

ABSTRACT

Background

Firefighters, like many other emergency service personnel provide vital services to the community by responding to fire related emergencies in dwelling houses, business premises, factories, vehicles accident fires, garbage dump fires and forest fires. In the course of their duties, firefighters are exposed to traumatic events such as badly injured people, deceased children and individuals who are highly distraught. The available literature on the subject clearly demonstrates that anxiety and posttraumatic stress disorders (PTSD) are prevalent among the professional firefighters which can affect job performance and overall wellbeing. The aim of the study was to describe the frequencies of emergencies, psychological wellbeing, and availability of health and psychological services of fire fighters working in Colombo Municipality area.

Methodology

A self administered questionnaire survey method was selected to gather relevant information as responding firefighters of Colombo Municipality could answer the questions at their convenience, without any interviewer biases once the objectives of the study and method of answering was explained to them. A cross sectional survey design was used. All the permanent staff (except trainees) attached to main station and other sub stations were included in the study. Secondary data were collected from various records (Occurrence book), registers and check lists maintained by the fire department of the Colombo Municipality. The types of emergencies and disasters the firemen have attended and their frequencies in last one year period (year 2015) were assessed.

The questionnaire consisted of two parts and first part consisted of questions based on the general socio-demographic information (study variable such as age, sex, marital status etc.), questions related to the job, training, health and psychological service availability that can affect their psychological wellbeing and health of fire fighters. The second questionnaire, the validated General Health Questionnaire - 30 was used to assess the psychological wellbeing of actively participating fire fighters of Colombo Municipality. GHQ 30 was used since it has been shown as most stable and to have the highest validity in Sri Lanka. The questionnaires were provided in all 3 languages.

Results

The results of the frequencies of emergencies encountered by the Colombo Municipal firefighters indicate that they had responded to 253 emergencies during the year 2015 of which 86.5% were within Colombo city limits and the balance in the western province. The average number of emergencies responded per month in 2015 was 21 while the maximum number was 31 and minimum was 14. The commonest type of fires had been caused due to electrical short circuiting. As far as fires in building were concerned fire brigade had responded to 47 fires in dwelling houses, 40 in boutiques/shops, 8 in factories, 7 in offices, 6 in stores and 5 in hotels. They had also attended to 9 vehicles fires and 4 oil related fires during the year. Firefighters attended to more emergencies during the weekdays (71.1%) compared to weekends and holidays. There were no significant variations between day time and night for calls of emergencies.

Widely used self administered Sinhala version of GHQ-30 was used to test psychological distress among the firefighters .15.1 % (n=24) of the total of 159 respondents yielded a GHQ score of ≥ 6 suggest severity of the problems and psychological distress. Of the 24 respondents who scored ≥ 6 , four obtained scores higher than 15 indicating distress while one respondent who scored more than 20 indicated severe problems and psychological distress. Those respondents with GHQ Score ≥ 6 were equally distributed among all age categories except a higher percentage was seen in 41- 50 year category (25%). When considering the rank, 16 firemen out of 118 (66.7%) had GHQ Score ≥ 6 . Motorman (12.5%) and 1st class fireman (12.5 %) had high percentages of staff scoring above GHQ Score ≥ 6 . Of the non smoking firefighters 66.7% had GHQ Score ≥ 6 while 33.3% of the smokers had GHQ Score ≥ 6 . 87.5% of firefighters with a GHQ ≥ 6 had claimed that they have life stresses. Regarding types of stresses 33.3% had indicated financial problems, while 29% had two types of stresses and 21% had had three types of stresses. It was seen that when level of job satisfaction is increasing life is a struggle rating decreased.

The availability of psychological services designated to the firefighters was assessed in this research as the final objective and 55% of the respondents answered that no such services were available. At the same time in case of disability and death the only benefit they have is the agraphara scheme.

Conclusion

As this study indicates, the optimal levels of requirements in terms of training, health and psychological health are not met by the administration of Colombo Municipality Fire Department. The degree of psychological distress may not be as very high compared to other countries however, it is important that these firefighters are physically and mentally fit at all times to face any serious situation as disaster situations are unpredictable and has a increasing tendency.