

## **Abstract**

Chemical disasters in Sri Lanka have increased during the past three decades due to rapid industrialization. Therefore the capacity of hospital staff to manage chemical disasters is important.

### **Objective:**

"To assess knowledge, attitudes and preparedness on chemical disasters among grade medical officers at District General Hospital Gampaha".

### **Methods:**

A descriptive cross sectional study, was conducted among Grade Medical Officers at District General Hospital Gampaha using a self-administered questionnaire. All Grade Medical Officers with three or more months of service at the current unit was considered for the study. Data was analyzed by using SPSS software and Chi square test was applied to assess correlation between selected variables. A probability value of  $< 0.05$  was considered as significant.

### **Results:**

Total sample was 232 Grade Medical Officers and the response rate was 80.6%.

The knowledge on chemical disasters among 136 (72.7%) participants was not satisfactory and there was no statistically significant difference ( $p > 0.05$ ) of knowledge with age, sex and the work experience.

Among the participants 144 (77%) had favorable attitudes towards chemical disasters. There was no statistically significant difference ( $p > 0.05$ ) of attitudes with age, sex, grade and the work experience.

In 98.9% of the participants, the total preparedness for chemical disasters was inadequate. Almost all the participants had not attended simulation drills regarding chemical emergency, not underwent any kind of training on chemical disasters, didn't know how to triage victims of a chemical disaster and not had a training on using personal protective equipment.



**Conclusion:**

Majority had relatively poor knowledge on chemical disasters in the aspects of characteristics of hazardous chemicals and their effects on humans, decontamination techniques and patient management.

Majority had favorable attitudes towards chemical disasters in the areas of risk perception, gaining more knowledge and training, patient handling and preparedness.

The preparedness for chemical injuries was grossly inadequate among the majority.

**Recommendations:**

From the study it is recommended to build the capacities of Grade Medical Officers on chemical disaster management. As the study was conducted in a small sample, it is necessary to carry out a comprehensive study in a larger sample in multi-level setting to gain more information on knowledge, attitudes and preparedness on chemical disasters.