



# STUDY ON KNOWLEDGE AND ATTITUDE REGARDING THE OCCUPATIONAL SAFETY IN TERTIARY CARE HOSPITAL

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## ABSTRACT

**Introduction:** The vision of Occupational health and safety (OHS) is to create better, healthier and more competitive workplaces for sustainable development of health institutions. Hospitals provide a wide range of services due to which health workers are exposed to a list of potential hazards. As there are millions of health workforces it is necessary to protect this vulnerable group and promote their health. This study was done to know the awareness and attitude towards the safety programme.

**Method:** Study population includes 3 professions i.e. 10% of total doctors, nurses and attendants. Data was collected by structured questionnaire and descriptive analysis was done.

**Result:** Doctors were aware that occupational safety as employees, employers and third party welfare while nurses and attendants define it as just employees and employers welfare. 68.5% of attendants, 83.3% of doctors and 94.4% of nurses have a favourable attitude towards protective devices. Very few nurses and attendants were aware of infection control committee in the hospital. Less than one third of doctors, 25.9% of nurses and 18.5% of attendants have suffered with injury in the hospital of which 91% have reported it. They believe that mostly the accidents were due to lack of safety equipments or lack of training.

**Conclusion:** Awareness regarding occupational health and safety was poor among the hospital staff.

**Key Words:** Occupational safety, Health, Doctors, Nurses, Attendants

## INTRODUCTION

Every person indulged in any type of occupation is exposed to some or other risk which if not taken care of at an early stage will further mount to disease. [1] Workplace-related health impairments, injuries and illnesses cause great human suffering and incur high costs, both for those affected and for society as a whole. The vision of Occupational health and safety (OHS) is to create a better, healthier and more competitive workplaces where managers and workers discuss work processes together in a continuous improvement process including all related risks and possible measures for improvements. Optimal occupational safety results from a continuous proactive process of anticipating, identifying, designing, implementing, and evaluating risk-reduction practices. [2]

Hospitals play an integral role in health care for inpatients, nosocomial infection control, evacuation plans for emergencies and natural disaster, and maintenance in the hospital kitchen, also concerned with environment

protection through their waste (contaminated) management strategy. As a result the list of potential hazards includes radiation, toxic chemicals, biological, heat, noise, dusts and psychological (stress). Along with health care workers, community also directly or indirectly are at substantial risk of these hazards. Thus Occupational Health and Safety issues relating to the personal safety and protection of its workers are a very important.

According to World Health Organisation estimates, there are 59.8 million HCWs worldwide. About two-thirds of them (39.5 million) provide health services; the other one-third (19.8 million) are management and support workers, which includes those working in ancillary Departments such as Laundry, Dietary, Central store and Supply division (CSSD), Laboratory, Mortuary, Ambulance Services and Administrative Departments. [3]. In India as per estimates there were 2.17 million health workforces in 2005. [4] It is very essential to protect this vulnerable group and promote their health by educating

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employers, employees and the community on occupational health and safety (OHS).

The first step to protect health workers and community is to improve their practice at workplace. Hence this study was planned to assess or to study their knowledge and attitude towards occupational safety.

## METHOD

A hospital based cross-sectional Study was conducted in Acharya Vinobha Bhawe Rural Hospital (A.V.B.R.H.) a 950 bedded rural tertiary hospital of Datta Meghe Institute of Medical Sciences (DMIMS) during February to April 2014. A list of working staff was procured from health resource department. 10% of total number of doctors, nurses and attendants (at least 1% from each department) working in AVBRH were randomly selected. Data was collected in a predesigned structured questionnaire. Data analysis was done using Spreadsheet.

## RESULTS

Total 151 health personnel (41 doctors, 56 nurses, 54 attendants) were recruited in study. About 80 % of nurses were female while 46 % and 42 % were female doctors and attendants as given in Table 1. Barring Doctors (69%) more than half of nurses and attendants had experience of more than 5 years. (fig1). 80 % and 76 % of doctors and nurses were working in surgical/maternity/medical/paediatrics ward while attendants were widely distributed in other support department too like laundry, kitchen, administration etc. (Fig 2) 47.6% of doctors understand occupational safety as employees, employers and third parties welfare while other health personnel consider it to be for their and employers safety only. (Fig 3). Proper disposal of waste and protective clothing were only considered as safety measures by most of health personnel. Very few attendants were aware of training, monitoring, reporting of accidents as depicted in Table 2. 68.5% of attendants, 83.3% of doctors and 94.4% of nurses felt that protective clothing is necessary as given in fig 4. It is given in fig 5 that 18.5%, 26 % and 31 % of attendants, nurses and doctors reported injury / infection in hospital and more than 90 % of them reported it to Infection control committee (ICC). Fig 6 depicts, Lack of training and safety equipment to be the main cause of injury according to health personnel. . More than half of nurses and attendants and 26 % of doctors not aware of existence of ICC in hospital (fig7).

## DISCUSSION

The present study was conducted on various categories of hospital staff to know their outlook towards the occupational health and safety measures. The representa-

tive from each department of hospital was included in study population. OSH benefits the employee by promoting the improvement of the working environment in order to give greater protection to the health and safety of workers. The employee is benefitted by having the low staff turnover rate, absenteeism and good reputation in society. While the community is benefitted by Promoting public health,. Increasing commitment to quality assurance. Most of the staffs consider it to be only limited to employee and employers while very few were aware of third party welfare.

All the safety measures are equally important but only half of the health workers (nurse and attendants) perceive proper disposal of waste and protective clothing as safety precaution while other were considered as safety measures by only 5 % - 27 %. Doctors were better aware of safety measures than others. Only 68 % of attendants consider the necessity of protective equipments, though they are most exposed to risk. Almost all of those injured or infected informed the infection control committee and started the prophylaxis or treatment. Trainings of OHS in hospitals are mostly organized for nurses or doctors. Safety equipments are inadequate in quantity. The OHS is not implemented, monitored and supervised properly.

More than half of nurses and attendants were unaware of Infection Control Committee. The pre placement and refreshers training is not organized frequently, at definite time. Employers, including the government, are required to provide information for employees to ensure that current legislative requirements are known, and that relevant, up-to-date information is given regarding all identified hazards and their control. [5,6] Staff members need to be aware of policies and procedures for appropriate management of exposures. ICC manual and protocol should be displayed and known to working staff.

## CONCLUSION

Awareness regarding occupational health and safety is poor among the hospital staff and as a result there is no felt need for proper implementation of OHS and ICC. . Nurses, doctors and attendants feel that by organising safety training as part of orientation on first employment and by using protective clothing we can certainly improve the infection control in the hospital.

Recommendations: Pre placement training and refreshers training for all the hospital staffs including the attendants has to be organised at regular interval.

The OHS should be properly implemented, monitored and supervised in accordance with relevant national and international laws and regulations to eliminate or minimize the risk at work and their safety and health is protected.

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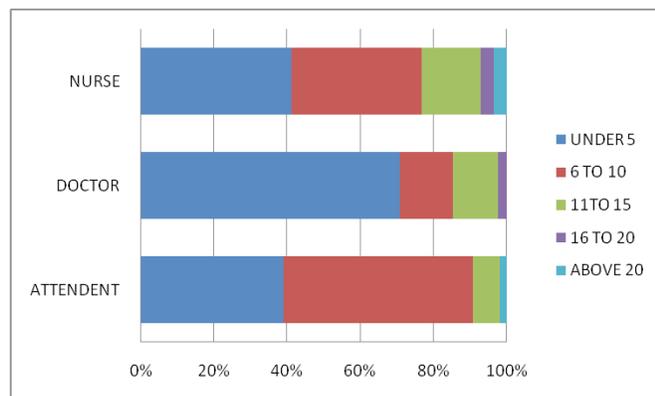
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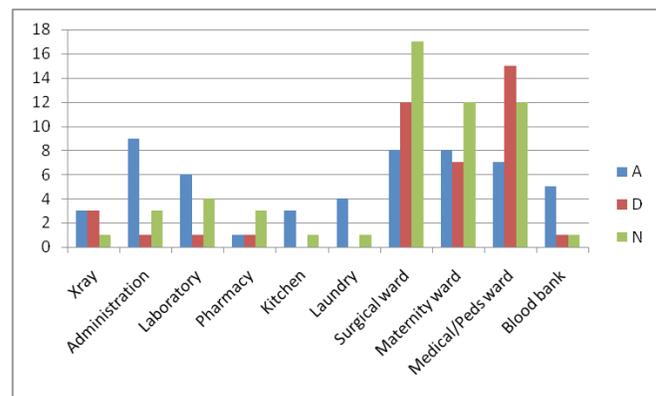
**Observations**

**Table 1: Distribution of study population**

	MALE	%	FEMALE	%	TOTAL
DOCTOR	22	53.65854	19	46.34146	41
NURSE	11	19.64286	45	80.35714	56
ATTENDENT	31	57.40741	23	42.59259	54
TOTAL	64	42.38411	87	57.61589	151



**Figure 1:** Duration of work experience in years.



**Figure 2:** Department wise distribution of study population.

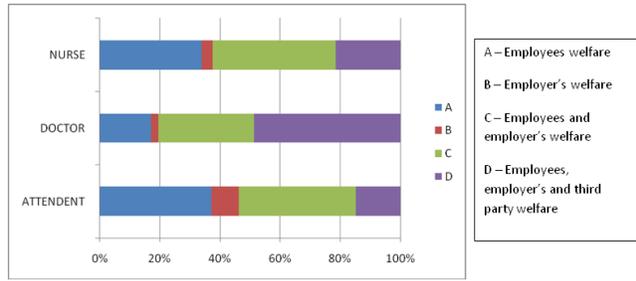


Figure 3: Attitude towards Benefits of occupational safety.

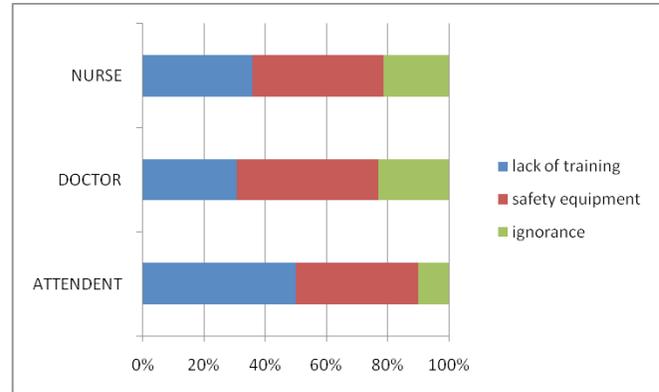


Figure 6: Cause of injury/infection wise distribution of study population.

Table 2: Safety measures (MR)

	DOCTOR	NURSE	ATTENDANT	TOTAL
A	11 (26.8%)	19 (33.9%)	9 (16.7 %)	39 (25.8%)
B	36 (87.8%)	32 (57.1%)	28 (51.8%)	96 (63.5 %)
C	23 (56.1%)	15 (26.8%)	6 (11.11%)	44 (29.1%)
D	32 (78%)	35 (62.5 %)	27 (50 %)	94 (62.25%)
E	11 (26.8%)	10 (17.8%)	3 (5.5%)	24 (15.9 %)

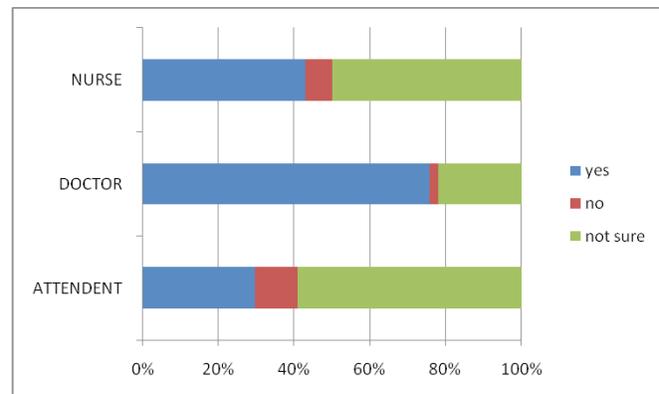


Figure 7: Awareness of Existence of infection control committee in hospital.

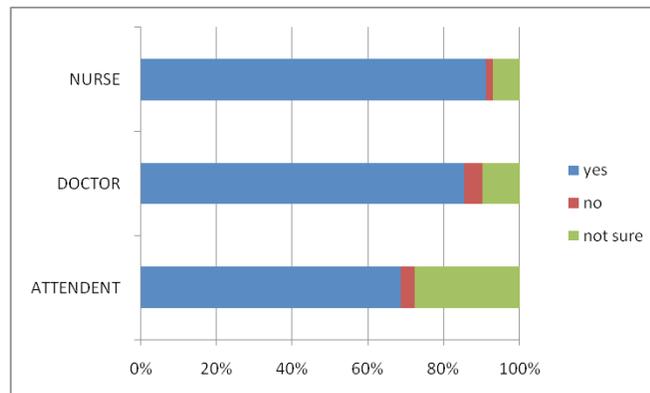


Figure 4: Necessity of protective clothing in safety wise distribution of study population.

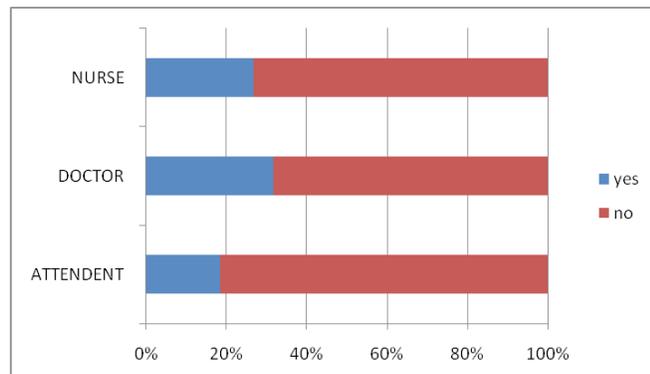


Figure 5: Suffered from any injury in hospital in past three months.