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Attitudes of pharmacists to the issue of applying basic first-aid

The most frequently mentioned causes of death and disability include blood circulation system diseases, tumors and injuries. The decision to apply immediate resuscitation actions often influence the chances of the victim's survival. It is estimated that approximately 18 million citizens of Poland have been trained in the field of basic first-aid procedures. What follows from the research is the low percentage of first aid applied before the arrival of an ambulance. The majority of the event's witnesses merely call for professional help (2, 5, 6). There are a few factors that influence the decision to start resuscitation actions. The ones that are emphasized include the knowledge of the rules of behaviour in difficult situations, mastering the skills of phantom resuscitation, awareness of the consequences of not applying first-aid in the social aspect (costs of death or disability), knowledge of the factors that threaten health, the sense of moral and legal obligation towards another man, willingness to act as a team – the issue of joint responsibility (10). It is still crucial to make all citizens aware that the final effect of the physician's actions depends on the proper work of the first links of the 'chain of survival', especially on early basic life support and common use of basic first-aid at the scene of the accident (3).

The aim of the paper was to get to know the opinions of the employees of pharmacies with a degree in pharmacy about the issue of applying basic first-aid and their knowledge of basic life support.

The survey was carried out by means of a questionnaire which was mailed to the pharmacies in the area of the Lublin region, excluding the city of Lublin. 250 questionnaires were sent and 106 were sent back and filled in properly. The return rate of the questionnaires was estimated at 42.4%.

RESULTS

Women accounted for 90.6% of the respondents, while men – for 9.4%. People aged 25–30 constituted 28.3%, aged 31–35 – 11.3%, aged 36–40 – 15.1%, aged 41–45 – 25.5%, aged 46–50 – 16.0%, while people over 50 accounted for 3.8%. 11.35% of the subjects have not participated in any first-aid training, 41.5% have participated in one training – during studies at university and 47.2% – have participated in two trainings: at university and as part of their specialization course. The opinions of the respondents showed that the trainings they participated in enriched their knowledge of basic life support (44.3%), reduced their fear of applying resuscitation actions (33%), reduced their fear of making the mistake (29.3%), were done too long ago (20.8%).

All the respondents agreed that a graduate of the faculty of pharmacy should have more knowledge and skills in the field of applying first-aid than the remaining social groups. They assessed their skills as satisfactory (69.8%), insufficient (22.6%), while only 7.6% – as good. All the respondents would volunteer for first-aid trainings if they were free.

88.7% of the subjects show readiness to apply resuscitation actions in the case of cardiac and respiratory arrest, while 11.3% claim the opposite. Those who would not take up resuscitation actions are convinced of the lack of own skills. They have never been trained. 96.2% claim that resuscitation actions should be applied 5 minutes after the event, 3.8% claim that the time limit is 15 minutes. Indirect cardiac massage should be done with the frequency of 60/min according to 42.5%; from 60 to 80/min (48.1%), while 9.4% claim they do not know. The proportion of indirect cardiac massage to number of breaths should be 5 to 1 according to 90.6% of the subjects, 10:1 according to 5.7% and 10:2 according to 3.8%. Expiratory volume should be up to 600 ml (11.3%), 700-1,000 (46.2%), while 42.5% do not know. 75.5% of the pharmacists are able to perform artificial mouth-to-mouth respiration, 3.8% would not risk doing it for fear of infection and 20.8% – due to the lack of skills. 84.9% of the respondents claim they would be able to administer indirect cardiac massage in case of circulatory and respiratory arrest, while 9.4% cannot do it and 5.7% feel too weak physically. According to 42.5% of the subjects, mere cardiac massage can be administered in the first minutes after the event of circulatory or respiratory arrest, while 37.7% claim it is not possible and 19.8% do not know. Mere artificial respiration can be administered according to 50% of the subjects, but only when blood circulation is not stopped. In case of circulatory arrest mere artificial respiration should be sufficient according to 26.4%, while 23.6% do not express their opinion about it. Circulatory arrest will be recognized by 59.4%, while respiratory arrest – by 93.4%. Indirect cardiac massage can be replaced with defibrillation according to 41.5% of the respondents, while 3.8% claim it is an ambiguous issue and 54.7% do not know.

Pharmacists claim to know basic procedures in case of heart attack (59.4%), food poisoning (65.1%), epilepsy (57.6%), hemorrhage (57.6%), choking (61.3%), loss of consciousness (42.5%), fracture (44.3%), shock (38.7%), allergy (31.1%), spinal injury (29.2%), drug poisoning (36.8%). So far the respondents have had the opportunity to apply aid in the following situations: hemorrhage (31.1%), food poisoning (43.4%), choking (21.7%), allergy (19.8%), fracture (10.4%).

The optimum time of the ambulance arrival at the scene of the accident was 4 minutes according to 50.9%, 10 minutes – according to 24.5%, 15 minutes (3.8%) and 20 minutes (13.2%). The danger of terrorist attack in Poland is regarded as realistic by 74.5%. 58.5% do not know the general rules of behaviour in biological, chemical or radioactive emergency, while 100% of the respondents claim that a pharmacist should know them. The rescue system in Poland is well-organized according to 7.6%, satisfactory – according to 37.7%, unsatisfactory according to 35.9% and badly-organized according to 18.9%. The pharmacist should have extended competence concerning dispensing medicines, applying aid, giving medical information. In the situation of mass emergency a pharmacist should be involved in rescue actions according to 22.6%, provided that he is delivered proper guidelines according to 58.9%. Only 18.9% definitely reject the necessity to participate in rescue actions. Their common opinion is that having proper medical information and knowledge of proceedings in case of emergency can reduce chaos and panic.

DISCUSSION

A high percentage of the respondents (40.2%) assess their level of knowledge of the rules of applying basic first-aid as unsatisfactory, similarly to other social groups, although as many as 88.7% of them participated in first-aid trainings during studies, and 47.2% as part of their specialization courses (1, 2, 4). Besides, all of them took part in first-aid basic training at school. The trainings enriched their knowledge, reduced their fear of making the mistake, but they were done too long ago. The respondents would eagerly volunteer for further training as long as it is free. A similar view was expressed by the drivers and high school students under survey (1, 2). Ambulance service physicians were convinced of the necessity of introducing trainings once every one or two years for the whole society, as they claimed in the research (7).

All the respondents maintain that the profession of pharmacist obliges them to more thorough knowledge of the rules of applying first-aid; they would even be willing to take up resuscitation actions in case of radioactive, biological and chemical emergency. However, they expect updated guidelines concerning basic rules of emergency service. The vast majority of them feel obliged to be involved in rescue actions due to the job they do.

The knowledge of the respondents about the resuscitation activities is not sufficient. They have difficulties in recognizing circulatory arrest; they do not know current instructions concerning resuscitation, the essence of cardiac massage and artificial respiration as well as defibrillation. Badly applied cardiac massage or artificial respiration does not influence chances of survival, whereas the proper cardiac massage even without artificial respiration increases the chances of victims' survival (9). The study conducted by Skowroński indicated that a 2-year break in mastering practical skills of resuscitation causes considerable decrease in the skills (8). The subjects participated in the trainings more than two years ago. Pharmacists do not know much about the Emergency System in Poland, about the recommended ambulance arrival time. They maintain that medical aid should reach the scene within time period shorter than 5 minutes. High standards of the developed western countries assume that professional first-aid at the scene should be given within 7–10 minutes (7).

CONCLUSIONS

1. Pharmacists feel they are obliged to know the rules of applying first-aid better than other social groups, and claim they should join the rescue activities in case of emergency.

2. The respondents show willingness to participate in first-aid trainings as long as they are free.

3. A high percentage of the respondents assess their level of knowledge in the field of emergency actions as unsatisfactory.

4. The knowledge of resuscitation techniques is insufficient; identification of circulatory arrest, technique of indirect cardiac massage and artificial respiration all seem to cause difficulties.

5. The pharmacists under survey would be glad to get updated guidelines concerning basic rules of behaviour in emergency.

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SUMMARY

The most frequently mentioned causes of death and disability include blood circulation system diseases, tumors and injuries. The decision to apply immediate resuscitation actions often influence the chances of the victim's survival. It is estimated that approximately 18 million citizens of Poland have been trained in the field of basic first-aid procedures. The aim of the paper was to get to know the opinions of the employees of pharmacies with a degree in pharmacy about the issue of applying basic first-aid and their knowledge of basic life support. The survey was carried out by means of a questionnaire which was mailed to the pharmacies in the area of the Lublin region, excluding the city of Lublin. 250 questionnaires were sent and 106 were sent back and filled in properly. The return rate of the questionnaires was estimated at 42.4%. Pharmacists feel they are obliged to know the rules of applying first-aid better than other social groups, and claim they should join the rescue activities in case of emergency. The respondents show willingness to participate in first-aid trainings as long as they are free. A high percentage of the respondents assess their level of knowledge in the field of emergency actions as unsatisfactory. The knowledge of resuscitation techniques is insufficient – identification of circulatory arrest, technique of indirect cardiac massage and artificial respiration all seem to cause difficulties. The pharmacists under survey would be glad to get updated guidelines concerning basic rules of behaviour in emergency.

Postawy farmaceutów wobec problemu udzielania pierwszej pomocy przedmedycznej

Wśród przyczyn zgonów i niepełnosprawności najczęściej wymieniane są choroby układu krążenia, nowotwory i urazy. Od podjęcia natchmiastowych czynności ratowniczych często zależy dalszy los poszkodowanego. Szacuje się, że w Polsce zostało przeszkolonych w zakresie pierwszej pomocy przedmedycznej około 18 milionów obywateli. Na podstawie badań obserwuje się wciąż niski procent pomocy udzielonej przed przyjazdem karetki. Celem pracy było poznanie opinii pracujących w aptekach magistrów farmacji na temat udzielania pierwszej pomocy przedmedycznej oraz zasobu ich wiedzy dotyczącej podstawowych czynności ratujących życie i zdrowie. Badanie przeprowadzono za pomocą ankiety, którą wysłano listownie do aptek na terenie województwa lubelskiego, z ominięciem miasta Lublina. Wysłano 250 ankiet, otrzymano 106 prawidłowo wypełnionych formularzy. Zwrotność ankiet oceniono na 42,4%. Po analizie materiału badawczego okazało się, że farmaceuci czują się zobowiązani lepiej znać zasady niesienia pomocy niż inne grupy społeczne, oraz uważają, że powinni włączyć się do akcji ratowniczej w sytuacji zagrożenia. Ankietowani chętnie będą uczestniczyć w szkoleniach z zakresu pierwszej pomocy, pod warunkiem że będą bezpłatne. Badani oceniają poziom swojej wiedzy z zakresu działań ratowniczych w dużym procencie za mało satysfakcjonujący. Znajomość schematu reanimacji jest niedostateczna, zgłaszają trudności z rozpoznaniem zatrzymania krążenia, techniką masażu pośredniego serca i sztucznego oddychania. Badani farmaceuci chcieliby dostawać aktualizowane wytyczne, dotyczące podstawowych zasad postępowania w sytuacjach zagrożenia zdrowia i życia.