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## **Police response to out-of-hospital cardiac arrest: the importance of confidence**

Letter in response to:

Salhi et al. The association of fire or police first responder initiated interventions with out of hospital cardiac arrest survival. *Resuscitation*. 2022;174:9-15.

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*To the editor,*

We read with great interest Salhi and colleague's important study on the association between police and fire-service delivered interventions in out-of-hospital cardiac arrest (OHCA) and patient outcome, which was recently published in *Resuscitation*.<sup>[1]</sup> This large registry-based observational study reported an association between police or fire-service initiation of cardiopulmonary resuscitation (CPR) and improved survival with favourable neurological outcome (adjusted odds ratio 1.40, 95% confidence interval 1.18 to 1.65). The study provides further support to the existing recommendations supporting the dispatch of police and fire services as part of an organised response to OHCA.<sup>[2, 3]</sup>

In the UK, police services are not routinely dispatched to attend medical emergencies, such as OHCA. However, they may nevertheless be first on scene at medical emergencies, either because they are dispatched as part of a multi-agency emergency response to an incident or through coming across events on routine patrol. Where a police officer is first on scene, a key barrier to effective treatment may be the police officer's level of confidence in delivering first aid. A 2018 UK inquiry reported that police support of the medical response at a major incident was, in part, hindered by police officer's lack of confidence in their first aid skills.<sup>[4]</sup>

We recently conducted an online survey to evaluate the level of confidence of UK police officers in responding to OHCA and other medical emergencies. The sample was special constables within one English police force. Special constables are UK volunteer police officers, but who have the same training and statutory powers as paid police officers. We received 83 responses (response rate 28%). Participants ranked confidence in managing medical emergencies using a five-point Likert type scale (1-not confident at all; 5-completely confident). The survey study was approved by the University of Warwick Biomedical and Scientific Research Ethics Committee.

All respondents had received at least basic first aid training (a one-day training course), and 60% had delivered first aid on duty. Median level of confidence using first aid was 4 (interquartile range (IQR) 3-4). Lowest levels of confidence were reported with drug overdoses and mass casualty incidents (both median 3, IQR 2-4). Median level of confidence in responding to cardiac arrest was 4 (IQR 3-5), but 28% of respondents reported a confidence level of three or less. Receiving more advanced first aid training was associated with improved confidence.

Our survey findings highlight that police officers frequently deliver immediate medical care, even in systems where they are not specifically dispatched to do so. However, despite frequent training, there is a lack of confidence in managing key conditions. There is a need for further work to understand levels of training and confidence in other services, and potential facilitators and barriers to police-delivered first aid.

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## References

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- [4] Kerslake R, Deeming H, Goodwin A, Liund K, Wahlström M. The Kerslake Report: An independent review into the preparedness for, and emergency response to, the Manchester Arena attack on 22nd May 2017, 2018. (Accessed 4 April 2022 at <https://www.kerslakearenareview.co.uk/documents/>)

Conflicts of interest: None