

A STUDY ON THE AWARENESS REGARDING OCCUPATIONAL HAZARDS AMONG THE HOUSEKEEPING STAFF WITH SPECIAL REFERENCE TO K.R HOSPITAL, MYSURU

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Abstract This study was conducted to know about the level of awareness about occupational hazards among the housekeeping staff in KR Hospital, Mysuru. The study tried to understand the level of awareness of the housekeeping staff about various occupational hazards that they are likely to face during their working hours, their knowledge about the safety measures which they are supposed to follow, and their ability to identify potential hazards at their workplace. The review of the existing literatures related to this topic was conducted by the researcher and study objectives were formed. The study was conducted using descriptive method, and convenient sampling method was used to collect the data from the sample. 50 respondents were considered for this study and a pre structured interview schedule was developed as a data collection tool. Both quantitative and qualitative data was collected from the respondents and analyzed using simple percentage method, mean, and average.

Key Words: Awareness, Occupational Hazards, Health, K.R Hospital

INTRODUCTION

In the global perspective health care workforce constitute almost 12% of the total working population around the world, making it one of the largest workforces. In the Indian context, according to the National Health Profile (2011), India has a health care workforce of over 4.3 million serving to a population of 1.2 million.* the health care workforce include a variety of professionals ranging from doctors, surgeons, nurses, laboratory scientists, patient attendants and the cleaners or the housekeeping staff. The provision of healthcare services requires the interplay of all these professionals. Major shares of India's health care workers belong to the public sector. The large number of patients and very limited personnel at their service leads to a great amount of stress and also paves way to many occupational hazards among the health care workers. Health care workers may be exposed to various kinds of occupational hazards including biological, physical, radiological, safety and ergonomic and psychosocial hazards. Many studies conducted around the world had shown the heightened risk of exposure of health care workers to various kinds of occupational hazards. In a hospital setting maintaining a clean and germ free environment becomes imperative and this very important task is done by the hospital cleaning staff also called as the housekeepers or janitors. The cleaning jobs in hospitals require the housekeeping staff to be in constant contact with various kinds of disinfectants, cleaning agents, sterilizing agents, various other chemical combinations used for cleaning. The constant exposure to these kinds of cleaning agents can cause various kinds of health problems among the cleaning staff, ranging from skin allergies, eye irritations, to respiratory disorder such as, asthma. Furthermore, due to their nature of work the cleaning staff constantly comes into close contact with various kinds of infectious materials discarded by the patients.

These objects include needles, sharps, linens and other such objects used by the patients. Exposure to such infectious objects can easily spread deadly diseases such as HIV/AIDS, Hepatitis B and C among the housekeeping staff. HIV can be spread with needle prick, and sharp injuries caused by negligent handling of the needles and sharps whereas, Hepatitis B and C can be spread easily by coming into direct contact with the infected patient's bodily fluids and secretions. The vulnerability levels of cleaning staff to such biological hazards at the work place can be related with the lack of proper knowledge and awareness among them. Reasons of which can be attributed to poor training and awareness, negligence, consequent fatigue due to high work stress and in compliance to the use of personal protective equipments (gloves and masks) while working.

Yamazhan et.al (2009) in their evaluative study of knowledge of hospital cleaning staff about preventive measures for Nosocomial infections found that the cleaning staff is mostly unaware of the severe fact that they can carry highly contagious viruses around, with or without getting infected. It was also noted in the same study that the work conditions of cleaning staff puts them, their lives and the lives of people around them in grave danger.

On similar speculations made by other studies, it was also noted that, health care workers including the cleaning staff often failed to have adequate knowledge about the immediate health hazards they face. They do not recognize the serious health and safety implications to occupational hazards. And owing to this reason despite receiving many trainings on biological and non biological hazards workers many a times neglect the safe work practices. (Senthil et.al .2015)

The concept of occupational health and safety

Occupational health is the promotion and maintenance of the highest degree of physical, mental, social well being of the workers in all occupations by the preventing departures from health, controlling risks and adaptation of work to people, and people to their jobs. (ILO/WHO 1950).The United Nations Universal Declaration of Human Rights, 1948 enshrines occupational safety and health as one of the human right by quoting in Article 23 that, " Everyone has the right to work, to free choice of employment, to just and favorable conditions of work.."

Key principles of occupational health and safety

Occupational health and safety is an extensive multidisciplinary field, invariably touching issues related to, medicine and other scientific fields, law, technology, economics, and concerns to specific industries. Despite variety of concern and interests certain basic principles can be identified as the following;

All workers have rights. International Labor Conference 1984, stated the following rights of the workers;

Work should take place in safe and healthy environment

Conditions of work should be consistent with workers' wellbeing and human dignity.

Work should offer real possibilities for self achievement, personal fulfillment and service to society.

Occupational health and safety policies must be established. Such policies must be implemented at both the government and enterprise levels. They must be effectively communicated to all parties concerned.

There is a need for consultation with the social partners and stakeholders. The employers and workers should be included and consulted during formulation, implementation and review of the policies.

Prevention and protection must be the aim of the occupational health and safety programmes and policies. Efforts must be focused on primary prevention at the workplace level. Work places and working environments should be planned and designed to be safe and healthy.

Information is vital for the development and the implementation of plans and policies. The collection and dissemination of information on hazards and hazardous materials, surveillance of work places, monitoring of compliance with policies and good practices, and other related activities are central to the establishment and enforcement of effective policies.

Health promotion is a central element of occupational health practice. Efforts should be made to enhance the workers physical, mental and social well being.

Occupational health service covering all the workers must be established. All the workers must have access to such service to promote workers' health and improve the working conditions.

Compensation, rehabilitation and curative services must be provided to all the workers who suffer from occupational accidents, injuries and diseases. Action must be taken to minimize the consequence of health hazards.

Education and training are the vital components of safe working environments. Workers and employers must be made aware of the importance and means of establishing safe working procedures. Trainers must be trained in area of special relevance to different industries, which have specific occupational health and safety concerns.

Workers, employers and the competent authorities have certain duties and obligations. For example, workers must follow the established safety measures, employers must provide safe work places and ensure access to first aid kits; and the competent authorities must devise, communicate and periodically review and update the occupational health and safety policies.

Policies must be enforced. A system of inspection must be in place to secure compliance with occupational health and safety and other labor legislations. (Encyclopedia of Occupational Health and Safety,1991)

Operational Definitions of the Terms

Occupational Hazard

Occupational hazard is the hazard experienced in the workplace. Occupational hazards can encompass many types of hazard including, chemical hazard, biological hazards, psychosocial hazards and physical hazards.

HIV and AIDS

Human Immune Deficiency Virus is a virus that attacks the immune system of the individual making him/her susceptible to many other infections and diseases. HIV leads to AIDS. AIDS is Acquired Immunodeficiency Syndrome, which appears in the advanced stages when the person is infected with HIV.

Hepatitis

Hepatitis is a viral liver infection which is transmitted by the blood and other bodily fluids of the infected person. Hepatitis can cause both chronic and acute disease. It is although preventable by vaccination.

Personal Protective Equipments

Personal Protective Equipments or PPE are all the equipments that will protect the individual against the health and safety risks at work. It can include items such as safety helmets, gloves, eye protection, safety footwear etc. in this study the PPE is meant to indicate the equipments such as gloves and masks that the hospital workers are supposed to use to protect them from bio hazards.

Sharp Injuries

Sharps are needles, blades, and other medical instruments that are necessary for carrying out the healthcare work and could cause an injury by cutting or pricking the skin. A sharp injury is an incident, which causes a needle, blade or other medical instruments to penetrate the skin. This is also called as percutaneous injury.

Blood Borne Pathogens

Blood borne pathogens are infectious micro organisms in human blood that can cause disease in humans. These pathogens include, but not limited to, hepatitis B, hepatitis C and HIV. Needle sticks and other sharp related injuries may expose the health workers to these blood borne pathogens.

REVIEW OF LITERATURE

Review of related literature, a significant and primary component of any research investigation enables the investigator to understand the earlier research interests, research pattern and magnitude of the research output in a field of knowledge. Following are the selected reviews of articles from the above sources. Researcher reviewed 25 articles on Occupational Hazards”

Research Methodology

Statement of the problem

The cleanliness in the hospitals has a very vital role to play. As many patients come to hospitals presenting various kinds of infectious and non infectious diseases, it becomes important to maintain clean and infection free environment in the hospitals to avoid the cross transmission of diseases from the patients to other patients and or from patients to the health care professionals and vice versa. This grave task of maintaining an infection free environment in the hospital comes to the housekeeping staff. But many a times it can be observed that the housekeeping staff delivers this duty by putting their lives at risk. While doing their daily activities they come in contact to various kinds of infectious and hazardous materials which can be potentially harmful and can cause fatal illnesses. However with proper knowledge and training about the safe work practices and occupational hazards the housekeeping staff can work in a safer environment without having to sabotage their lives and the lives of many others.

Aim of the study

The aim of this study is to know about the awareness regarding occupational hazards among the housekeeping staff with Special Reference KR Hospital, Mysuru.

Objectives of the study

The objectives of the study are the following

1. To know the demographic profile of the housekeeping staff in the KR Hospital.
2. To find out the level of awareness regarding the occupational hazard among the housekeeping staff of K.R Hospital.
3. To study the safety measures practiced by the housekeeping staff in their work place.
4. To learn about the training process of the housekeeping staff in K.R Hospital.
5. To suggest the remedial measures for the housekeeping staff in K.R Hospital

Research design

This study uses a descriptive research design to study the awareness about occupational hazards among the housekeeping staff.

Universe and Sampling

The population that is considered in this study is the housekeeping staff of the K.R Hospital, Mysuru. The total population is 90 and for this study a sample size of 50 members was taken. Convenient sampling method was used to collect data from the respondents.

Data collection

Data was collected using convenient sampling method. A structured interview schedule was prepared. The interview schedule had questions that aimed to assess the knowledge of the respondents about occupational hazards, their awareness regarding various hazardous substances, the precautionary measures that they used, standard precautions that they follow and also about the training they received and their perception about the effectiveness of the training that they received.

Sources of data

The primary source of data collection for this study was the information collected from the representative sample population.

The study also employs a secondary source in order to collect significant information related to the field of investigation. The secondary sources of data collection were, books, journals, reports, research articles and several related literature.

Data collection instruments

The primary data was collected using the questionnaire as the main instrument.

Data collection procedures

The primary data was collected through personal interview. The researcher administered the pre structured interview schedule to the respondents groups.

Data processing

All the interview schedules were serially labeled and entered accordingly in SPSS. Before entering field editing and central editing were done. Code sheet was prepared for systematic data entry.

Data analysis and interpretation

Simple percentage method was used to present the data, tables were generated using SPSS and graphs were prepared using Microsoft Excel. Information was presented in frequencies as well as in percentages.

Major Findings

- Out of the total 50 respondents, two (4%) were males and the remaining 48 (96%) were all females. This may due to the reason that for the housekeeping work mostly female candidates were preferred.
- 48% of the respondents belonged to the age group of 36-45 years, 30% of the respondents were of 46-55 years and 22% of the respondents were falling in the age group of 25-35 years.
- Out of total 50 respondents, 50 (100%) were married and none of the respondents were unmarried or divorced.
- Out of the total 50 respondents, 33 (66%) respondents had never gone to school, 10 respondents (20%) had studied up to primary level, five respondents (10%) had studied till secondary level, two respondents (2%) had attended school till higher secondary level.
- It was found in the study that out of 50 respondents, 34 respondents (68%) had an income of Rs.4000-5000 per month, ten respondents received Rs.5000-6000 in a month, five respondents (10%) earned Rs.3000-4000, and one respondent earned Rs.2000-3000. The respondents who received Rs.4000-5000 in a month were senior employees with more than 5 years of experience.
- All 50 (100%) respondents said that they never worked overtime.
- Out of the total 50 respondents, 15 (30%) respondents reported of experiencing work stress whereas, 35 (70%) of the respondents said that they never experienced work stress.
- Out of the total 50 respondents, 32 (64%) respondents expressed that they experience several types of musculoskeletal pains including back pain, leg pains and muscle cramps regularly. 18 (36%) respondents did not experience any kind of musculoskeletal pains.
- Out of 50 respondents, 32 respondents said that they experienced musculoskeletal pains. When asked if the pain they experienced was because of their long and hectic working hours 26 respondents (52%) were of the opinion that their musculoskeletal pains were the results of their long working hours and six respondents(12%) reported that their musculoskeletal pains were not due to the long working hours.
- In the present study, out of 50, 36(72%) respondents said that they did not suffer from any kind of chronic illnesses and 14 (28%) respondents were suffering from chronic illnesses.
- Out of total 50, 36 respondents (72%) did not suffer from any chronic illnesses. Five respondents (10%) reported of suffering from gastritis, three respondents (6%) were suffering from polycystic ovarian disorder. Two respondents (6%) reported of having hyper tension, two respondents (6%) said that they suffered from heart disease, one respondent (2%) suffered from diabetes and one (2%) respondent suffered from anxiety attacks.
- Out of 50 respondents, 36 respondents (72%) did not suffer from any chronic illnesses. Among the 14 respondents who suffered from chronic illnesses, 9 respondents (18%) suffered from chronic illness for 12 months and above. 4 respondents (8%) were suffering from chronic illnesses from over a period of 1-6 months and one respondent(2%) reported having chronic illnesses from 6-12 months.

- Out of a total of 50 respondents 36 respondents (72%) did not suffer from any chronic illness. 10 respondents (20%) were not aware if their chronic illness is caused due their work. This can be understood by the low literacy levels among the respondents. Only 4 (8%) of the respondents felt that the chronic illness they suffered from was due their work conditions. These 8% respondents reported of having gastritis, and they felt that it was due to their untimely food habits or skipping meals due to excess work load.
- It is seen that out of a total of 50, nine respondents (18%) are aware that they have chances of acquiring cold or flu from the hospital, four respondents (8%) had information about viral fever. Six respondents (12%) said that they have chances of getting skin allergies, ten members (20%) knew about their chances of cross transmitting HIV/AIDS, seven of them (14%) knew about hepatitis. Two respondents had knowledge about their risks of acquiring tuberculosis and two respondents (4%) knew about chikengunia.
- Out of the 50 respondents, 39 (78%) respondents did not perceive any threat from hospital acquired infections whereas 11 respondents (22%) identified the threats of hospital acquired infections.
- In the present study conducted it was found out that 27 out of 50 respondents (54%) were aware that used needles can cause/ transmit diseases whereas 23 respondents (46%) were unaware that used needles can be potentially hazardous. Among the respondents who were aware of the hazardous nature of the used needles, not all of them had proper knowledge as to what kind of diseases a discarded needle can spread.
- 28 (56%) respondents were unaware of the hazardous nature of the used sharps and only 22 (44%) were aware that used sharps can be infectious. This again reflects the lack of proper training among the workers about their hazardous work environments.
- 27 (54%) respondents responded that they were aware of the hazardous nature of the patient's bodily fluids while 23 (46%) respondents did not have any knowledge about the patient secretions and its hazardous nature.
- The above table shows the number of respondents who are aware of the infectious nature of the used linens in the wards. Out of 50 respondents 28(56%) were aware that the used linens of the patients can transmit illness. 22 (44%) respondents said that they did not have information that the used linens can be infectious.
- 27 (54%) respondents had knowledge about the waste from the wards being hazardous and they handled it with proper precautions. 23 (46%) of the respondents did not have sufficient information regarding the waste that came from the wards. The respondents who lacked proper knowledge regarding the hazardous nature of the waste also admitted handling those waste with bare hands during their work hours.
- In the present study it was found that out of total 50 respondents, 33 (66%) of the respondents did not have any information regarding HIV/AIDS, while only 17(34%) had awareness about HIV/AIDS.
- Out of the total of 50 respondents 37 (74%) of the respondents did not have the knowledge about the modes of transmission of HIV/AIDS and only 13 (26%) said that they knew how HIV/AIDS is transmitted. Out of the 13 respondents who knew about HIV/AIDS only 13 of them had knowledge about the modes of transmission of the disease.
- The data from this study indicate, that out of 50 respondents, 44 (88%) respondents did not have any information about the HBV or HCV and only six (12%) of the respondents knew about the disease. These figures raised a lot of concern as HBV/ HCV highly infectious than HIV and hepatitis B/C can be easily spread.
- . Out of 50 respondents, five of respondents had knowledge about hepatitis infection. When asked about the knowledge regarding the transmission routes of the hepatitis virus 45 (90%) of the respondents out of the total 50, did not have any information regarding the modes of transmission of the hepatitis virus. Only five respondents (10%) knew how the infection is spread.
- Out of 50 respondents, 43 respondents (86%) daily used bleaching powder in their working hours and seven respondents (14%) said that they did not use bleaching powder regularly. These 14% of the respondents were semi cleaning staff and were working as patient attendants; their jobs did not require them to use the cleaning chemicals on regular basis.
- . Out of a total of 50 respondents, 45 (90%) of the respondents used phenol solutions daily in their working hours and five respondents(10%) said that they did not use phenol on regular basis. The reason was these 10% of the respondents either were semi cleaning staff / patient attendants or they had shifts were they would do the other cleaning activities which did not require the use of phenol
- Out of the total 50 respondents, it was found that 43 respondents (86%) daily used spirit solutions for disinfection purposes. Seven respondents (14%) said that they did not use spirit solution on daily basis.
- . Out of the total 50 respondents, 31 respondents (62%) said that they were aware of the abrasive chemical content in the bleaching powder due the side effects they faced while using it. 18 (36%) of the respondents said that they were not sure about the hazardous chemicals present in the bleaching powder. Even though they faced some side effects while using the bleaching powder they could never relate it with the high amount of chemical composition of the bleaching powder. One respondent (2%) out of 50 respondents said that they did not find any harmful chemicals in the bleaching powder.
- It was found out that out of total 50 respondents, 27 (54%) respondents were aware of the hazardous chemical nature of the phenol solution. 19 respondents (38%) did not know if the phenol had hazardous chemicals and four (8%) of the respondents said that they did not think that the phenol had any hazardous chemicals in it.
- The data collected from this study indicated that out of 50 respondents, 24 (48%) of the respondents were aware about the hazardous chemical nature of the spirit and 22 (44%) of the respondents did not know about the chemical present in the spirit which can be harmful. Four respondents (8%) said that they did not think that spirit solution can be hazardous due to its harsh chemical nature.
- Out of the 50 respondents studied, 36 of the respondents (72%) said to have experienced health implications from the regular use of cleaning products such as bleaching powder; phenol and disinfectants such as spirit solutions. 14 respondents (28%) did not experience any health implications with the use of cleaning products.
- The data collected points out that out of 50 respondents, 45 respondents (90%) were aware that their work requires them to follow strict safety measures at work without fail. Five of the respondents (10%) were not aware of this and they did not follow necessary safety measures while working. The respondents, who were aware of the need to follow safety measures, were educated partially about it by the nurses and the doctors during their work hours.
- 35 respondents (70%) told that they never handled used needles without proper personal protective equipments such as gloves. 15 respondents (30%) agreed that they handled discarded needles and sharps without wearing gloves.

- The data indicated that out of 50 respondents, 45 respondents (90%) reported of using gloves on regular basis and only five respondents (10%) said that they did not use gloves on regular basis. The reasons for such practice were varied ranging from unavailability of gloves, work stress to lack of knowledge and negligent attitudes. Respondents said that sometimes due to heavy workloads they do not get the time to go and change gloves every now and then in case the gloves are torn. In such cases they work without the gloves
- Out of the total 50 respondents, 43 respondents (86%) used safety masks regularly and seven respondents (14%) did not use safety masks while working. It was observed that respondents who used masks regularly were in the cleaning section because of their constant exposure to bleaching powder and other strong smelling chemical compositions used for cleaning. While the respondents who worked as the semi cleaning staff did not use masks regularly
- The data collected showed that out of the total 50 respondents, 42 respondents (84%) reported that they daily used aprons and eight respondents (16%) did not use aprons. It was also observed that all the workers had uniforms and they were not allowed to work wearing their casual outfits.
- The data collected indicated that out of a total 50 respondents, 44 (88%) respondents said that they were supplied with sufficient amount of personal protective equipments like gloves and masks. Six respondents (12%) complained of not receiving enough amounts of gloves. They pointed out that in busy wards and departments there was glove shortage.
- In the present study it was found that 49 respondents (98%), practiced hand hygiene as they were aware that while delivering their duties their hands can get contaminated. Respondents used spirit solutions to disinfect the hands after washing them with soap and water. Only one respondent (2%) did not follow hand hygiene practices, it can be related to the individual's personal hygiene practice and also their perception and ideas about cleanliness.
- In the present study it was found out that 40 respondents (80%) had received vaccinations for hepatitis and 10 respondents (20%) had not received any vaccination from the hospital. The reasons for not receiving vaccination were identified as lack of knowledge, not being present when the vaccinations were administered, and fear of vaccination.
- The data from this study indicate that out of total 50 respondents, 25 respondents (50%) claimed that they received training while 25 respondents (50%) reported that they did not receive any training. The respondents who said that they received training did not receive it in any formal or organized way; rather training for them was given in an informal manner by nurses and doctors. These respondents had some knowledge about the safety measures and risk factors but they lacked thorough and sound knowledge about their occupational hazards. This can be clearly understood by the fact that when 34% of the respondents had knowledge about HIV/AIDS only 24% did know about the modes of transmission of HIV
- The above table shows the number of respondents who perceived the training they received as effective. Out of total of 50 respondents, 25 respondents who said that they had received training, 15 (30%) of them found the training they received as effective and 10 respondents (20%) found the training ineffective
- Out of total 50 respondents, 29 respondents (58%) perceived a need for proper training before joining for work in the hospitals, whereas 21 of the respondents (42%) did not feel that their work requires any special training or orientation. 58% of the respondents who demanded training had some awareness about the hazardous nature of their work while their counterparts who did not perceive any need for training had no awareness about how their daily work routine and the tasks performed by them could prove fatally hazardous for them.
- The data found indicates that out of 50 respondents, 45 respondents (90%) were not aware of any occupational hazards they said they never received any training that told them about the occupational hazards. Only five (10%) of the respondents believed that the trainings that they received in job helped in identifying the occupational hazards they faced and gave them the necessary information to handle exposures to hazardous situations.

Conclusion:

Occupational health is the promotion and maintenance of the highest degree of physical, mental, social well being of the workers in all occupations by the preventing departures from health, controlling risks and adaptation of work to people, and people to their jobs. (ILO/WHO 1950). The United Nations Universal Declaration of Human Rights, 1948 enshrines occupational safety and health as one of the human right by quoting in Article 23 that, "Everyone has the right to work, to free choice of employment, to just and favorable conditions of work.." The study found out that the reason behind this is the lack of proper training of the housekeeping staff in the KR Hospital. The study suggests the need for proper training of the housekeeping staff about the various occupational hazards they are likely to face. It is also recommended to educate the housekeeping staff about occupational health, the importance to follow safety measures and strict monitoring could be conducted to ensure the same.

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