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*Knowledge of Basic Life Support algorithms among students
of Lublin's universities*

First aid algorithms seem to be extremely important nowadays. Such skills are especially crucial in countries like Poland since in 2004 there were 51069 road accidents which caused 64611 injured victims. First aid classes are part of teaching program in medical schools as well as during driving courses. Well applied first aid as quickly as possible after accident can save people's life and decrease number of possible complications. In order to achieve increase a chances of survival of 20% of victim first aid should be applied within 5 minutes after occurrence of the injury (4). Considering mentioned above facts in this study we wanted to estimate the knowledge of first aid algorithms among students of Lublin's universities.

MATERIAL AND METHODS

The study was carried out on the form of auditorial survey composed of 32 questions. Most of the questions required multiple- choice answers. All questions were based on ERC 2000 Guidelines since the study was carried out between February and March 2005 (3). Chi-square test was used to test group differences, assuming the significance level of 0.05. All of the subjects were either in the first aid course nor right after the training. We analyzed readiness for applying first aid as well as a possible behavior in case of an emergency such as a road accident. The profile of subjects is shown in Table 1.

Table 1. Characteristics of the studied group (AM – Medical University of Lublin, UMCS – Maria Curie-Skłodowska University, KUL – Catholic University of Lublin, AR – Agricultural University of Lublin, PL – Lublin Technical University)

University	Number of subjects	Sex		Age		Number of driving license holders
		Male	Female	M	SD	
	N					N
AM	315	117	198	22.31	2.54	149
UMCS	282	97	185	21.71	2.19	98
KUL	140	44	96	23.64	2.32	65
AR	160	103	57	22.45	2.47	76
PL	186	132	54	21.56	2.22	118

RESULTS AND DISCUSSION

Seventy per cent of subjects took part in first aid course at least once in a lifetime. However, this fact has no influence on their knowledge regarding Basic Life Support algorithms. Regardless of sex and university education only 15% of all students know a valid algorithm, 16.4% know the correct place of chest compressions and 16.7% were able to give the correct value of rescue breath volume.

Readiness for applying first aid in case of emergency is declared by 40.5% of subjects. A rate of readiness is statistically higher among subjects who underwent first aid training (students of Medical University and driving license holders). Twenty-five and a half per cent of all questioned subjects admit they would be helpless in case of such an emergency. These findings are comparable to the findings of Chemperek and Rudnicka-Drożak (1).

Only 44.6% of driving license holders declared that they are ready to act in case of a road accident. All of them took part in first aid course during the driving course. However, they claim that first aid courses within driving courses are run badly. These findings are in accordance with those of Goniewicz (2).

In case of bleeding the majority of subjects (75.9% regardless of sex and university education) would apply compression dressing and 24.1% would apply a tourniquet. There were no Medical University students in the latter group. These findings show that there is an improvement in students' training in comparison to Chemperek and Rudnicka-Drożak findings.

Eighty-five per cent of all students (100% of Medical University students) know the national emergency number (999) and only 65% of all subjects know a new European telephone number for emergencies (112). In the latter group such a knowledge is correlated with being a Medical University student and being a holder of a driving license ($p < 0.001$).

In case of a burn most of students (67% regardless of sex and university) would use water to cool scaled surface. In case of a fracture the majority of students would immobilize a broken limb. These findings are in accordance to findings of Chemperek and Rudnicka-Drożak (1).

Regardless of sex and university, 92.2% of subjects think that their abilities to provide first aid in case of emergency are insufficient. They believe that first aid courses should be run every few years and 62.5% of all them are willing to take a part in first aid course within a year.

CONCLUSIONS

1. Only 40.5% of all the questioned students declare readiness to apply first aid and it is insufficient.
2. 70% of students took part in first aid courses. However, this fact has no influence on their readiness to act in case of emergency.
3. All of driving license holders did first aid training during driving course and they claim that such courses are run badly.
4. Most of students are capable to act in cases of burns, bleeding and fractures.
5. 92.2% of all subjects think that their abilities to apply first aid are insufficient and that first aid courses should be repeated every few years.

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SUMMARY

An increase in the number of road accidents has been observed in Poland recently. Many road accidents victims can be rescued by other drivers. Due to a big number of road accidents in Poland it seems that knowledge of BLS is crucial in our country. The aim of the study was to evaluate knowledge of BLS algorithms and readiness to act in case of a road accident among students of Lublin's universities. The study was carried out among 1,083 students of the Medical University of Lublin, Maria Curie-Skłodowska University, Catholic University of Lublin, Agricultural University of Lublin and Lublin Technical University between February and March 2005 by means of auditorial survey composed of 32 questions. Despite taking part in first aid course in the past only 40.5% of students would act facing a road accident. Most of the questioned students do not know the correct BLS algorithm. Knowledge of first aid in case of a car accident and BLS algorithm is unsatisfactory. Most of the students are capable to act only in case of burns, bleeding and fractures.

Znajomość algorytmów pierwszej pomocy pośród studentów uczelni wyższych Lublina

Obserwuje się wzrost liczby wypadków samochodowych na terenie Polski. Wielu rannym osobom pomocy można udzielić przed przyjazdem karetki pogotowia. Umiejętność udzielania pierwszej pomocy ofiarom wypadków jest szczególnie potrzebna. Celem badania była ocena znajomości algorytmów udzielania pierwszej pomocy przez studentów uczelni wyższych Lublina oraz umiejętności podjęcia działań w wypadkach komunikacyjnych. Badania przeprowadzono wśród 1083 studentów Akademii Medycznej, Katolickiego Uniwersytetu Lubelskiego, Uniwersytetu Marii Curie-Skłodowskiej, Akademii Rolniczej oraz Politechniki Lubelskiej w okresie luty–marzec 2005. Badania przeprowadzono metodą sondażu diagnostycznego techniką ankiety audytoryjnej, wykorzystując kwestionariusz własnej konstrukcji, składający się z 32 pytań. Pomimo że większość badanych deklarowała udział w kursach pierwszej pomocy przedmedycznej, to tylko 40,5% osób podjęłoby działania w wypadku komunikacyjnym. Większość ankietowanych nie zna obowiązujących schematów prowadzenia akcji reanimacyjnej. Znajomość zasad udzielania pierwszej pomocy ofiarom wypadków komunikacyjnych oraz znajomość zasad zabezpieczenia miejsca wypadku jest niesatysfakcjonująca. Większość studentów zna zasady prawidłowego postępowania jedynie jeśli idzie o oparzenie, krwawienie lub złamanie kończyny.