Aim Multiple studies affirm that Bystander CPR (BCPR) improves outcomes in Out-of-hospital Cardiac Arrest (OHCA). This study investigates age and other factors in affecting BCPR rates in Singapore.

Method Data was extracted from the national cardiac arrest registry. OHCA cases in Singapore conveyed via emergency medical services from April 2010–December 2015 were included. Zipcodes of arrest location, census data from 2010–2015 and planning areas were used for geospatial analysis. Multivariate logistic regression was performed to investigate the association between patient demographics and pre-hospital data with BCPR.

Results 8955 cases were split into 3 groups: Paediatric (Age 0–10 years; n=107), Young (Age 11–65 years; n=3979), Old (Age>65 years; n=4869). Compared to the Old, Paediatric and Young patients had higher rates of BCPR (OR 3.997, 95% CI: 2.567 to 6.224; OR 1.133, 95% CI: 1.027 to 1.249). Non-traumatic arrest (OR 2.550, 95% CI: 1.743 to 3.731) and Witnessed arrest (OR 1.267, 95% CI: 1.157 to 1.387), positively associated with BCPR, while arrest in residential location (OR 0.655, 95% CI: 0.441 to 0.973) negatively associated with BCPR. Of the OHCA in residential locations, patients in neighbourhoods with younger population were more likely to receive BCPR (OR 1.242, 95% CI: 1.061 to 1.453) compared to older neighbourhoods. There was no association with gender and major race groups, and univariate analysis showed no difference in BCPR rates between family bystanders and other layperson bystanders.

Conclusion Older patients, residential arrests and older neighbourhoods were associated with lower rates of BCPR. Public education and training programs can be targeted to these populations to improve BCPR rates.

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Aim Starting first aid education in early childhood can be an effective method of knowledge transfer. Our aim was to examine first aid education related opinions of kindergarten- and primary school children, educators, and parents.

Method Eight-hundred seventy-one people (700 kindergarten- and primary school children, 29 educators, 142 parents) were involved in our study. Opinions were measured with self-edited questionnaires, containing mainly open questions.

Results Based on the answers, the majority of children (90%) enjoyed our programme, they would like to participate further first aid programmes in the future. General opinions of parents and educators about first aid education in childhood were mainly positive, but they also gave negative ones. The majority of participants (90%) had a positive opinion about our completed programme. Based on the opinions of parents and educators first aid education is recommended by health care professionals. Opinions were independent from gender (p=0.302), age (p=0.512), time of working with children (p=0.251).

Conclusion Children’s opinion about the first aid programme were mainly positive. General opinions of parents and educators were different, but were positive related our programme. Based on this results opinions can change with concrete activities and can make first aid education more popular/acceptable by laypeople.