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Knowledge of first-aid rules among students

Znajomość zasad udzielania pierwszej pomocy wśród studentów

The aim of the paper was to estimate the knowledge of first-aid rules among students and their preparation for acting in case of emergency. The question of interest was the issue of first-aid trainings, their usefulness in the subjects' opinions, the point to which they influenced the level of knowledge of proper behaviours in cases of injuries or states of life threats.

In recent years a constant rise in the number of road accident has been observed. Statistically every week from 100 to 150 people die and 1,000 – 1,500 are hurt in road accidents in Poland. It is more than in many armed conflicts. Injuries are the third major reason for sudden deaths in Poland as well as in the world and among people under 40 – they are the first reason (7, 5). It is an immensely important issue and social policies of many countries search for methods of reducing the size of phenomenon. It is well-known that applying first-aid as quickly after the occurrence of an injury as possible can save life, shorten the time of treatment and reduce the number of complications. It has been proved that reducing the time of applying first-aid from 20 to 10 minutes increases the chances of survival for 20% of victims. In the cases when reanimation is necessary the time span that determines survival is limited to 5 minutes (6). However, it is difficult to expect medical services to arrive within this period of time.

In theory, there are approximately 18 mln citizens of Poland who underwent first-aid trainings. Witnesses of accidents constitute the first link of the rescue chain and the fate of many victims depends on the witnesses' reaction. In our country, first-aid is hardly ever applied by drivers or accident witnesses. It is estimated that in every 100 accidents in Poland as many as four times more people die than in the majority of western countries. 14 people in Poland as against 6 in France, 4 in Switzerland and 3 in Germany. Statistic

analyses show that on the average each citizen will face the necessity to apply first-aid to somebody 6 times in his life; in 70-80% of cases this "somebody" is a close or related person (1). If the significant part of our society we capable of applying first-aid, about 10,000 deaths could be avoided every year (8).

MATERIAL AND METHODS

The research was carried out in the form of an auditorial survey filled in correctly by 251 UMCS students. Women constituted 90.4% of the group. The subject of analysis was to examine their preparation for applying aid to people injured in accidents. The subjects answered the questions that estimated the level of their knowledge of first-aid rules as well as the questions about their probable behaviour in emergency. A lot of questions required multiple-choice answers.

RESULTS AND DISCUSSION

66.5% of the whole group participated in various first-aid trainings. The most frequent were: cadet corps classes at secondary schools, driving-licence courses and others. From the OBOP (Centre for Public Opinion Research) inquiry carried out by A. Rasmus it resulted that 73% of the society have been trained in the field of first-aid application (1).

Facing the accident, 37.6% of the subjects will assume a passive attitude towards the events waiting for other people's initiative; 15.8% will observe the course of events helplessly and 46.6% of the subjects are ready to act in such situations (Fig. 1). In the group of people trained for first-aid a significantly larger percentage will assume an active attitude (53.7%); 25.3% of them will wait for others to help; 20.4% of them admit they would be helpless in such a case. In 1996 a similar survey was carried out among secondary school students who were in the course of or immediately after the training. 44.7% of the subjects declared their readiness to act, so the results of this survey are comparable to the survey described above (2).

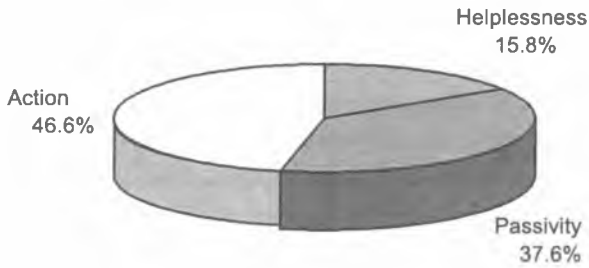


Fig. 1. Types of behaviour while facing accident

In the case of the loss of consciousness 51.6% of people will be able to examine one’s breath and blood circulation; 47.3% of them will raise the victim’s legs and 22.2% will lay the victim in the safe coiled position. In the group of students who were trained for first-aid this position will be applied by 23.8%. It is even better among the secondary school students. 54.2% of them will apply this position to the victim. When the victim does not breathe 71.9% of the subjects will apply mouth-to-mouth rescue breathing, while 24% admit they do not know how to apply this method. Among the trained subjects 68.7% will be able to put rescue breathing into practice. The fact of participation in the training does not significantly influence the subjects’ readiness to act as well as the proper application of the first-aid. Only 13.6% (15.6% of the trained subjects) will take up proper reanimating action in the case of the loss of breath or blood circulation. Secondary school students capable of applying proper reanimation constitute a larger percentage of 66.7%. It should be taken into account that this group of subjects was in the course of or right after the training. 25.3% of the university students know which reanimation pattern should be applied in the case of reanimation carried out by one rescuer and 38.5% - by two rescuers. After the training 23.1% showed the knowledge of 1 rescuer pattern and 10.9% of the subjects – knowledge of two rescuers pattern (Fig. 2).

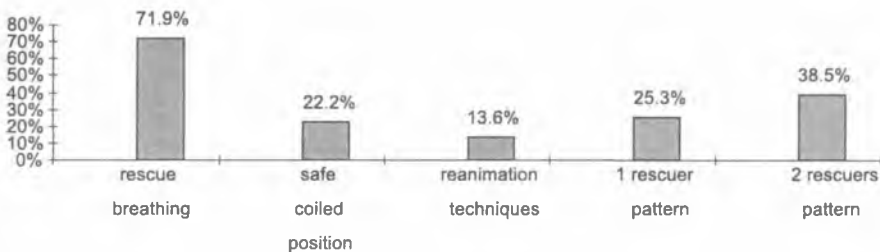


Fig. 2. Reanimation action

25.3% of the subjects will staunch the flow of blood with the help of an elastic bandage and 67.3% of them – with the help of a tourniquet. A tourniquet, which is presently contraindicated, will be applied by 58.8% of the school children. 54.8% will use water or oxygenated water to lavage the wound. The same percentage of the students will use water to cool burnt or scalded surfaces. 74.2% of the subjects will immobilize a broken limb. According to 27.1% of the subjects (and 37.4% of the trained subjects) falls from altitudes and road accidents are the most frequent reasons for backbone injuries.

52.9% of the students will behave correctly avoiding redundant movements and controlling life actions of the victims of such accidents. In the cases of scalds, burns, bleedings, fractures and wounds secondary school students will act in a similar way.

The level of knowledge of the application of first-aid, especially in the cases of direct life threats is insufficient. The fact of the participation in the first-aid training did not trigger any improvement in the level of knowledge. In the survey carried out among the residents of Lublin only 31% of the surveyed people declared the knowledge of first-aid rules. According to the subjects accident witnesses will take up rescue actions only in 12% of cases. However, these are only declarations that are put into practice with difficulties in stressing circumstances, as it follows from the literature on the subject (3). It must also be emphasized that the survey tested theoretical knowledge, not practical abilities which should still be improved. As it follows from the research carried out by P. Jałowicki, only in 20.2% of 375 cases of people with serious injuries the first-aid was applied.

CONCLUSIONS

1. Readiness to apply first-aid to the victims of accidents is insufficient; it is declared by 46.6% of the UMCS students.

2. 66.5% of the students took part in first-aid trainings, which did not have any significant impact on the correctness of their answers as well as on their active behaviour in emergency.

3. The knowledge of reanimation techniques and first-aid rules in the cases of the loss of consciousness is definitely unsatisfactory. 13.6% of the people under the survey will apply a proper reanimation pattern; 22.2% know the safe coiled position; 51.6% will check life actions in the case of the loss of consciousness.

4. In the cases of scalds, burns, injuries, bleedings and fractures the number of correct answers was larger.

5. The results of the survey indicate the need to educate our society in a more effective way, teach practical actions and repeat the training every few years.

REFERENCES

1. Bałkota M., Rasmus A., Markiewicz A.: Szkolenie w zakresie pomocy przedmedycznej. *Ratownictwo Polskie*, 4, (18), 48, 1998.
2. Chemperek E.: Znajomość zasad udzielania pierwszej pomocy wśród uczniów szkół średnich. *Ratownictwo Polskie*, 1, 40, 1996.
3. Goniewicz M.: Znajomość zasad udzielania pierwszej pomocy na miejscu wypadku komunikacyjnego wśród mieszkańców Lublina. *Zdrowie Publiczne*, 5-6, 95, 1997.
4. Jałowiecki P. et al.: Ocena wstępnego postępowania diagnostyczno-terapeutycznego u chorych z obrażeniami wielonarządowymi. *Anestezjologia i Intensywna Terapia*, 24, 297, 1992.
5. Kamiński B., Dziak A.: Doraźna pomoc lekarska. PZWL, Warszawa 1994.
6. Nowakowski R., Klonowski R.: Kształcenie i doskonalenie kadr niosących pomoc medyczną w katastrofach. *Ratownictwo Polskie*, 4, (18), 39, 1998.
7. Pszczołowski K.: Konieczność nadążania dydaktyki pierwszej pomocy za rzeczywistością. *Ratownictwo Polskie*, 2, (8), 29, 1996.
8. Stebelski M.: Zabójcza niewiedza. *Ratownictwo Polskie*, 1, 35, 1996.

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STRESZCZENIE

Celem pracy była ocena znajomości zasad udzielania pierwszej pomocy przez studentów oraz ich przygotowanie do działania w sytuacjach nagłych. Interesujące było zagadnienie dotyczące przebytych szkoleń, ich przydatności w opinii badanych oraz czy wpłynęły na poziom wiedzy o zachowaniu się w obliczu urazów, stanu zagrożenia życia.

Wśród ankietowanych 66,5% uczestniczyło już w rozmaitych kursach udzielania pierwszej pomocy. W obliczu wypadku podjęłoby działanie ratujące 46,6%. W razie utraty przytomności 51,6% osób sprawdzi oddech i krążenie, 47,9% uniesie nogi do góry, a 22,2% po upewnieniu się, czy oddech i krążenie są zachowane, ułoży w pozycji bocznej bezpiecznej. Gdy ofiara nie oddycha, sztuczne oddychanie metodą „usta-usta” podejmie 71,9%, zaś 24% twierdzi, że nie potrafi przeprowadzić takiego zabiegu. W przypadku braku oddechu i krążenia prawidłowe czynności reanimacyjne podejmie zaledwie 13,6%. 25,3% studentów wie, jaki schemat reanimacji należy zastosować w przypadku reanimacji prowadzonej przez jednego ratownika, a 38,5% – przez dwu ratowników. Krwotok z rany poprzez założenie opatrunku uciskowego zatamuje 25,3% ankietowanych, gdy tymczasem opaskę uciskową stosuje 67,3%. Upadek z wysokości czy wypadek komunikacyjny są najczęstszymi przyczynami uszkodzenia kręgosłupa według 27,1% respondentów. W stosunku do ofiar tych wypadków prawidłowo zachowa się, unikając zbędnych ruchów i kon-

trując czynności życiowe, 52,9% studentów. Poziom wiedzy na temat udzielania pierwszej pomocy, szczególnie w przypadkach bezpośredniego zagrożenia życia, jest niewystarczający. Fakt przebytych szkoleń nie wpłynął znacząco na poprawę wyników. Należy również pamiętać, że badano w ankiecie wiedzę teoretyczną, nie sprawdzając umiejętności praktycznych, które powinny być wciąż doskonałe.