Evaluating the psychological impact of practice dispatch-assisted cardiopulmonary instructions using the ALERT protocol: preliminary results in Liege dispatching centre.

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ABSTRACT

Background. The ALERT algorithm, an effective compression-only phone cardiopulmonary resuscitation (CPR) protocol has the potential to help bystanders initiate CPR. This study evaluates the psychological impact of the CPR's practice on untrained persons (UP).

Methods. A 3-month quasi-experimental longitudinal study (n = 153). We used: demographics data, CPR emotional characteristics; the Peritraumatic Dissociative Experiences Questionnaire; the Way of Coping Check List and the Impact of Event Scale.

Findings. Two psychological profiles: UP at high risk to develop a post traumatic stress disorder (PTSD) (higher average scores; high emotional distress during the CPR) versus UP at low risk.

Discussion. These preliminary results highlight the importance of identifying the psychological profile of the UP in a CPR. UP at high risk should be treated differently. First, take the time to reduce emotional distress and then only talk about the CPR. This step could reduce the risk for PTSD.

Introduction

Recent reports suggest that witness presence during cardiopulmonary resuscitation (CPR) may be associated with a significantly lower incidence of post-traumatic stress disorders-related symptoms (PTSD) (Jabre et al., 2013). However, little is know about the psychological burden of bystanders further involved in dispatcher-assisted CPR.

The ALERT algorithm, a simple and effective compression-only phone CPR protocol has the potential to help bystanders initiate the procedure (Ghuyzen, A.; et al., 2011).

Aim of the study

This is a quasi experimental longitudinal study (n = 153). We used: demographics data, CPR emotional characteristics; the Peritraumatic Dissociative Experiences Questionnaire; the Way of Coping Check List and the Impact of Event Scale.

Patients and Methods

We selected the 153 dispatching-center calls concerning out-of-hospital cardiac arrest from March to June 2012. Audio recordings of calls allowed the identification of bystanders phone CPR attempts, with the exclusion of technical problems or volunteers with prior medical or paramedical training. Included UP (be aged over 18 years) were joined by phone contact after six attempts, with the exclusion of technical problems or volunteers with prior CPR attempts. We selected the 153 dispatching-center calls concerning out-of-hospital cardiac arrest.

Methods

Recruitment (N = 153)

Out of the 153 dispatching-center calls, 44 participants were eligible cases. Out of these, 26 declined their participation in the study because of language constraints, lack of times, or no interest.

Socio-demographic-medical data of the participants (N = 18):

- Mean age was 49, with a sex ratio of 8 men for 10 women; four participants used psychotropic medications before the resuscitation.

Results

Recruitment (N = 153) (cf. Fig. 1)

Out of these, 26 declined their participation in the study because of language constraints, lack of times, or no interest.

Socio-demographic-medical data of the participants (N = 18):

- Mean age was 49, with a sex ratio of 8 men for 10 women; four participants used psychotropic medications before the resuscitation.

Discussion

Participants to phone-CPR attempts are responsible for a relative psychological stress among untrained persons (UP): out of the 18 participants, only 6 high-risk PTSD participants could be detected (with and without CPR attempts).

However, the results must be interpreted carefully because the PDEQ score is obtained with a retrospective memory. A second difficulty, after six months, is to distinguish between PTSD symptoms and symptoms of grief related to the lost of a loved one.

To develop strategies to prevent the occurrence of PTSD, dispatchers must be trained to cope with dimensions such as: being a woman and having an emotional attachment to the victim, describing dissociative experiences such as (cf. items PDEQ).

- What was happening seemed unreal, like I was in a dream and I was playing a role in it.
- I was confused at times I had difficulty understanding what really happened.

For a CPR, we recommended that UP at high risk should be treated differently. first, take the time to reduce emotional distress and then only talk about the CPR. This step could reduce the risk for PTSD.

References


Keywords

Cardiopulmonary resuscitation Post-traumatic stress disorder Untrained person

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