementation of OHS procedures have been implemented consistently although there are still several aspects that need to be improved.

Factors supporting the implementation of OHS include hospital OHS policies and programs, routine training and outreach, the availability of supporting facilities and equipment, staff awareness, supervision by the OHS team, and the implementation of electronic medical records that reduce contact with physical files. Meanwhile, inhibiting factors include high workloads, limited facilities, the risk of exposure to infectious diseases, non-compliance by some patients, suboptimal work ergonomics, and individual behavioral factors.

PAK prevention efforts are carried out through the use of PPE appropriate to the job risk, disciplined hand hygiene, regular K3 training and outreach, supervision and evaluation by the K3RS team, provision of supporting facilities such as PPE, MCU, vaccinations, and ergonomic risk control through stretching reminders and the implementation of electronic medical records. In addition, controlling the risk of exposure to infectious diseases is also carried out through patient flow management and education on mask use.

Observations indicate that the implementation of OHS in the medical records facility has generally been successful. Staff use PPE, particularly masks, as needed, hand hygiene facilities are available and used, and work SOPs have been implemented, although they are still general hospital SOPs. The work environment is generally clean and organized, but several aspects, such as room comfort, dust control, and ergonomics, still need improvement. Therefore, the implementation of OHS is considered to have supported PAK prevention efforts, although continuous improvement is still needed.

Overall, it can be concluded that the implementation of Occupational Safety and Health (K3) in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung has been running well and is in the very good category based on quantitative and qualitative results. This implementation has contributed to efforts to prevent Occupational Diseases through the use of PPE, hand hygiene, K3 training, supervision, and the provision of supporting facilities. However, continuous improvement is still needed, especially in aspects of ergonomics, the work environment, and strengthening compliance so that work risks can be optimally minimized.

IV. CONCLUSION

The implementation of Occupational Safety and Health (K3) in medical recorders at Dr. HA Rotinsulu Lung Hospital, Bandung, has been carried out very well as an effort to prevent Occupational Diseases (PAK), supported by the use of PPE, compliance with hand hygiene, K3

training and socialization, supervision of the K3RS team, and the provision of supporting facilities. The results of interviews, observations, and questionnaires show a level of compliance of 88.26% in the (very good) category. Although there are still obstacles such as ergonomic factors, workload, limited facilities, and potential exposure to infectious diseases, this study is expected to provide input for hospitals in improving the implementation of K3. This study was limited to one hospital with a relatively small number of respondents, so the results cannot be generalized. Future research is recommended to involve more hospitals and examine the factors that influence the incidence of PAK.

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