Can first aid training encourage individuals’ propensity to act in an emergency situation? A pilot study

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ABSTRACT

Objective To explore the effect that different activities included in first aid training can have on an individual’s propensity to act in a medical emergency.

Design Additional pilot-developed activities were added to a core first aid training session to create six unique groups, including a control group where no activities were added. Participants rated their agreement to pre-identified fears following the course and scored their self-efficacy and willingness to act before, immediately after and 2 months after the course. Change values were compared between groups.

Setting Three locations in the UK (community halls, schools).

Participants 554 members of the public were recruited using advertising and community groups. A deliberately broad demographic was sought and achieved using targeted approaches where a particular demographic was deficient.

Intervention Each participant attended one British Red Cross first aid course lasting 2 h.

Main outcome measures The same questionnaire was completed by all participants before and after each course. Two months later all participants were asked a series of follow-up questions.

Results All courses showed an increase in self-efficacy and willingness to act immediately following the course. The course, which included both factual information relevant to helping in an emergency and ‘helper’ identity activities, produced significantly more positive responses to pre-identified fears.

Conclusions Activities which allow the learner to explore and discuss behaviour in an emergency situation can effectively increase the learner’s propensity to act. First aid education should be expanded to support the learner to develop both the skill and the will to help.

INTRODUCTION

First aid training is widely advocated to help save lives but, to achieve that, learners need to use their skills. Unfortunately training does not always translate into helping behaviour.1 In the UK only 7% of the population is both skilled and willing to help a stranger.2 This study builds on the concept of increasing the propensity to act through first aid education. Its objective was to explore the effect that different activities included in first aid training can have on an individual’s propensity to act in a medical emergency.

METHODS

Based on discussion within a focus group, activities targeted at increasing willingness to act were added to British Red Cross first aid courses lasting 2 h, leaving one as a control course, as set out in table 1.

Sample

A total of 554 members of the public aged >10 years across three locations recruited using local advertising received training. Each was allocated to a course using non-random methods to provide a mixed demographic for each course type.

Measures

Propensity to act was measured as willingness and self-efficacy as validated by Bandura3 (that an increase in self-efficacy leads to behaviour change). All participants completed a pre- and post-course questionnaire in which they rated their willingness to help in an emergency situation, their self-efficacy to use first aid skills effectively and, following the course, any change to pre-identified fears about stepping in to help, measured on a Likert scale.

Table 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Name</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Control course</td>
<td>First aid only</td>
</tr>
<tr>
<td>B</td>
<td>Information course</td>
<td>First aid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video to trigger discussion of bystander effect. 999 activity</td>
</tr>
<tr>
<td>C</td>
<td>Helper course</td>
<td>First aid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video to initiate a discussion on qualities of a helper. Helper qualities’ activity</td>
</tr>
<tr>
<td>D</td>
<td>Red Cross course</td>
<td>First aid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video and activity to aid discussion on qualities of someone who shares the values of the Red Cross</td>
</tr>
<tr>
<td>BC</td>
<td>Information and helper course</td>
<td>As for B and C</td>
</tr>
<tr>
<td>BD</td>
<td>Information and Red Cross course</td>
<td>As for B and D</td>
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</tbody>
</table>
Participants rated their willingness and self-efficacy again 2 months later.

RESULTS
The demographic split of the results is shown in table 2.

Willingness to help
Following the removal of records which were incomplete (n=89), across all interventions including the control, useable records (n=465) showed an increase in willingness to help following the training intervention and 2 months later. There was no significant difference between courses although the greatest positive change occurred with strangers (positive change to help a family member=27.4% vs positive change to help a stranger=64.4% immediately after the course).

Self-efficacy
The majority of participants across all courses increased their self-efficacy score following the training course, and many scored themselves even higher 2 months later. No one intervention course stood out as significantly increasing self-efficacy above any other course. The Information and helper course (BC) received the highest percentage of participants with a positive change in self-efficacy between the pre-course score and 2 months later, but this was marginal compared with the control (88.9% for Control course A vs 91.2% for course BC). The Information course (B) scored the highest percentage change between pre- and post-course (90.5% vs 85% for the Control).

Pre-identified fears about stepping in to help
As shown in figure 1, when comparing the Control course (A) with those taught the Information and helper course (BC), many participants said they were much less worried about getting sued in an emergency situation (46% vs 23%) and much less worried about getting involved when confronted with an emergency situation (46% vs 22%) (both significant at 99.9% probability using a t test).

DISCUSSION
The Control course (A) confirmed that doing a first aid course does, in itself, increase confidence and willingness to act. However, while individual parts of the research are not conclusive, taken together the results of this study show that it is possible for course content to increase the likelihood that someone who has learned first aid skills will help a stranger in an emergency.

Although the extent of behaviour change can vary, activities which allow the learner to explore and discuss behaviour in an emergency situation can effectively increase the learner’s propensity to act. Consequently, to make first aid education more effective the core content should be expanded to support the learner in developing both the skill and the will to help.

The lack of stratified randomisation of participants is a weakness which limits the comparability of this study with the randomised deception trial by Van de Velde et al in which helping behaviour added to first aid education did not affect the speed of intervention. Further study which incorporates a randomised deception trial would test Bandura’s model that an increase in self-efficacy can lead to behaviour change in situations of...
medical emergency and would be a worthwhile development of this study to identify the most effective first aid education.

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Contributors EO wrote and edited the submitted manuscript. JC was the project manager who managed the collection of evidence for this project, including assisting with the project design, recruitment of trainers and marketing of the courses, and wrote the original project report for internal use. DM provided statistical analysis and advice for this project.

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Competing interests None.

Ethics approval Ethics approval was not sought, however all participants were informed that they were part of a research project but not the subject of the research. The courses were provided free of charge, but it was a condition of attending the course that the pre-and post-course questionnaire was completed. Participants were free to withdraw.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement A full write-up of this study, data tables, copies of questionnaires and programmes of study are available on request from the corresponding author.

REFERENCES
2 Penrose H. First aid research amongst the general public measuring confidence, competence and willingness to act. British Red Cross, 2009.