

A SURVEY ON THE PREPAREDNESS LEVEL OF THE STARA ZAGORA MEDICAL FACULTY STUDENTS FOR PROTECTION DURING AN EMERGENCY SITUATION

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ABSTRACT

The natural and anthropogenic catastrophes cause emergency situations, various in type, character and size. Training and willingness to protect are an important part of preserving the health and life of people in the disaster area. This study examines the level of knowledge and training for protection during disaster of students from the Stara Zagora Medical Faculty. Here we have presented results of the Inquiry Study made on ninety one students from the specialty of Medicine for the period of March - May 2009. Surveyed students show satisfactory readiness for self-preservation in danger of radioactive contamination and the occurrence of emergency epidemic situation. The preliminarily training for effective conduct in case of massive chemical emergency (MCE) with release of highly toxic poisons is insufficient. A large percentage of respondents assess their readiness for such protection as partial. A high percentage of respondents state that public knowledge of disaster protection must be increased.

Key words: disaster, emergency situations, disaster protection, health prevention

INTRODUCTION

The natural and anthropogenic disasters are increasingly becoming a serious challenge on national and international scale. The emergency situations that they cause are characterized with suddenness, they create severe general and medical situations, discrepancy between required and available forces and means, including medical such for eradication of the consequences (1). This imposes the need for education and training of the people who work in the health sphere on all levels, for organizing activities in the event of a disaster situation, as well as for acquiring knowledge on various affecting factors, sequence of interactions and means of protection (2).

PURPOSE AND OBJECTIVES

Our goal was to investigate the medical knowledge and training of students from Stara Zagora Medical Faculty, for Disaster Protection.

TASKS:

To determine the students' level of knowledge on medico - tactical characteristics of different types of disasters.

- To establish the level of preparedness for response to a disaster, that causes massive chemical trauma.
- To determine the level of preparedness for protection from a disaster, that causes radiation injury.
- To determine the level of knowledge on the methods and means for protection under the conditions of an emergency epidemic situation.

MATERIALS AND METHODS

During the period March - May 2009 there was a group inquiry, conducted on ninety one students in "Medicine" specialty of Stara Zagora Medical Faculty.

An Inquiry Card was used, which held thirty three questions relating to preparedness for disaster protection. In twenty three of the questions all the possible answers were formulated and specified in advance, five questions were open and gave the opportunity for opinion, another five questions presented a situational task.

The principle of anonymity and voluntaries was respected. The students worked independently with the inquiry card without being limited in time. During the data processing mathematical - statistical methods were applied which gave the opportunity for quality analysis of the results.

RESULTS AND DISCUSSION

Respondents' age ranges from 19 to 28. The majority are in the age range of 20 to 24 years - seventy eight people (85,71 %). The distribution by gender is as follows: 51 women (56,04 %), 40 men (43,96 %). There are no significant differences in the responses of respondents according to age and gender.

We considered the students' knowledge concerning basic principles of anti-chemical protection, to be satisfactory. On the question "What are the measures needed to be taken in the occurrence of chemical damage", sixty four of the inquired students (70,32 %) note as protective measures putting a gas mask and quickly leaving of the area. Results are unsatisfactory in terms of readiness to respond in case of major chemical accident with the release of chlorine and ammonia into the atmosphere. Thirty five of the students (38,46 %) demonstrated sufficient knowledge for proper behavior in the occurrence of crisis situation.

Forty four of the students (48,35 %) will be protected against the effects of ammonia by placing porous gauze cotton mask soaked in vinegar. Thirty eight of the students (41,75 %) will react properly when they evacuate to a lower altitude.

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Only thirty nine students (42,85 %) will place on porous gauze cotton mask soaked in sodium bicarbonate to prevent gassing with chlorine. Proper behavior - climbing higher altitude, will have forty students (43,95 %).

The students demonstrate better preparation in terms of radiation protection measures. Sixty eight of the students (74,72 %) are aware of the risks from external exposure and the incorporation of radioactive substances in the body in the case of accident in a Nuclear Electrical Plant.

The vast majority of respondents - seventy one of them (78,02 %) comprehensively list the food products endangered of contamination with radio nuclides and the methods for their decontamination.

During the analysis of the results of the questions related to the characteristics of epidemic emergencies, several key points have been identified. Seventy of the students (76,92 %) have pointed out all possible sources of infection in case of epidemic. Sixty seven of the students (73,62 %) are aware of the diseases that belong to the group of FSI (focused severe infections) controlled by WHO.

According to seventy one of the respondents (78,02 %) the highest risk of occurrence of emergency epidemic situation holds the use of biological weapons of mass destruction. Fifty nine of the students (64,83 %) note floods and earthquakes as disasters which present a risk of epidemics as a secondary outbreak of damage.

On the question "How would you react in the occurrence of emergency epidemic situation", sixty three of the surveyed students (69,23 %) say that they will seek means of prevention, fifty one of them (56,04 %) will wait for information and guidance. Thirty three students (36,26 %) answer they will immediately leave the area, therefore will take the wrong action.

In the event of an emergency situation the vast majority of respondents will rely on the support formations of the Civil Protection National Service, on the teams of the medical service, on themselves and on colleagues, friends and relatives (**Fig. 1**).

Fig. 1

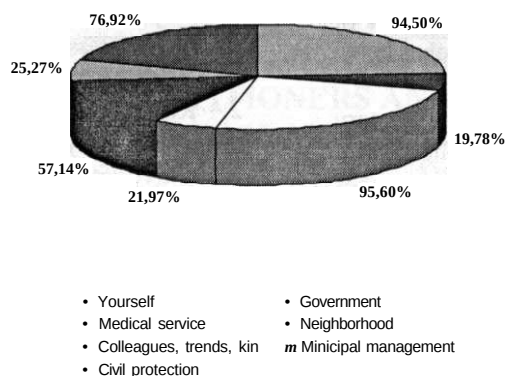


Fig.1

On the question "Do you think that you are ready for Disaster Protection" sixty one of the respondents (67,04 %) answered that they have partial preparedness (**Fig. 2**). Sixty one of the

students (67,04 %) believe that public knowledge and preparedness for protection in case of disaster must definitely be increased (**Fig. 3**).

Fig. 2

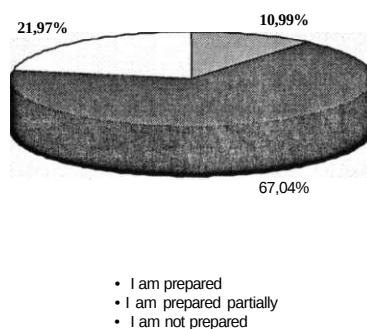


Fig. 2

Fig.3

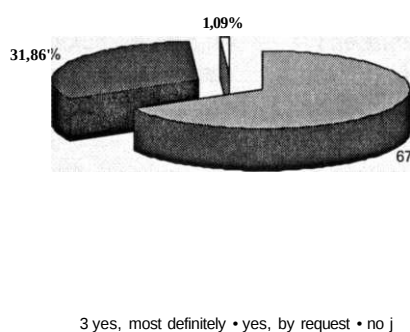


Fig.3

CONCLUSION

Training and preliminary preparations are an essential part of the preventive activity for protection in crisis situations (3). In the absence of such preparation fifty per cent of the victims are the result of wrong behavior in case of a disaster (4).

- Respondent students show satisfactory readiness for self-preservation at the risk of contamination with radioactive substances and occurrence of emergency epidemic situation.
- The preliminary preparation for proper behavior in case of MCE with release of highly toxic poisons is insufficient.
- A large percentage of respondents (67,04 %) assess their readiness for such protection as partial.
- The percentage of respondents who express the opinion that public knowledge for

protection in case of emergency situation must be increased, is high (67, 04 %).

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