

The knowledge of European Resuscitation Council Guidelines 2010 among students of emergency medicine at the Medical University in Lodz

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Received: 2013.012.11 • Accepted: 2013.12.13 • Published: 2013.12.20

Summary

Introduction: We are living in a time of very rapid changes, therefore the risk to human life is extremely high. The dynamic development of medical science with the simultaneous introduction into daily clinical practice, strict rules of conduct rescue, raise the public expectations for efficiency in the health and life saving in emergency situations of life.

Research problems: Demonstrate the level of preparedness of each student majoring in Emergency Medical Services of knowledge of the guidelines of the European Resuscitation Council in 2010.

Material and methods: The study group are students of Emergency Medical Services at the Medical University of Lodz. Material for analysis consisted of 90 questionnaires, there were 30 questionnaires for each individual year of study.

Results: The study shows that among the students of the second and third year, 100% of respondents noted the content of the guidelines , while only 57% of respondents from the first year noted the guidelines.

Conclusions: Level of knowledge of the guidelines of the respondents from the second and third year is similar. Third – year students have to learn more about the scope of the guidance.

Key words: cardiopulmonary resuscitation, 2010 ERC Guidelines.

Introduction

We are living in a time of very rapid changes, therefore the risk to human life is extremely high. The dynamic development of medical science with the simultaneous introduction into daily clinical practice, strict rules of conduct rescue, raise the public expectations for efficiency in the health and life saving in emergency situations of life. Sudden cardiac arrest is always a dramatic event which

threatens the existence of humans in a very high degree². resuscitation is to restore using rescue methods of spontaneous blood circulation and breathing or circulation with no consciousness return¹. Knowledge of CPR is still growing , that's why the guidelines are to be constantly updated to increase the effectiveness of treatment. However, despite the fast development of knowledge in the field of resuscitation techniques and pharmaco-

therapy is far efficiency resuscitation and CPR are very low – at around 6%2. Implementation of new recommendations does not mean that the former ones are ineffective or dangerous. Previously described inefficiency is not associated with the fact that the procedures are bad, this is due to the time of taking actions2.

The purpose and the scope of work

The aim of the study was to compare the knowledge degree of the guidelines of the European Resuscitation Council in 2010 among students of various years at The Faculty of Health Sciences at the direction of Emergency Medical Services at the Medical University of Lodz.

Research problems

The main problem of the research is to demonstrate the level of preparedness of each student majoring in Emergency Medical Services for the exam on the subject of advanced rescue procedures that largely will be based on knowledge of the guidelines of the European Resuscitation Council in 2010, as well as preparation for further work.

Detailed research problems

- 1) Knowledge of basic life support in adults;
- 2) knowledge of electrotherapy;
- 3) Knowledge of advanced life support in adults;
- 4) Knowledge of the preliminary investigation in acute coronary syndromes;
- 5) Knowledge of advanced life support in children
- 6) Knowledge of newborn resuscitation immediately after birth.

Hypotheses

I conclude that the knowledge of the students will grow with the number of completed semesters, thus preparing for the exam, as well as for further work will be much better.

Material and methods

The study group are students of Emergency Medical Services at the Medical University of Lodz. The anonymous survey consisted of specifications, questions of fact to become acquainted with the ERC Guidelines 2010, and 20 questions about the proceedings in accordance with in the guidelines in the form of a single choice test. Each question had 4 response

options, only one answer was correct. For each correct answer was awarded 1 point, and for every wrong 0 points. For the lack of response or two answers were given 0 points. There was no time limit to solve the polls. Attention was paid to the independence of filling the questionnaire. Material for analysis consisted of 90 questionnaires, there were 30 questionnaires for each individual year of study.

Application of statistical methods

For statistical analysis of collected research material used spreadsheet Microsoft Excel 2010 with the function of the descriptive analysis of the data and the PivotTable.

Results

The study shows that among the students of the second and third year, 100% of respondents noted the content of the guidelines, while only 57% of respondents from the first year noted the guidelines.

The number of surveyed men and women was

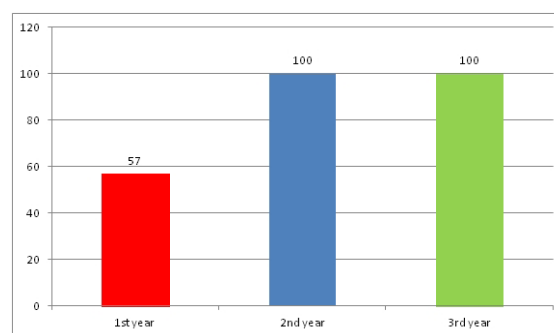


Figure 1: Percentage familiarized with the guidelines of the European Resuscitation Council 2010.

similar. To win the first place, which respond to the highest number of correct compared to other years, the winning group receives 3 points, second place is 2 points, and the last is only 1 point. Scoring lets determine the ranking of the knowledge of the guidelines each year relationship.

The total classification score, the most points were won by the respondents from the second year, they won 50 points. Second – respondents from the third year scored 46 points, and half the points scored by the second year for the third place were students from the first year.

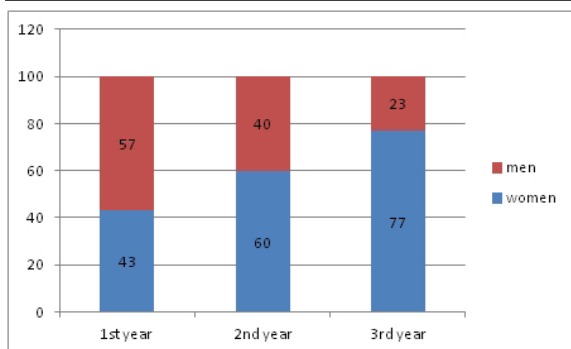


Figure 2: Percentage of men and women each year in the study.

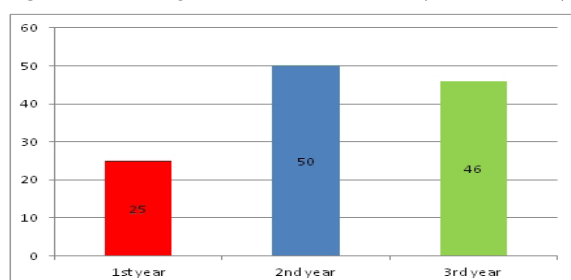


Figure 3: Summing up the number of points for each of the years.

After summing up the correct answers by all respondents from different years of study we will see that this statement reflects the summary point that we created for the purpose of work

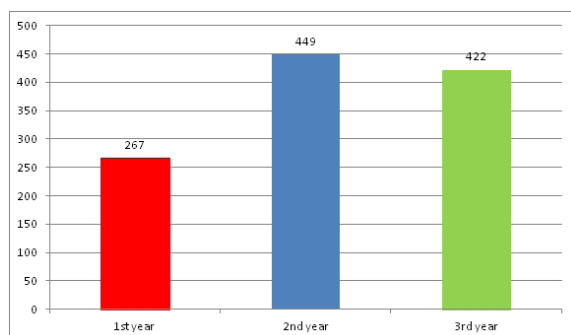


Figure 4: Summing up the number of correct answers given by each of the years.

Discussion

In the case of health or life emergency significant role for action is to be played by the witnesses. Unfortunately, aid is often not granted due to lack of knowledge on the subject. Research shows that up to 41% of the surveyed students (non-medical studies) In the Tri-City has a low level of knowledge in providing first aid³. Fire brigade, placing first on the obtained 80% correct answers , which is a satisfactory result⁵. In contrast, other services

less familiar with the principles of first aid, police gave 51% of correct answers, and municipal guards only 41%⁵. The need to help the injured in a sudden state of danger to life or health shall be governed by the relevant provisions of law, including art. 162 of the Penal Code⁴. The survey results demonstrate the need to change the state of students' awareness of emergency medical services in the field of knowledge of the ERC Guidelines 2010. It is not the whole area of knowledge that graduate direction but should have an excellent foundation for further learning process. The current guidelines of the European Resuscitation Council (ERC), including the method of treatment, which supported the current knowledge, research and experience. ERC Executive Committee considers the current guidelines for the most effective and easy to learn. Equipment differences may necessitate changes in individual countries. Guidance are written in such way as to be enable their easy adaptation to the situation.

Certainly Guidelines 2010 are not the best solution and do not stand for all the problems. On the other hand, we can surely say that their best advantage is that they. Identify the recommended procedure. However, we should keep on mind that according to the algorithm the previous step has been ineffective and the patient is still in the state of cardiac arrest. We also have to remember that we treat the patient, not the ECG monitor.

Conclusions

Research analysis shows that:

- 1) only 57% of respondents from the first year took note of the content of the guidelines of the European Resuscitation Council, the remaining respondents are familiar with the content of the guidelines;
- 2) level of knowledge of the guidelines of the respondents from the second and third year is similar;
- 3) second – year students scored more points in the general classification;
- 4) third – year students have to learn more about the scope of the guidance.

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