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# THE KNOWLEDGE, ATTITUDE, AND PRACTICES STUDY OF GENERAL SURGEONS AND MEDICAL STUDENTS OF MEDICAL COLLEGES OF NORTH INDIA

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#### **ABSTRACT**

There are so many chances to be infected by the hospital infections, during the operation procedure. During the operation procedure the surgeons, medical students and patients are on risk. So it's a need for the health workers including all the doctors, medical student, nursing staff, patient etc. all should be aware about the infections caused in hospital by different means. Here in this study we performed knowledge, attitude and practices study for the standard precautions on the general surgeons and the medical students participating in surgery.

**KEYWORDS:** Knowledge, Attitude, Practices, KAP, Infections, Standard precautions.

### **INTRODUCTION**

Hospitals are the main points for the infections and the workers of hospitals are the main target including from ward boy to the doctors. Infections from the medical waste to the Operation theatre are known as the Hospital infections.<sup>[1]</sup> These Hospital infections are due to the spreading of microorganisms, through personal hands, equipment, patient's blood, body fluid, secretions, and/or used solutions. The operation theatre is the most sanitized place of a hospital but it is the most infectious place also for surgeon as well as the medical students. Physicians and medical students are at risk of hospital-acquired viral infections and exposure to a broad range of viral pathogens, including hepatitis B virus (HBV), hepatitis\*C virus

(HCV), and human immunodeficiency virus (HIV), through percutaneous injury (e.g., needle stick and cut with a sharp object), contact of mucous membrane or non-intact skin with blood, tissue, or other potentially infectious body fluids.<sup>[2]</sup>

With reference to these exposures, the United States Centers for Disease Control and Prevention (CDC) proposed a series of procedures for preventing occupational exposures, reducing the risk of transmission of blood-borne pathogens, and handling potentially infectious materials such as blood and body fluids. These procedures are known as standard precautions. These precautions say that both the medical staff and patients are on the risk of infections by the patient blood, body fluid, secretions, and excrement especially in operation theatre with regular personal hygiene, hand washing, performing sterilization, and the safe removal of sharp instruments, handling and disposal material including needles, gloves etc. The HBV, HCV, and HIV infections are considered as a serious health problem worldwide. Many studies reports that these precautions may be helpful in protecting both surgeons, medical students as well as the patient participating in the surgery.<sup>[3]</sup>

Many studies have demonstrated that knowledge, attitude, and practice (KAP) of general surgeons and medical students regarding the risk factors related to surgery, use of preventative measures, and agreement with standard precautions, routes of spreading of HBV and HCV are insufficient and unsatisfactory. Consequently, the field of standard precautions has attracted increasing attention from all medical workers, and research programs are currently being performed on standard precautions regulations in many countries.<sup>[4]</sup> Therefore, the objectives of this study were to assess the rate of KAP of general surgeons and medical students of Medical colleges of North India.

#### MATERIALS AND METHODS

This was a cross-sectional research based on a survey on 100 health workers (20 general surgeons and 80 medical students) in 5 medical colleges of North India. Data were collected using a self administered structured questionnaire of 4 main sections including demographic variables, and KAP of general surgeons and medical students regarding standard precautions.<sup>[5,6]</sup>

#### **RESULTS**

In the present study, 100 questionnaires were distributed and returned after completion from the participating surgeon and the medical students. Out of 20 general surgeons 17 (85%) were

aware about standard precautions while 13 out of 20 (65%) have joined the training of the standard precautions. While on the other hand 35 out of 80 (44%) medical students participating in surgical procedures have knowledge about the standard precautions and 15 out of 80 (19%) were participated in the training about the standard precautions.

#### **DISCUSSION**

In this study, the response rate was 100% and the majority of participants were medical student (80%) participating in surgery with the mean age of subjects was 32 years. Most of the participants (28%) were untrained on Standard precautions. However, the response rate in the study by Hosoglu was 40.7%, the average age of the respondents was 31.4 years. The response rate in the study by Melo was 91.1%, the average age of the respondents was 39.6 years. Ghofranipour et al. reported that 36.1% of their study samples had received training on universal precaution prior to their job. The results of this research are more satisfactory than those of the study by Abou El-Enein and El Mahdy, and Ghofranipour et al. [7-9]

The results of this study showed that the knowledge score was desirable but attitude and practice scores were not desirable. That varied by occupation and adherence to standard precautions and was found to be suboptimal.<sup>[4,10]</sup> According to Researchers new strategies may be preventive against the exposure during surgical procedures by the training and monitoring adherence.

#### **CONCLUSION**

As per the results obtained from study, research as well as medical education programs should be organized time to time not only for the general surgeons and medical students participated in the surgery but also for all the health workers of hospital. These programs may work against the hospital infections and may also be helpful in increment of the knowledge aptitude and the practices regarding.

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