Public Confidence and Self-Reported Efficacy in Basic Life Support Skills in Cypriot General Practice

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1. Aims

This questionnaire study aims to investigate the attitudes of laypeople in Cyprus in the confidence and skill level in performing Basic Life Support (BLS) skills, primarily cardiopulmonary resuscitation (CPR). The focus is on on self-reported ability, willingness and barriers to attaining further training.

2. Introduction

Sudden cardiac death following an out-of-hospital cardiac arrest (OHCA) is the third leading cause of death in industrialised nations[1]. OHCA affect over 350,000 people across Europe. 100,000 of these people could be saved each year if more laypeople were effective at providing bystander resuscitation, such as immediate chest compressions before emergency services arrive[2]. There has been increasing access to CPR training however there is still an unwillingness from people to perform CPR[3]. This project will explore current knowledge of BLS and feelings towards it. Similar studies have been performed for other nations but a literature review showed no such study had been performed in Cyprus.

The project hypothesis is that there is room for improvement in BLS skills and confidence in the Cypriot public.

3. Methods

A questionnaire adapted on that used by Aaberg et al. in 2014[4], focused on understanding, and that used by Cheskes in 2014[5], focused on public perceptions, was used. The questionnaire was distributed by email to patients registered at the Apostolos Loukas Medical Centre, Nicosia and completed through Google Forms.

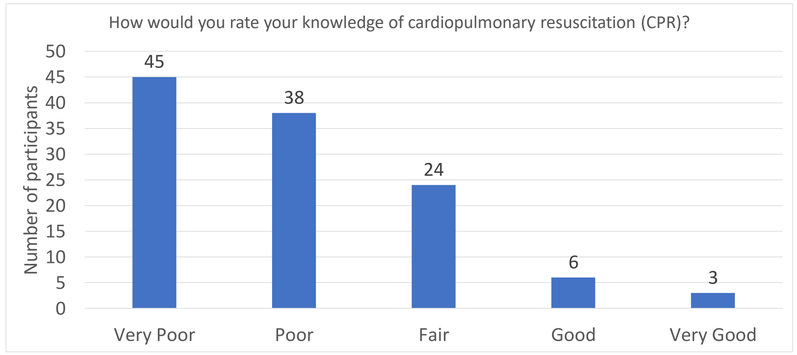
The data was processed in Google Sheets. Anonymity was safeguarded throughout.

The project was reviewed and approved by:

- Nicoletta Nicolaou, Academic Lead and Chief Examiner for SSC at St George's, University of London at the University of Nicosia
- Professor George Samoutis, Clinical Director Apostolos Loukas Medical Centre, Clinical Professor University of Nicosia Medical School
- The project has received ethical approval from the Cyprus National Bioethics Committee (CNBC)

4. Results

116 questionnaires were completed over the two week data collection period. Of these 72 (62.1%) had never received BLS training. Of the 44 participants that had received previous training, 16 specified that the training had been received within the last 5 years. 4 of the 116 had performed CPR in a real-life emergency.



Only 7.8% of participants rated themselves in the top two categories of knowledge of CPR. When asked "to what extent do you feel able to perform basic life support?" 9.5% of participants felt they were prepared. Common fears were due to not knowing what to do, doing harm or something wrong. There were also fears of seeing someone die and legal responsibilities.

Question	Correct response	Count of correct answers	Count of incorrect answers	Answered "Don't Know"
1: What is a cardiac arrest?	The person is unconscious and not breathing normally	80 (69.0%)	21 (18.1%)	15 (12.9%)
2: Suddenly a person becomes unconscious and collapses. What do you do?	Shake the person to see if he/she wakes up then call for help	65 (56.0%)	44 (40%)	7 (6.0%)
3: How do you know if a person is breathing normally?	I put my ear over the mouth looking for the chest to rise	89 (76.7%)	23 (19.8%)	4 (3.4%)
4: Who do you call in a cardiac arrest situation?	The ambulance	110 (94.8%)	5 (4.3%)	1 (0.9%)
5: What is cardiopulmonary resuscitation?	30 chest compressions in the middle of the chest followed by 2 ventilations	32 (27.6%)	40 (34.5%)	44 (37.9%)
6: How do you perform ventilations to an unconscious person?	By breathing into the mouth or nose until the chest rises	52 (44.8%)	29 (25.0%)	35 (30.2%)
7: What do you do if you are in doubt whether the person is having a cardiac arrest?	If in doubt, I start cardiopulmonary resuscitation	37 (31.9%)	70 (60.3%)	9 (7.8%)
8: What is an AED?	An electronic device that can potentially restart the beating of the heart	75 (64.7%)	12 (10.3%)	29 (25.0%)

5. Discussion

The results from the questionnaire show a clear picture that the majority of participants did not feel knowledgeable in BLS skills and as such would not be confident in performing basic life support skills. The majority (72.4%) did not know the ratio for chest compressions to rescue breathes which is essential to provide the most effective CPR.

There were some limitations to this project in that the sample from the general practice does not represent the general public. To engage in clinical research may show an interest in healthcare and science. Therefore I hypothesise that the true confidence and efficacy of the Cypriot general public may be lower than that reported here. Another barrier was that this questionnaire was only available in English. This could have effected the results in that participants may have performed worse in this questionnaire due to translation issues. It also excludes a significant population that do not speak English in Cyprus.

6. Conclusions

This project highlights that there is a need for improved access to Basic Life Support teaching in Cyprus. Of the 116 participants, 59 showed interest to attend an informal training session provided by medical students. Additional comments left by participants stated opinions that training should be more widespread, even mandatory, especially in schools.

We hope to extend this project to provide training to those interested and see how much of an impact this has on knowledge and confidence in performing basic life support skills.

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Acknowledgements

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