# A study on knowledge, attitudes and practices of laboratory safety measures among medical laboratory technologists, at Teaching Hospital Karapitiya

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## Introduction

In recent years the care of patients has become increasingly dependent on the results of the laboratory investigations. Laboratory staff is at high risk of exposure to specimens and chemicals. Considering the inherent risk associated with bio hazardous material, this study was designed to assess the level of knowledge, attitude and practices among medical laboratory technologists (MLTs) regarding the laboratory safety measures.

#### Methods

A descriptive cross sectional study was conducted in microbiology, histopathology, and chemical pathology laboratories of Teaching Hospital Karapitiya. Convenience sampling method was used to select the sample. The data was collected using an anonymous, pretested self-administered questionnaire. Ten, seven and eight questions were used to assess the knowledge, attitudes and practices respectively. Each correct response was given 10. Score of 0-39, 40-69 and 70-100 were considered as poor, satisfactory and good respectively.

#### Results

Eighty MLTs participated and 46 of them were females. Mean (SD) age was 40 (8.36) years. Majority of males (73.52%) and females (73.91%) had good knowledge (P=0.85). Yet only 21.25% had good knowledge on how to clean a blood spill. Majority of males (64.70%) and females (73.91%) had good attitudes (P=0.37). Fifty-five percent of males and 56.22% of females have satisfactory level of practices on laboratory safety measures. Ninety-seven percent used gloves but only 45% used face masks. Ninety-five percent used to wash hands after a procedure but hand washing before a procedure was 26.25%. Twenty-five of respondents have had no injuries while at work. Out of the rest, 37 have had sharp injuries, 30 have had chemical burns and 23 have had injuries due to broken glasses. Level of practice showed significant association with duration of service (P=0.013) but not with gender (P=0.46)

### **Conclusions**

This study shows that knowledge and attitudes on laboratory safety measures do not change considerably with gender and duration of service. Yet, increase in duration of service has a positive impact towards practice in the sample studied.