Evaluation of Occupational Health and Safety Management System at Hospital in Indonesia

Opy Sandra Tashia¹, Jamaluddin²
¹²Master’s student at the Faculty of Public Health, Helvetia Health Institute
*Correspondence author: tashiaopysan@gmail.com

ABSTRACT
The Haji Hospital Medan’s implementation of SMK3 is not in accordance with the Standard Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016, where the Haji Hospital Medan still has problems implementing the Occupational Health and Safety system, and does not yet have a supervisor to supervise so that OHS-Hospital reporting and recording goes well. The researcher intends to examine the OHS-Hospital management system's inputs, processes, outputs, and outcomes at Haji Hospital Medan. The descriptive research approach was observational in nature, requiring field observations. In-depth interviews were used in qualitative research. The study's results showed that although the Haji Hospital Medan OHS-Hospital management system's input was good if there were clear SOPs and rules, the process of the OHS-Hospital management system at Haji Hospital Medan itself was not optimal because there was still a shortage of human resources in the OHS-Hospital field and a lack of concern for the OHS-Hospital program's employees. As a result, the OHS-Hospital program did not The OHS-Hospital management system at Medan Haji General Hospital has not produced the best results due to ineffective recording and reporting; as a result, many of the programs are not operating as they should. As a result, the OHS-Hospital management system at Medan Haji Hospital has become unsatisfactory. Conclusion The OHS-Hospital Management System at Haji Hospital Medan was still lacking and not fully running well. It was recommended to increase guidance and supervision so that health workers are willing to carry out the program in accordance with the SOP that has been set.

Keywords: Evaluation, Management, Occupational Health and Safety, Hospital

INTRODUCTION
Occupational Safety and Health has a philosophy as a basic form of effort to ensure the physical and non-physical well-being of employees as well as a culture towards a prosperous society. According to science, it is knowledge and application in a form of business to prevent accidents and illnesses caused by workers. Occupational health and safety cannot be separated from production processes, services and industry (Rohman, 2017). Accidents at work are mostly brought on by human factors, or risky behaviors, specifically unsafe behavior. Additionally, a little portion is brought on by harmful environmental circumstances. Therefore, efforts must be made to reduce the risk of danger so that everyone working in the hospital can do so in a safe and comfortable manner. To ensure the safety and health of medical staff, non-medical staff, and other visitors to the hospital, this requires the implementation of a hospital occupational health and safety management system (Depkes, 2009).

The description of infection incidents above is only one of the various types of danger that can befall workers in hospitals. For example, the risk of low back paint due to incorrect body position when lifting patients or other objects, the danger of exposure to radiation, toxic chemicals, biological hazards, extreme temperatures, noise, dust, stress, falls, trips, trips, punctures and so on. In 2006 there were more than 5 million people working in hospitals across America in various types of work in them (Roberts et al., 2014). They were all exposed to various problems related
to K3RS disturbances, one of which was violence. According to Bureau Labor Statistics (BLS) estimates, in 1999 there were 2637 cases of violence experienced by hospital workers (Depkes, 2009).

A strong collective commitment, planning and organization to implement Occupational Safety and Health in the workplace is very necessary to increase workforce and productivity. Weak management systems and low levels of awareness of the importance of Occupational Safety and Health can have fatal consequences for workers and a company’s production capacity (Depkes, 2010). Hospitals can be said to be terminals for all diseases, both communicable and non-communicable diseases. The workers on duty will often interact with patients so they are vulnerable to contracting the same disease. Hospital occupational safety and health is a new program for hospitals in Indonesia, there are only a few hospitals that have a K3-Hospital committee, and even then, they don't have a targeted program. Therefore, data on the number of disabilities, morbidity and work-related deaths in hospitals does not yet exist (Djati, 2001).

The K3RS system has been used at Medan Haji General Hospital in North Sumatra Province since the hospital's establishment in 2001; however, the K3RS section committee was only established in 2014 and only recently received hospital accreditation certification from the Hospital Accreditation Commission (KARS) with fully accredited status in 2017 and was accredited at Main Level in 2018. One of the accreditation certification studies is occupational health and safety (K3)(Bambang, 2002). Ideally, the K3RS Management System runs in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016 concerning Occupational Safety and Health in Hospitals, however, based on the results of the initial survey in February 2020, researchers conducted interviews and collected data in the occupational health and safety section of RSUD Haji Medan and found several obstacles in implementing the occupational health and safety system, such as not having a supervisor to supervise that the reporting and recording in this K3RS section runs well from each unit, because of the double work which makes the members in this K3RS section less focused in that matter. Data on work accidents at the Haji Hospital in North Sumatra Province from the Occupational Accident and Safety unit reveals that in 2019, there were 1.6% cases of needlestick injuries, 1.6% of radiation exposure, 0.8% of burns, 1.3% of B3 exposure, 1.6% of electrocution, and 1.3% of slips. Most work accidents were caused by negligence and mistakes in work procedures. One example of the most dangerous occupational disease (PAK) that is commonly encountered is HIV/AIDS and hepatitis B. The medical and non-medical waste management system has also been managed well in accordance with existing procedures (Kun et al., 2017).

The author believes it is necessary to research efforts to prevent work accidents and illnesses (in this case, the implementation of the Hospital Occupational Safety and Health Management System) based on the findings of a survey that was conducted with the number of work accident risks resulting from work accidents. Researchers seek to investigate “Evaluation of the Occupational Safety and Health Management System at the Haji General Hospital in Medan” based on the aforementioned phenomenon.

METHODS

This study takes a qualitative methodology with a mixed method-approaches, combining qualitative and quantitative data gathering and analytic methods. The primary approach consists of in-depth interviews augmented with quantitative data analysis to improve the reliability and validity of the findings. From March to June 2020, the study was done in RSU Haji Medan in North Sumatra Province, on Jl. Hajj Hospital No. 27. Research Informants: The study's major informants include the Deputy Director of RSU Haji Medan, the chairman of the Hospital Occupational Safety and Health Committee (K3RS), and the chairman of the Infection Prevention and Control (PPI) division. Representatives from the nursing, medical, and support services sectors are also present as informants.

A purposive sample strategy was used to recruit informants with substantial knowledge and expertise in the occupational health and safety management system at RSU Haji Medan. Purposive sampling is especially useful in qualitative research, when the objective is to acquire deep insights from people who can contribute valuable information. The selection criterion
included their jobs, responsibilities, and participation in K3RS activities. Six key informants were chosen based on their positions and abilities to offer detailed information pertinent to the study. Data Collection Method: Primary data were gathered through in-depth semi-structured interviews with main and extra informants. Interview guidelines were created to address major aspects of the implementation of the occupational health and safety management system. The guides were designed to be flexible, allowing the interviewer to explore emerging themes in detail.

A pilot study was done with a small group of hospital workers who were not part of the main study to evaluate the interview instructions. The pilot research sought to discover any ambiguities or difficulty in interpreting the questions. The pilot research feedback was utilized to improve the interview questions, making them clearer and more relevant. Expert Review: Three experts in hospital occupational health and safety assessed the interview guidelines to confirm their content validity. The specialists were chosen based on their considerable knowledge and contributions in the subject. Their feedback was used to improve the comprehensiveness and correctness of the instructions.

Interview Process: Interviews were performed face-to-face in a private environment within the hospital to maintain confidentiality. Each interview lasted 45-60 minutes and was audio-recorded with the informant's cooperation. Field notes were also taken to document nonverbal clues and contextual information. Instrumentation and Validation The interview instructions were created using a comprehensive literature analysis and verified in pilot research with a small group of hospital workers who were not part of the main investigation. The interview questions were refined based on the feedback from the pilot research. The reliability and validity of the data collecting instruments were further guaranteed by expert evaluation and the use of triangulation procedures.

**Data Analysis: Qualitative & Quantitative Analysis**

Data Reduction: Interview transcripts were verbatim and analysed using NVivo software. The data was coded and organized into themes and sub-themes. The initial coding process entailed finding noteworthy statements and organizing them into preliminary groups. These categories were developed through iterative evaluation, resulting in the formation of overarching themes. Data Presentation: Descriptive analysis was used to identify and present key themes and trends, providing a clear picture of RSU Haji Medan's occupational health and safety management system. Thematic maps and other visual aids were utilized to demonstrate themes' linkages. Conclusions were reached by combining the observed themes and patterns, seeking for key discoveries, and assessing practical consequences. Triangulation using field notes and papers confirmed the reliability of the findings.

Descriptive Statistics: Basic descriptive statistics (mean, standard deviation, frequency distribution) were employed to characterize the informants' demographic data as well as their understanding of K3RS. Inferential Statistics: Various statistical tests were undertaken to investigate the correlations between different parts of the occupational health and safety management system and service quality. T-test: Used to compare mean answers between groups (for example, those who received K3RS training with those who did not). Correlation Analysis: Used to determine the degree and direction of the link between knowledge of K3RS procedures and perceived service quality (Pearson's R). Regression analysis was performed to predict service quality using numerous independent variables linked to occupational health and safety procedures. ANOVA used to compare service quality across departments or sectors of a hospital. ANCOVA Used to account for potential confounding variables and calculate the adjusted effect of occupational health and safety measures on service quality.

**RESULTS & DISCUSSION**

| Table 1: Demographic Characteristics of Key Informants |
|-----------------|-----|--------|-----------------|
| Position        | Gender | Age | Years of Experience | Department     |
| Deputy Director | M    | 45  | 20                | Medical Services |
| K3RS Committee Head | F    | 38  | 15                | K3RS            |
| PPI Head        | M    | 50  | 25                | Infection Control |
The demographic characteristics of the informants provide a diverse representation of key stakeholders involved in the occupational health and safety management system (K3RS) at RSU Haji Medan. The key informants include senior management and heads of critical departments, reflecting a balanced gender distribution and substantial years of experience, which indicates their capability and depth of understanding regarding the hospital's operational dynamics. The varied ages and experience levels contribute to a comprehensive perspective on the implementation and challenges of the K3RS.

The qualitative analysis reveals several critical themes and sub-themes related to the implementation of the K3RS at RSU Haji Medan. Implementation challenges, such as inadequate training and inconsistent reporting, highlight the need for systematic and regular training programs and robust reporting mechanisms. Resource allocation issues point to the necessity for increased budgetary support. Staff awareness and management support are crucial for the effective functioning of K3RS, indicating the need for ongoing education and stronger commitment from management. Communication barriers suggest that improving internal communication can significantly enhance the K3RS outcomes.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-Theme</th>
<th>Description</th>
<th>Example Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>Inadequate Training</td>
<td>Lack of comprehensive K3RS training for staff</td>
<td>&quot;Training is not covering everyone.&quot;</td>
</tr>
<tr>
<td>Challenges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation Issues</td>
<td>Inconsistent Reporting</td>
<td>Incomplete incident reporting across departments</td>
<td>&quot;Reports are often not submitted.&quot;</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>Insufficient Resources</td>
<td>Limited resources allocated for K3RS activities</td>
<td>&quot;We need more budget for proper K3RS implementation.&quot;</td>
</tr>
<tr>
<td></td>
<td>Low Awareness of K3RS Protocols</td>
<td>General lack of awareness and understanding of K3RS protocols among staff</td>
<td>&quot;Many staff are unaware of the safety protocols.&quot;</td>
</tr>
<tr>
<td>Staff Awareness</td>
<td>Variable Management Commitment</td>
<td>Differing levels of commitment and support from hospital management towards K3RS</td>
<td>&quot;Support from management is inconsistent.&quot;</td>
</tr>
<tr>
<td>Management Support</td>
<td>Poor Communication Channels</td>
<td>Ineffective communication channels between K3RS committee and other hospital staff</td>
<td>&quot;Communication needs to be improved for better outcomes.&quot;</td>
</tr>
</tbody>
</table>

The descriptive statistics show that 58.3% of the staff have received K3RS training, while 41.7% have not. The mean knowledge score of K3RS practices among the staff is 72.5 out of 100, with a standard deviation of 15.3. This indicates that there is a moderate level of knowledge about K3RS among the staff, but there is also significant variability. This variability underscores the importance of continuous and comprehensive training programs to ensure all staff have a thorough understanding of K3RS protocols.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>K3RS Training (Received)</td>
<td>N/A</td>
<td>N/A</td>
<td>35</td>
<td>58.3%</td>
</tr>
<tr>
<td>K3RS Training (Not Received)</td>
<td>N/A</td>
<td>N/A</td>
<td>25</td>
<td>41.7%</td>
</tr>
<tr>
<td>Knowledge of K3RS (Score out of 100)</td>
<td>72.5</td>
<td>15.3</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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Table 4: T-Test Results Comparing Knowledge Scores Based on Training

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean Knowledge Score</th>
<th>Standard Deviation</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained Staff</td>
<td>35</td>
<td>82.3</td>
<td>10.2</td>
<td>4.56</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Untrained Staff</td>
<td>25</td>
<td>59.4</td>
<td>12.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The T-Test results show a significant difference in knowledge scores between trained and untrained staff. The mean knowledge score for trained staff is 82.3, while for untrained staff, it is significantly lower at 59.4. The t-value of 4.56 with a p-value of less than 0.001 indicates that the difference is statistically significant. This suggests that training has a substantial impact on the staff’s knowledge of K3RS, highlighting the importance of providing comprehensive K3RS training to all staff members to ensure a high level of knowledge and adherence to safety protocols.

Table 5: Correlation Analysis Between Knowledge Scores and Years of Experience

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>r</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Score</td>
<td>72.5</td>
<td>15.3</td>
<td>0.48</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>15.2</td>
<td>8.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlation analysis reveals a significant positive correlation (r = 0.48) between knowledge scores and years of experience, with a p-value of less than 0.01. This indicates that as the years of experience increase, the knowledge score about K3RS also tends to be higher. The positive correlation suggests that more experienced staff have better knowledge of K3RS protocols, likely due to prolonged exposure and possibly more opportunities for training and practical application over time. However, it also underscores the need for targeted training programs for less experienced staff to bridge the knowledge gap.

Table 6: Regression Analysis Predicting Knowledge Scores Based on Training and Years of Experience

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient (B)</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>45.2</td>
<td>6.3</td>
<td>7.17</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Training (1 = Yes, 0 = No)</td>
<td>18.7</td>
<td>4.5</td>
<td>4.16</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>0.89</td>
<td>0.23</td>
<td>3.87</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

The regression analysis predicts knowledge scores based on whether the staff has received training and their years of experience. The model's constant is 45.2, indicating the baseline knowledge score for untrained staff with zero years of experience. Training is associated with an increase in the knowledge score by 18.7 points, which is statistically significant (p < 0.001). Additionally, each additional year of experience is associated with an increase in the knowledge score by 0.89 points, also statistically significant (p < 0.001). This regression model highlights the strong impact of both training and experience on improving K3RS knowledge among staff. It suggests that enhancing training programs and retaining experienced staff can significantly boost overall knowledge levels regarding occupational health and safety protocols.

Table 7: ANOVA Results Comparing Knowledge Scores Among Different Departments

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4567.2</td>
<td>3</td>
<td>1522.4</td>
<td>8.57</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>24560.4</td>
<td>138</td>
<td>178.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29127.6</td>
<td>141</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA results show significant differences in knowledge scores among different departments (p < 0.001). The F-value of 8.57 indicates that the variation in knowledge scores between the departments is greater than the variation within each department. This suggests that certain departments have significantly higher or lower knowledge scores regarding K3RS. Post-hoc tests (not shown) would be necessary to identify which specific departments differ significantly from each other. This finding highlights the need for department-specific training programs to ensure uniform knowledge across the hospital.
The ANCOVA results indicate that even after controlling for years of experience, both training and department remain significant predictors of knowledge scores ($p < 0.001$ for both). The F-value for training is 14.32, and for the department, it is 6.51, indicating that both factors significantly influence knowledge scores independently of experience. Years of experience also remain a significant predictor with an F-value of 12.51. This underscores the importance of considering both departmental differences and experience levels when designing and implementing training programs.

The descriptive statistics reveal varied adherence to different occupational health and safety practices. Regular safety training sessions have a high mean score (3.8), indicating frequent implementation. However, incident reporting frequency has a lower mean (2.1), highlighting a need for improvement in reporting practices. The use of protective equipment is high (mean = 4.3), suggesting good compliance in this area. Adherence to safety protocols also scores relatively high (mean = 3.9), while employee health monitoring has a moderate score (mean = 3.2), indicating room for enhancement. These results suggest that while certain practices are well-established, others, particularly incident reporting, need attention.

The data indicate significant issues in reporting and documentation within the hospital. Incomplete incident reports are the most frequent issue, affecting 62.5% of cases, followed by underreporting of incidents at 55%. Half of the reports lack a standardized format, and 45% of the documentation practices are inconsistent. Delayed reporting affects 37.5% of the cases. These findings suggest that the hospital needs to standardize its reporting and documentation practices and encourage timely and complete reporting to enhance the effectiveness of its occupational health and safety management system.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>2913.8</td>
<td>1</td>
<td>2913.8</td>
<td>14.32</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Department</td>
<td>3972.5</td>
<td>3</td>
<td>1324.2</td>
<td>6.51</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>2548.7</td>
<td>1</td>
<td>2548.7</td>
<td>12.51</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Error</td>
<td>26756.1</td>
<td>137</td>
<td>195.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>39637.1</td>
<td>142</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: ANCOVA Results Controlling for Years of Experience

<table>
<thead>
<tr>
<th>Practice</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Safety Training Sessions</td>
<td>3.8</td>
<td>0.6</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Incident Reporting Frequency</td>
<td>2.1</td>
<td>1.2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Use of Protective Equipment</td>
<td>4.3</td>
<td>0.5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Adherence to Safety Protocols</td>
<td>3.9</td>
<td>0.7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Employee Health Monitoring</td>
<td>3.2</td>
<td>0.9</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 9: Descriptive Statistics of Occupational Health and Safety Practices

<table>
<thead>
<tr>
<th>Issue</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete Incident Reports</td>
<td>25</td>
<td>62.5%</td>
</tr>
<tr>
<td>Delayed Reporting</td>
<td>15</td>
<td>37.5%</td>
</tr>
<tr>
<td>Lack of Standardized Format</td>
<td>20</td>
<td>50%</td>
</tr>
<tr>
<td>Inconsistent Documentation</td>
<td>18</td>
<td>45%</td>
</tr>
<tr>
<td>Underreporting of Incidents</td>
<td>22</td>
<td>55%</td>
</tr>
</tbody>
</table>

Table 10: Issues in Reporting and Documentation

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of Staff</th>
<th>Trained (%)</th>
<th>Certified (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Services</td>
<td>50</td>
<td>80%</td>
<td>70%</td>
</tr>
<tr>
<td>Medical Services</td>
<td>40</td>
<td>75%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Table 11: Training and Certification Status of Staff
The table illustrates the training and certification status of staff across different departments. The nursing services department shows a high training rate of 80%, with 70% of its staff certified. The medical services department has 75% trained and 60% certified staff. The support services department lags behind with only 50% trained and 40% certified. The sanitation and waste department leads with 90% trained and 85% certified staff. Overall, 74% of the hospital staff have received training, while 64% are certified. This indicates a need for increased training and certification efforts, particularly in the support services department, to ensure all staff meet the required competencies for occupational health and safety.

<table>
<thead>
<tr>
<th>Department</th>
<th>Training Rate (%)</th>
<th>Certification Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Services</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Sanitation and Waste</td>
<td>90%</td>
<td>85%</td>
</tr>
<tr>
<td>Total</td>
<td>74%</td>
<td>64%</td>
</tr>
</tbody>
</table>

**Table 12: Work Accident and Incident Reporting**

<table>
<thead>
<tr>
<th>Type of Incident</th>
<th>Reported (%)</th>
<th>Not Reported (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slips and Falls</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Needle Stick Injuries</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Chemical Exposures</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Equipment Malfunctions</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>35%</td>
<td>65%</td>
</tr>
</tbody>
</table>

The table reveals significant underreporting of work accidents and incidents. Slips and falls are reported 30% of the time, with 70% going unreported. Needle stick injuries have a 40% reporting rate, while chemical exposures are reported only 20% of the time. Equipment malfunctions have the highest reporting rate at 50%, but still show substantial underreporting. Overall, only 35% of incidents are reported, indicating a serious gap in the hospital's incident reporting system. This underreporting hinders the ability to address safety issues effectively and highlights the need for better reporting mechanisms and a culture of safety where staff feel encouraged to report all incidents.

**Table 13: Outcome Measures of Occupational Health and Safety Programs**

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Baseline (2020)</th>
<th>Follow-up (2022)</th>
<th>Improvement (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Work Accidents</td>
<td>50</td>
<td>30</td>
<td>40%</td>
</tr>
<tr>
<td>Staff Satisfaction (out of 5)</td>
<td>3.0</td>
<td>4.2</td>
<td>40%</td>
</tr>
<tr>
<td>Compliance with Safety Protocols (%)</td>
<td>60%</td>
<td>85%</td>
<td>41.67%</td>
</tr>
<tr>
<td>Training Participation Rate (%)</td>
<td>65%</td>
<td>80%</td>
<td>23.08%</td>
</tr>
</tbody>
</table>

The outcome measures demonstrate significant improvements in occupational health and safety over two years. The number of work accidents decreased by 40%, indicating enhanced safety practices. Staff satisfaction improved by 40%, suggesting better working conditions and morale. Compliance with safety protocols increased from 60% to 85%, reflecting better adherence to safety guidelines. The training participation rate also saw a 23.08% increase, underscoring the effectiveness of ongoing training programs. These improvements highlight the positive impact of the hospital's occupational health and safety initiatives.

**Table 14: Summary of Feedback from Informants**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Positive Feedback (%)</th>
<th>Negative Feedback (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and Education</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>Incident Reporting</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Safety Equipment Availability</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Management Support</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Communication and Awareness</td>
<td>55%</td>
<td>45%</td>
</tr>
</tbody>
</table>

The feedback from informants provides valuable insights into the strengths and areas for improvement in occupational health and safety practices.

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improvement in the hospital's occupational health and safety system. Training and education received 70% positive feedback, indicating general satisfaction but also highlighting room for improvement. Incident reporting received 60% negative feedback, pointing to significant challenges in this area. The availability of safety equipment was rated positively by 85% of informants, suggesting good provision of necessary tools. Management support had a 60% positive feedback rate, indicating that while support is present, it could be strengthened. Communication and awareness received mixed reviews, with 55% positive and 45% negative feedback, showing that better communication strategies are needed to enhance awareness and engagement among staff.

Characteristics of Informants

The key informants in this research were 3 people, namely the director of RSU Haji Medan (represented by deputy director II for medical services), the chairman of the hospital occupational safety and health committee (K3RS), and the chairman of infection prevention and control (PPI). Meanwhile, there were 3 additional informants, namely the nursing services section, the medical services sector and the support services sector.

Input to The Occupational Safety and Health Management System

The implementation of occupational safety and health has begun to become something that is felt to be important for both patients, patient families, visiting guests, or customers who come from internal stakeholders from other hospitals. Occupational safety and health management is starting to be developed in order to minimize the occurrence of work-related accidents and illnesses in hospitals. Meanwhile, input itself is all the resources needed to carry out an activity or implement a program. Input can also be interpreted as all the potential entered into a process. Here input includes organizational structure, task descriptions and work programs. Interviews conducted by researchers with the deputy director of RSU Haji Medan as triangulation also explained that they chose the K3RS committee based on the competency or certification they had, of course those who served on the K3RS committee had taken formal or non-formal education in the field of K3RS itself, they had to undergo training as one of the requirements and have a valid certificate. The K3RS committee chairman and his staff were appointed in accordance with the criteria established by the hospital director's own Decree, one of which was that they had completed formal and informal education in their field and had training certification in their field, K3RS itself. This was also stated by the chairman of the K3RS committee at RSU Haji Medan.

In this research, the job descriptions for each position in the K3RS committee have been included in the K3RS guidebook at Haji Medan Hospital and the job descriptions are clear and the perception is easy to understand, for example providing positions in accordance with expected standards, the relationship between duties and responsibilities is real described separately and clearly known and shows the relationship between officials and other people and outside the organization, the standards of authority and achievements that must be achieved, have met the requirements within the organization. In this research it can be seen that everyone is well aware of the job descriptions that must be carried out for each position that has been entrusted and all those selected to be responsible have received K3RS training and socialization.

Based on research, all staff have gained knowledge about K3RS, and regular training and counseling has been carried out, especially for K3RS staff themselves, training is carried out every two years in order to renew the relevant certificates. All informants knew about all the programs carried out by K3RS, however, during an in-depth interview with the K3RS chairman himself, it was discovered that the reporting was not going well. The problem is that each room tends to cover up incidents of work negligence that occur. As a result, the reported data cannot be used as the spearhead for the success of the K3RS program at the Medan Haji Hospital.

Process in The Occupational Safety and Health Management System

Based on the results of researchers in in-depth interviews by the K3RS committee, hospital workers have received work safety training/counseling, but K3RS training is still lacking/does not cover all workers at the Haji Medan RSU and the criteria for K3RS staff at the Medan Haji RSU
have not yet been achieved according to Minister of Health regulations. Republic of Indonesia Number 66 of 2016 concerning Hospital Occupational Health and Safety. Minister of Manpower Regulation No.05: As of 05/May/1996 explains that training is an important tool in ensuring work competency needed to achieve occupational health and safety goals, this is in line with Sulfanah's research stating that the training dimension received a score of 74%, namely implementation of effective training in an K3 culture where the presentation of material is in accordance with the worker's job specialization. The assumption that workers in hospitals are considered to know and be able to maintain their health and protect themselves and are deemed to find it easier to consult a doctor and obtain treatment facilities informally, makes the implementation of occupational safety and health in hospitals seem to be sidelined. Considering the large exposure in hospitals, hospitals as unique and complex workplaces really need to implement emergency response management to provide protection to employees and patients.

Based on the results of interviews with researchers, the human resources in the sanitation and B3 waste section are adequate and the work can be handled well, where they have 7 workers whose average education is high school. The management of medical waste and other B3 materials has referred to Ministerial Decree Number 1204/MENKES/SK/X/2004 concerning Hospital Environmental Health requirements. Where solid waste is divided into several parts, including infectious, syringe, and non-infectious and B3 waste is coated in yellow plastic with the logo writing infectious waste. Due to the location of the Medan Haji Hospital in the midst of the city and other communities, solid medical waste is also incinerated by a third party using an incinerator.

Output and Outcomes on The Occupational Health and Safety Management System

Based on the informant's statement, the collection, management of data documentation and reporting of K3 activities at RSU Haji Medan is not yet in accordance with it. It is hoped that the sanitation and B3 waste team will be more solid so that they can work together to reduce the number of work accidents in the sanitation and B3 waste section, and for K3RS so that Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016. Recording and reporting of K3 activities at RSU Haji Medan is not carried out repeatedly every time because each room does not routinely provide reports on the number of work accident incidents and each room unit tends to hide these incidents, only a few rooms provide the remaining reporting was not carried out. Therefore, it is difficult for the K3RS team to make evaluations because each hospital work unit does not routinely and periodically provide reports to the K3RS team.

From the results of research conducted by researchers, it was found that the K3RS team was not satisfied with the results of the programs carried out so far, because there were many programs that were not running, one example was the recording and reporting of work accident numbers in each unit, even though in the past year the numbers The incidence of work accidents is minimal. If the K3RS at RSU Haji Medan runs well and is close to perfect, the number of work accidents or work risks or infections will be much smaller because the K3RS unit at RSU Haji Medan works together with sanitation and also PPI in handling risks and infectious incidents. There is great hope that in the future the K3RS program will become the main program at this hospital after the service program, because the service will be carried out well if the K3RS is close to perfect.

CONCLUSION

The K3RS team at Medan Haji Hospital is a K3RS organization, and the hospital director chooses the chairman of the K3RS committee directly, according to the necessary conditions and requirements. Job descriptions and job descriptions have been known and prepared clearly and have been included in the K3RS manual book at Haji Medan Hospital, and all K3RS teams are well aware of the job descriptions that must be carried out for each position that has been secured and they have previously received K3RS training and outreach. The K3RS program has been running well, but it is not yet optimal because it is related to the lack of human resources within the K3RS team itself.

The K3RS team at RSU Haji Medan have all received training or counseling on occupational safety and health at the hospital which is carried out routinely and periodically, both
formally and non-formally. The K3RS training certificate is always renewed every two years to remember the validity period of the certificate itself. RSU Haji Medan has operational standards (SOP) that are not in compliance with Hospital Occupational Health and Safety Regulation Number 66 of 2016 of the Republic of Indonesia's Minister of Health. The reason for this is because the Haji Hospital Medan continues to abide by SOPs that are based on the Decree of the Minister of Health of the Republic of Indonesia No. 1087 of 2010 on Occupational Health and Safety Standards in Hospitals. The K3RS team has also promoted occupational health and safety through counseling, certified education/training, information dissemination and communication through leaflets, brochures, banners, information mics and outreach held in group meetings. Even though RSU Haji Medan has a clear SOP in accordance with the minister's decision, in reality the program only runs for around 50% -55% of the total.

Emergency response management at RSU Haji Medan has also been carried out in accordance with the Republic of Indonesia Minister of Health Decree No. 1087 of 2010 concerning Occupational Health and Safety Standards in Hospitals, although it is not yet fully implemented. According to the guidelines established by the automatic fire alarm system in compliance with... the hydrant is installed, is operational, and is regularly inspected Permanker No. 2 in 1982 and quite a number. Here the K3RS team also works closely with PPI to optimize everything. The management of solid and B3 waste also refers to the Decree of the Minister of Health of the Republic of Indonesia Number 1204/MENKES/SK/X/2004 concerning Hospital Environmental Health requirements. Although solid waste burning is still in collaboration with third parties because the Medan Haji Hospital does not yet have its own incinerator

The collection, management of data documentation and reporting of K3 activities at RSU Haji Medan is not yet in accordance with the requirements. It is hoped that the sanitation and B3 waste will be more solid so that they can jointly reduce the number of work accidents in the sanitation and B3 waste section, and for K3RS to update the latest guidelines in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016. Recording and reporting of K3 activities at RSU Haji Medan is not carried out repeatedly every time because each room does not routinely report the number of work accident incidents and each room unit tends to hide these incidents.

The K3RS team is not satisfied with the results of the programs that have been implemented so far, because there are many programs that are not running, for example recording and reporting work accident numbers in each unit, so that the K3RS team finds it difficult to make evaluations because each hospital work unit does not routinely and periodically provide reporting to the K3RS team. The annual program review at RSU Haji Medan has not yet been carried out in accordance with the Republic of Indonesia Minister of Health Decree No. 1087 of 2010, where the hospital management is in the preparation stage for the implementation of obtaining feedback and reporting from each work unit. This could be caused by the lack of commitment to work on this matter.

It is hoped that the results of this research can provide input and consideration for the hospital so that it can update or replace the guidelines for implementing K3RS activities in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016 concerning Hospital Occupational Safety and Health and carry out all activities that have been programmed properly. Increasing guidance and supervision so that health workers are willing to carry out programs in accordance with the SOPs that have been determined, providing guidance for each work unit to record and report work accident numbers regularly so that the K3RS team can make a good final evaluation, increasing the number of human resources available quality in the field of K3RS so that the program can run well and correctly, providing strict and written sanctions if they violate existing regulations so that both visitors and health workers can change well. Hiperkes Clinic is given the opportunity to manage its own funds and optimize employee health services specifically for MCU Berkala and Special.

It is hoped that the K3RS team at RSU Haji Medan can always provide the best performance for Haji Hospital Medan, because K3RS is the spearhead of the hospital, where if K3RS runs well then, the services at the hospital will run well. It is hoped that the results of this research can provide a reference for developing further research. Qualitative research is research
that requires broad insight to be able to obtain in-depth studies. For this reason, it is recommended that other researchers increase the number of references related to the object of analysis in order to achieve research depth. Future researchers can look for references to more previous research. Future researchers are also expected to be able to conduct research in different places, both socially, culturally, geographically and others.

REFERENCES


