

## ABSTRACT

### Introduction

Disasters have received much attention in recent years. Disaster is a serious disruption of the functioning of a community or a society involving widespread human, material, economics or environment loss and impairments which exceeds the ability of the affected community or society to cope using its own resources. Staff of the Medical Officer of Health plays a unique role in the management of health effects following a disaster. Therefore, it is important to know how primary health care workers manage such a health effects.

### Objective

To describe the knowledge and experience on disaster preparedness in relation to management of health effects among primary health care workers in Puttalam district.

### Methodology

Community based, descriptive, cross sectional study was carried out among primary health care workers attached to all the medical officer of health officers in Puttalam district in 2015. A self administered questionnaire was used to collect data. Total of 206 primary health care workers responded. Both the knowledge and experience of primary health care workers on management of health effects following a disaster were assessed. Knowledge on disaster preparedness of health care workers were assessed in areas of disaster management plan, first aid treatment, relief works, internal displaced camp management, reproductive health management and mental health management whereas experience was assessed in areas of training, participation to develop disaster management preparedness plan and drills, engagement of real disaster responding activities and working with both local and international Non-Governmental Organizations. Scoring system was applied and data was analyzed. Total knowledge score for each areas of disaster preparedness were calculated. Those who scored  $\geq 75$  marks for each knowledge areas were considered as having adequate knowledge whereas workers who scored  $< 75$  marks were considered as having inadequate knowledge on disaster preparedness. In addition to that, total number of experience was calculated.

### Results

Male to female ratio is 1:4. Almost all the health care workers were Sinhalese (98.5%, n=204). Majority (76.7%, n=158) of the study sample were public health midwives followed by public health inspectors (14%, n=29), medical officers (7.35, n=15) and public health nursing sisters (1.9%, n=4). Majority (78.2%, n=161) of the sample were  $> 30$  years of age and (85.9%, n=177) of primary health care workers educated up to advanced level.

Only 35 % (n=72) of workers had  $\leq 5$  years of duration of service. 67% (n=138) of workers had used motor bicycle as commonest transport method to the office.

45.6% (n=94), 48.5% (n=100), 73.8% (n=152), 74.3% (n=153), 51.9% (n=107) and 67.7% (n=127) of primary health care workers had adequate knowledge on disaster management preparedness plan, first aid treatment, relief works, internal displaced camp management, reproductive health management and mental health management respectively. Total mean knowledge score for disaster preparedness was 76.5 with standard deviation of  $\pm 9.45$ .

There was no significant difference in total knowledge level among primary health care workers except in medical officers who had the highest adequate knowledge (93.3%, n=14). There was no significant statistical association between knowledge on disaster preparedness and age of the workers, level of education and duration of service ( $p > 0.05$ ).

Majority (70.4%, n=145) of the sample had not participated even single disaster management training programmes such as lectures, drills and disaster relief works. Hence, there was statistically significant association between total knowledge score and experience of workers on disaster preparedness ( $p < 0.05$ ).

### **Conclusion**

Majority (68.4%) of primary health care workers had adequate knowledge on disaster preparedness. But, the experience of primary health care workers was low. However, the knowledge and experience of the primary health care workers on disaster in relation to management of health effects had acquired mainly from their primary health care service.

### **Recommendation**

More and more both theoretical and practical disaster management training, like lectures, discussion and drills should be organized for primary health team. In addition to that, encouragement of Primary health care workers to engage in disaster relief works should be promoted

### **Key words**

Disaster, Disaster relief works, Drills, Experience, Knowledge, Preparedness