Title: *I don't want to put myself in harm's way trying to help somebody*: Knowledge and attitudes towards bystander CPR in North East England – findings from a qualitative interview study

Background

Out of hospital cardiac arrest (OHCA) is a time-critical event with a low survival rate. Bystander cardiopulmonary resuscitation (BCPR) and public access defibrillator (PAD) use more than doubles the chance of survival but is delivered in only 40% of cases. Research suggests low rates of BCPR are correlated to lower socio-economic status (SES). The aim of this study was to explore the perceptions and willingness of individuals to deliver BCPR/use a PAD in communities of varying SES across North England.

Methods

A qualitative study between September 2021 and January 2022; this study formed one phase of a broader mixed methods project focused on understanding the role of health and social inequalities within BCPR. Participants were identified from those who participated in a survey conducted during an earlier phase of the study and who consented to being re-contacted for interview. Participants were purposively sampled according to SES, age and gender. SES was classified using the Index of Multiple Deprivation (IMD) decile (1 most deprived - 10 least deprived). Interviews were transcribed verbatim and analysed using reflexive thematic analysis.

Results

There were 277 survey participants who agreed to be recontacted regarding interview. Twenty in-depth semi-structured interviews were conducted (participants were 50% female, aged 21-73 years (mean 50 years), mean IMD 5). Mean interview length was 49 minutes. Analysis indicated perceptions and attitudes towards BCPR were underpinned by multiple , intersecting factors, contextualised by the individual's unique position within society. A poor understanding of BCPR and very limited knowledge of PAD use was uncovered, precipitated by language and education marginalisation. Willingness and confidence to attempt BCPR, particularly during the Coronavirus pandemic, was driven by a sense of social cohesion. Barriers to delivering BCPR initiatives existed in all communities, and particularly closed communities such as those not in employment.

Conclusions

Willingness and ability to deliver BCPR appears to lie beyond SES alone. Future initiatives to improve rates of BCPR should take an intersectional, place-based approach, and be co-developed in conjunction with local communities and delivered in close proximity to the homes of individuals. Further research is required to understand how future targeted initiatives should be delivered and how these translate to improved outcomes from OHCA.

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