

A Study on Occupational Health and Safety of Employees at Hospital's

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Abstract—Occupational Health and Safety (OHS) is an important aspect of hospital management, as it helps maintain a safe and healthy workplace for employees while supporting the delivery of quality patient care. This study, titled “A Study on Occupational Health and Safety of Employees in Hospitals, in Kalaburagi” examines the occupational health and safety practices followed in hospitals and assesses employees’ awareness, perceptions, and satisfaction regarding workplace safety measures.

The study uses a descriptive research design and incorporates both primary and secondary data. Primary data were gathered from employees working in several hospitals in Kalaburagi through a structured questionnaire. Secondary information was obtained from hospital records, official documents, books, and relevant online sources. The study covers major areas of occupational safety, including Personal Protective Equipment (PPE) usage, infection prevention, emergency preparedness, safety training, accident reporting, and employee well-being.

The findings indicate that hospitals have established effective occupational health and safety practices, with most employees expressing positive views regarding the availability of safety measures and management support. The study concludes that continuous safety training, regular monitoring, and active employee participation are important for further improving workplace safety and supporting employee health, productivity, and overall organizational performance.

Index Terms—Occupational Health and Safety, Healthcare Workers, Workplace Hazards, Personal Protective Equipment, Infection Control, Safety Training, Employee Well-being.

I. INTRODUCTION OF THE STUDY

Occupational Health and Safety (OHS) is an important part of effective hospital management and employee welfare. It focuses on protecting employees from workplace risks and creating a safe environment that supports their physical and mental well-being. In hospitals, employees may face various hazards such as infections, chemical exposure, needle-stick injuries, physical strain, workplace accidents, and occupational stress.

Effective safety practices such as the proper use of Personal Protective Equipment (PPE), infection control, safety training, emergency preparedness, and accident reporting help reduce these risks. Management support and employee awareness are also important for maintaining a safe and healthy workplace.

The present study, titled “A Study on Occupational Health and Safety of Employees in Hospitals,” examines existing safety practices, employees’ awareness of workplace hazards, and their perceptions of the safety measures provided by the hospital. The study also identifies areas that require improvement and provides suggestions for strengthening occupational health and safety practices. The study aims to contribute to a safer work environment and improve the overall well-being and effectiveness of hospital employees.

II. TYPES OF OCCUPATIONAL HAZARDS

Hospital employees are exposed to various hazards, including biological, chemical, physical, ergonomic,

and psychosocial hazards, which may affect their health and work performance.

1. **Occupational Health and Safety (OHS):** Occupational Health and Safety refers to the policies and practices adopted to protect employees from workplace hazards and ensure their physical and mental well-being.
2. **Workplace Hazards:** These are potential sources of harm in hospitals, including biological, chemical, physical, ergonomic, and psychosocial hazards.
3. **Personal Protective Equipment (PPE):** PPE includes gloves, masks, gowns, face shields, and other protective gear used to minimize exposure to workplace risks.
4. **Infection Prevention and Control:** This involves measures such as hand hygiene, sterilization, isolation procedures, and waste management to prevent the spread of infections.
5. **Occupational Diseases and Injuries:** These are illnesses and injuries that occur due to workplace exposure, such as needle-stick injuries, musculoskeletal disorders, and infectious diseases.
6. **Safety Training and Awareness:** Training programs educate employees about safe work practices, emergency procedures, and the proper use of safety equipment.
7. **Emergency Preparedness:** This includes hospital readiness for emergencies such as fire outbreaks, medical emergencies, disasters, and evacuation procedures.
8. **Risk Assessment and Hazard Management:** The process of identifying workplace risks, evaluating their impact, and implementing measures to control or eliminate them.
9. **Employee Health and Well-being:** Focuses on maintaining the physical, mental, and emotional health of employees through wellness initiatives and occupational health services.
10. **Stress Management:** Addresses work-related stress, burnout, and fatigue through counselling, workload management, and employee support programs.
11. **Occupational Health Policies and Legal Compliance:** Covers hospital safety policies and compliance with occupational health and safety laws, regulations, and standards.
12. **Incident Reporting and Accident Prevention:** Involves reporting workplace accidents, investigating

their causes, and implementing preventive measures to reduce future incidents.

III. LITERATURE REVIEW

1. Rai et al. (2021): This study reviewed occupational hazards among healthcare workers in low- and middle-income countries, highlighting biological, chemical, physical, ergonomic, and psychosocial risks. It emphasized the need for effective safety measures to protect healthcare workers.
2. Agrawal et al. (2022): This study examined needle-stick injuries among healthcare workers in a tertiary care hospital. It highlighted the importance of proper training, use of gloves, universal precautions, and preventive measures to reduce occupational injuries.
3. Debelu et al. (2023): This systematic review examined occupational injuries among healthcare workers in developing countries. The study found that inadequate training, lack of awareness, work stress, and insufficient safety measures increased workplace injury risks.
4. Finn et al. (2024): This systematic review examined interventions for improving safety culture among healthcare workers in hospitals. It highlighted the importance of leadership, teamwork, employee participation, and organizational support in improving workplace safety.
5. Lyakurwa et al. (2024): This study reviewed occupational hazards among healthcare workers and identified biological, physical, chemical, ergonomic, and psychosocial hazards. It emphasized the need for adequate resources and stronger occupational health and safety practices.
6. Yilma et al. (2024): This systematic review examined standard precaution practices among healthcare workers in low- and middle-income countries. It emphasized the importance of PPE, hand hygiene, sharps safety, waste management, and continuous infection-control practices for protecting healthcare workers.

IV. NEED OF THE STUDY

1. To understand the significance of occupational health and safety in safeguarding hospital employees from work-related risks.
2. To examine the need for effective safety measures in hospitals, where employees may be exposed to biological, chemical, physical, ergonomic, and psychosocial hazards.
3. To emphasize the importance of preventive measures in minimizing workplace accidents, injuries, and occupational health problems.
4. To understand how effective occupational health and safety practices can contribute to employee well-being, work efficiency, and the uninterrupted delivery of healthcare services.

V. PROBLEM STATEMENT

Hospitals are high-risk workplaces where employees are exposed to various occupational hazards, including infectious diseases, needle-stick injuries, hazardous chemicals, ergonomic strain, workplace stress, and other safety risks. Despite the implementation of occupational health and safety policies, gaps may still exist in employee awareness, compliance with safety procedures, availability of protective equipment, and effectiveness of safety training programs. These issues can lead to workplace accidents, occupational illnesses, reduced employee morale, absenteeism, and a decline in the quality of healthcare services.

The study seeks to examine the existing occupational health and safety practices in hospitals, identify the challenges faced by employees in maintaining workplace safety, and evaluate the effectiveness of current safety measures. The findings will help in identifying areas for improvement and provide recommendations to strengthen occupational health and safety practices, thereby ensuring a safer and healthier working environment for hospital employees.

VI. OBJECTIVES OF THE STUDY

1. To determine whether hospital employees receive sufficient training on workplace safety practices.

2. To examine the extent to which employees use Personal Protective Equipment (PPE) while carrying out their work.
3. To determine employees' level of awareness of the infection control practices implemented in the hospital.
4. To examine employees' views on the effectiveness of hospital procedures in preventing needle-stick injuries.

VII. SCOPE OF THE STUDY

1. The study focuses on the occupational health and safety conditions of employees working in the selected hospitals in Kalaburagi.
2. It covers employees from various functional areas, such as doctors, nurses, medical personnel, administrative staff, and support staff.
3. The study covers key safety aspects, including PPE usage, infection control, employee health check-ups, equipment safety, emergency preparedness, and prevention of workplace injuries.

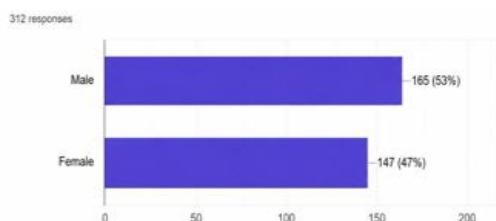
VIII. RESEARCH DESIGN

The study is based on a descriptive research design, which was used to describe and analyze employees' perceptions of occupational health and safety practices in hospitals. This design helped in assessing existing safety measures, identifying workplace hazards, and evaluating employees' awareness regarding occupational health and safety. The population of the study consists of employees working in hospitals in Kalaburagi. Convenience sampling was used as the sampling technique, and the sample consisted of 312 hospital employees, including doctors, nurses, medical personnel, administrative staff, support staff, and other employees, which included demographic details and statements related to occupational health and safety practices. Secondary data were collected from books and textbooks, research journals and published articles, government reports and occupational safety guidelines, hospital policies and official documents, and reliable websites and online databases. The statistical tools used for data analysis were frequency distribution, percentage analysis, tables, and bar charts.

IX. RESULTS AND DISCUSSION

1. Gender

Gender	Frequency	Percentage
Male	165	53%
Female	147	47%
Total	312	100%

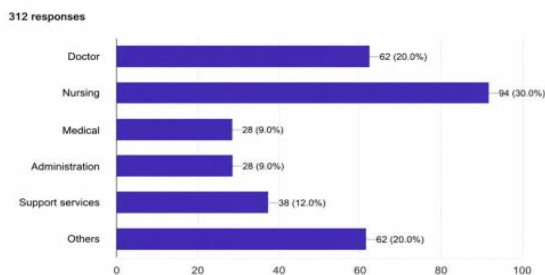


Interpretation:

The findings show that 53% (165) of the respondents are male, while 47% (147) are female. This indicates that the survey includes a nearly balanced representation of both genders, with a slightly higher participation from male employees, providing diverse perspectives in the study.

2. Department

Department	Frequency	Percentage
Doctor	62	20%
Nursing	94	30%
Medical	28	9%
Administration	28	9%
Support Services	37	12%
Others	63	20%
Total	312	100%

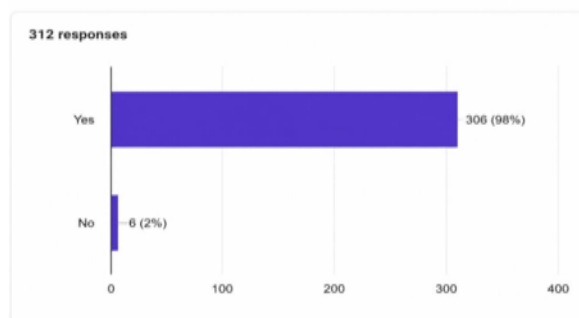


Interpretation:

The findings show that 30% (94) of the respondents belong to the Nursing department, followed by Doctors (20%, 62) and Others (20%, 63). Support Services account for 12% (37), while Medical and Administration each represent 9% (28) of the respondents. Overall, the survey includes employees from a wide range of departments, ensuring a balanced representation of hospital staff.

3. Does the hospital provide adequate safety training?

Response	Frequency	Percentage (%)
Yes	306	98%
No	6	2%
Total	312	100%

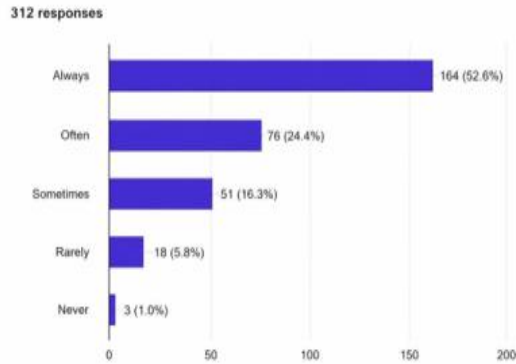


Interpretation:

The results reveal that 98% (306) of the respondents answered Yes, while only 2% (6) answered No. This indicates an overwhelming positive response, suggesting that nearly all employees agree with or acknowledge the aspect being assessed, reflecting a very high level of acceptance, awareness, or compliance within the hospital.

4. I regularly use PPE while performing my duties

Response	Frequency	Percentage (%)
Always	164	52.6%
Often	76	24.4%
Sometimes	51	16.3%
Rarely	18	5.8%
Never	3	1.0%
Total	312	100%

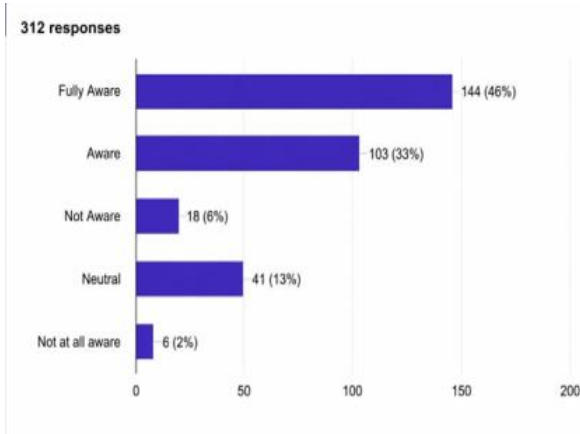


Interpretation:

The results indicate that 52.6% (164) of the respondents selected Always, while 24.4% (76) selected Often. A smaller proportion responded Sometimes 16.3%, (51), Rarely 5.8%, (18) and Never 1.0% (3). Overall, the findings suggest that the majority of employees have a highly positive perception of the aspect being assessed, indicating strong implementation and consistent practice within the hospital.

5. I am aware of infection control procedures followed in the hospital

Response	Frequency	Percentage (%)
Fully Aware	144	46%
Aware	103	33%
Neutral	41	13%
Not Aware	18	6%
Not at all Aware	6	2%
Total	312	100%

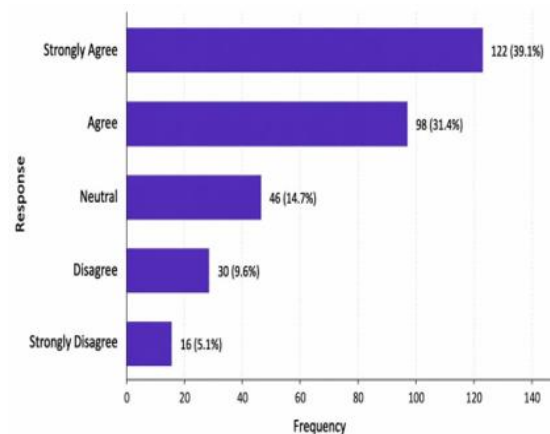


Interpretation:

The findings show that 46% (144) of the respondents are fully aware, while 33% 103 are aware of the subject. A smaller proportion of respondents are neutral 13%, (41,) not aware 6% (18), and not at all aware 2% (6). Overall, the results indicate that the majority of employees have a good level of awareness, suggesting that awareness initiatives and communication within the hospital are effective.

6. Do you feel that the hospital's procedures effectively minimize the risk of needle-stick injuries?

Response	Frequency	Percentage (%)
Strongly Agree	122	39.1%
Agree	98	31.4%
Neutral	46	14.7%
Disagree	30	9.6%
Strongly Disagree	16	5.1%
Total	312	100%



Interpretation

The table shows that 39.1% (122) of the respondents strongly agreed and 31.4% (98) agreed that the hospital's procedures effectively minimize the risk of needle-stick injuries. However, 14.7% (46) remained neutral, while 9.6% (30) disagreed and 5.1% (16) strongly disagreed, indicating that although most employees perceive the procedures as effective, further improvements may enhance confidence in needle-stick injury prevention.

X. FINDINGS

1. Male employees represented 53% (165) of the respondents, while female employees accounted for 47% (147), showing a relatively balanced gender representation.
2. The Nursing department recorded the highest participation at 30%, followed by Doctors and Others at 20% each, providing representation from various sections of the hospital.
3. Nearly all respondents (98%) indicated that the hospital provides adequate safety training, reflecting a strong focus on employee safety and awareness.
4. More than half of the employees (52.6%) reported that they always use PPE, while (24.4%) stated that they use it often, indicating a high level of compliance with protective practices.
5. Approximately (79%) of employees stated that they were fully aware (46%) or aware (33%) of the infection control procedures implemented in the hospital.
6. A majority of respondents (70.5%) either agreed or strongly agreed that the hospital's procedures are effective in reducing the risk of needle-stick injuries.

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