

Category : **Cardiovascular: cardiac arrest\CPR\eCPR**

A273 - The association of gender with cardiopulmonary resuscitation performance, knowledge, and attitudes amongst laypersons in singapore

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Introduction:

Clinical research has found that males tend to achieve better CPR performance, particularly in compression depth. However, limited research has been conducted in the Asian context and few papers delve in-depth into the effect of gender on additional factors, such as CPR knowledge and attitudes. The objective of this paper was to uncover the association of gender with CPR performance as well as the knowledge and attitudes of laypersons towards CPR following CPR training in Singapore.

Methods:

We evaluated the CPR performance of 983 participants by analysing the metrics of compression depth, rate and flow fraction as measured by the CPRCard™. The criteria for adequate CPR were defined according to the Singapore Resuscitation and First Aid Council guidelines in 2021. We assessed participants' knowledge and attitudes via pre-training and post-training surveys. We also gathered feedback on the CPRCard™ via a survey employing a Likert scale.

Results:

Male participants attained a statistically significantly higher proportion of compressions meeting the requirements of adequate rate (81.5% vs 74.2%; $p < 0.001$) and depth (81.0% vs 76.7%; $p = 0.001$). Prior to training, there was a statistically significant difference in the total knowledge quiz scores between genders, favouring males ($p < 0.001$); however, this gender gap became statistically insignificant after training ($p = 0.454$). The training had a positive impact on both male and female attitudes towards CPR, with a more pronounced effect observed in females. Overall, feedback on the CPRcard™ was favourable, with increased confidence and perceived ease of use, particularly in the male population.

Conclusion:

The male gender was associated with better CPR compression depth, rate, and flow fraction. CPR training played a crucial role in bridging the knowledge gap between genders and fostered increased confidence among participants. Emerging feedback devices such as the CPRCard™ maintain a promising outlook.