

**A STUDY ON THE HOSPITAL ACQUIRED INFECTION AMONG HEALTH CARE PROFESSIONALS AND ITS PREVENTION****Dr. Abid Ashraf Sheikh<sup>1\*</sup>, Dr. P. Karkuzhali<sup>2</sup>**<sup>1</sup>Postgraduate, Department of Pathology, SBMCH, Chrompet, Chennai.<sup>2</sup>Professor & HOD, Department of Pathology, SBMCH, Chrompet, Chennai.**\*Corresponding Author: Dr. Abid Ashraf Sheikh**

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**ABSTRACT****Aim:** Assessment of various risk factors among health care professionals at a Tertiary health care professionals.**Introduction:** This survey assessed knowledge, compliance and the attitude regarding standard precautions about hospital acquired infections (HAIs) and the associated determinants among different categories of healthcare professionals. **Methods and materials:** Questionnaire was prepared and distributed among various categories of health care professionals. It included a total of seven questions that mainly emphasized on the most common causes of exposures, hand hygiene, use of PPE etc. **Results:** Out of a total of 100 participants, 70% of them have experienced an accidental exposure in their work period that proves that the complications arising due to the work practices among the HCW's still is increasing at an alarming rates. **Conclusion:** The results have emphasized the need for adopting and following all the preventive recommendations by all health care professionals and also there is a need to update the health care related policies as per the requirements.**KEYWORDS:** Nosocomial infections, HIA, PPE, health care professionals.**INTRODUCTION**

Health care workers are always at a potential risk of exposure to infectious agents while performing their duties and most of the infections can be prevented by taking care of all the preventive measures.<sup>[1]</sup> Health care workers include all those dealing with the patients as well as the biomedical equipments and pharmaceuticals within and outside the hospital premises.<sup>[1,2]</sup>

**MATERIALS AND METHODS**

A study was conducted among healthcare professionals including doctors, nurses and lab technicians through a questionnaire and the results were analyzed.

**RESULTS**

Among a total of 100 participants, doctors were 45, nurses 30 and lab technicians 25. More than 70 participants had experienced the accidental exposure while working, and reported direct contact with the patients or specimens as the most common cause of exposure. About 40% of participants reported inadequate hand hygiene as the important cause of exposure. 37% of participants had not taken any training in occupational infection prevention measures. 65% of the participants reported practicing hand washing technique strictly after contact with the patient or the specimen. 77%

participants practiced proper disposal of biomedical wastes. 95% are vaccinated against Hepatitis B. 96% reported wearing apron while on duty. 79% wore gloves, 62% wore masks and none wore goggles while on duty.

**Table: Formulated table showing statistical analysis among health care professionals on the basis of survey done using a questionnaire.**

| No. of total participants | Reported Exposure | Cause exposure of                         | Training                         | Hand hygiene practice             | Timely vaccination | Use of PPE      | BMW management              |
|---------------------------|-------------------|---|----------------------------------|-----------------------------------|--------------------|-----------------|-----------------------------|
| 100                       | 70                | 40% inadequate hand wash facility         | 63% received training            | 65% practiced strict hand washing | 95% vaccinated     | 96% used aprons | 77% did it strictly         |
|                           |                   | 30% lack of personal protective equipment | 37% did not receive any training | 35% did it most of the time       | 5% not vaccinated  | 79% used gloves | 23% did it most of the time |
|                           |                   | 30% overcrowded work place                |                                  |                                   |                    | 62% used masks  |                             |

## DISCUSSION

Complications associated with health care infections have been well documented and continues at an alarming rate, carrying high morbidity and mortality.<sup>[3,4,5]</sup> Most of the pathogens are resistant strains, thereby, making it very difficult to treat, adding to the misery of the victim. Such escalation in incidence rate can be influenced by factors such as inadequate staff, patient ratio, unavailability of resources, poor mandatory vaccination of health care workers, increased exposure due to increased working hours or poor ventilation of the work place, poor biomedical waste management and lack of trained personnels.<sup>[3,4]</sup>

Exposure to various infections like Hepatitis B can have grave consequences carrying significantly high mortality and morbidity. Blood and body fluid transmitted infections due to needle stick injuries, cuts and splashes are among the commonly encountered modes of infection.<sup>[5]</sup>

## CONCLUSION

All these infections can be prevented by timely vaccination. Interventions should be instituted to mitigate the hazards. Specifically inadequate PPE supply, job related pressures, and non-compliance in adhering to mitigation measures should be addressed.

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