Renmark Community Engagement Project
CPR for Young Mothers
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Introduction
Immediate bystander CPR is an effective immediate management for victims of cardiac and respiratory arrest which can dramatically improve chances of survival (Nolan & Hazinski et al 2010). Bystander CPR rarely leads to harm in victims and should hence be encouraged wherever possible (Soar & Mancini et al 2010). A single one-hour training program has demonstrated efficacy in improving participant confidence and knowledge in reacting in emergency situations and performing CPR (Kelley, Richman, & Ewy et al. 2006).

The CPR for Young Mothers program was based on the CPR for Kids program. The target cohort was selected based on perceived community need and targets a group of young mothers who may be first responders in an emergency situation.

Methods
Participants were recruited from a group of young mothers aged 16-25 currently enrolled in a Flexible Learning Option in the Riverland. On the day of the teaching session, participants were given consent forms and a pre-session questionnaire, assessing confidence and knowledge regarding the provision of CPR. Confidence was measured by asking participants to rate their level of confidence regarding various aspects of CPR on a scale of 1-5 (1 = not confident at all, 5 = very confident). Knowledge was measured by asking participants specific questions about the details of CPR, such as ratio of compressions to breaths, rate of compressions and location of compressions, a score of 3 was given for each correct answer.

A one hour teaching session was conducted by a group of Second Year Medical Students and included a brief explanation and demonstration of CPR followed by 4 hands-on stations featuring a variety of mannequins simulating different ages and body types, a choking infant scenario, and use of an AED.

Immediately after the teaching session, a post-session questionnaire, identical to the pre-session questionnaire, was completed by participants. Scores were calculated in the same manner as in the pre-session questionnaire and the pre- and post-session data for each participant was analysed for changes.

Knowledge and confidence scores were added for each participant and converted to a percentage of the maximum possible score for each domain.

Results
Three participants attended on the day of the teaching session (n=3). All participants saw an increase in knowledge after the teaching session (figure 1). Confidence increased in 2 of the 3 participants, however one participant’s confidence score decreased after the teaching session (figure 2).

Discussion
Overall there were immediate improvements in knowledge (46%) and confidence (30%) scores across the three participants after a one-hour teaching session. However, one of the participants showed a decrease in confidence score after the teaching session. One of the possible reasons for this is that the teaching style employed might have lacked certain factors such as encouragement and enthusiasm. Another reason could be that during the teaching, medical jargon may have been overused which would have confused the participants. Moreover, some of the participants disclosed prior first aid experience, which may have led to overconfidence. It is also important to acknowledge that our study had a limited sample size (n=3) which would make it difficult to extrapolate the study results. Possible explanations for this would be due to school holidays that were occurring at the time the study was conducted. Overall, the results of this study appear to be promising and indicates the possibility of application to other population groups. Comments from the participants were overwhelmingly positive. Future research might aim to assess longitudinal knowledge retention (potentially via follow up questionnaires at a later time) and assess competence through formal assessment scenarios. This would allow assessment of confidence maintained and knowledge retained by the participants and give a measure of competence as well. Finally, it is imperative to ensure a larger sample size to improve data quality.

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References