Evidence suggests that relatives offered the opportunity to observe cardiopulmonary resuscitation at home are less likely to have post-traumatic stress disorder symptoms.

**Family presence at resuscitation attempts**

**In this article...**
- Current evidence and advice on family presence at cardiopulmonary resuscitation
- A randomised controlled trial on the psychological effects on relatives of seeing cardiopulmonary resuscitation at home
- Expert commentary on the findings of this trial

**Author** Helen Jaques is a medical writer, Evidence Information Services, National Institute for Health and Care Excellence.


UK resuscitation guidelines suggest that parents and carers should be allowed to be present during a resuscitation attempt in hospital but no guidance is available regarding family presence when resuscitation takes place out of hospital.

A new research study has suggested that relatives who were offered the opportunity to witness resuscitation were less likely to develop symptoms of post-traumatic stress disorder than those who were not given the chance.

This article summarises the results of this study and provides an expert commentary on its conclusions.

**Current advice**
The guidelines for resuscitation from the European Resuscitation Council (Lippert et al 2010), of which the UK Resuscitation Council is a member, recommend that family members should be offered the opportunity to be present during resuscitation attempts.

The Resuscitation Council UK’s (2010) guidelines (accredited by the National Institute for Health and Care Excellence) suggest that parents or carers should be allowed to be present during an in-hospital resuscitation attempt of their child, but makes no recommendations regarding family presence at resuscitation for out-of-hospital cardiac arrest.

**New evidence**
Jabre et al (2013) undertook a cluster randomised controlled trial to establish whether offering relatives the chance to observe cardiopulmonary resuscitation affected whether they subsequently experienced negative psychological symptoms.

Between November 2009 and October 2011, 15 pre-hospital emergency medical service units in France participated in the study. Eight units systematically asked family members whether they wanted to be present during cardiopulmonary resuscitation of an adult relative in cardiac arrest at home (intervention). The remaining seven units followed standard practice for interacting with relatives (control). Family members were contacted by telephone 90 days after their relative’s successful or unsuccessful resuscitation and asked to complete the Impact of Event Scale (IES-10).

**Key points**
1. The incidence of out-of-hospital cardiac arrest is increasing in England: 28,784 people were resuscitated by ambulance services in 2012-13 (24.0% survival rate), compared with 24,136 in 2011-12 (22.1% survival rate) (NHS England, 2013).
2. Some research, for example by Meyers et al (1998), suggests that allowing family members to be present when their relative undergoes cardiopulmonary resuscitation may help them cope psychologically after the event. Other studies, such as Compton et al (2009), have found an association between witnessing cardiopulmonary resuscitation of a family member and negative psychological outcomes.
3. Jabre et al (2013) undertook a cluster randomised controlled trial to establish whether offering relatives the chance to observe cardiopulmonary resuscitation affected whether they subsequently experienced negative psychological symptoms.
4. Between November 2009 and October 2011, 15 pre-hospital emergency medical service units in France participated in the study. Eight units systematically asked family members whether they wanted to be present during cardiopulmonary resuscitation of an adult relative in cardiac arrest at home (intervention). The remaining seven units followed standard practice for interacting with relatives (control). Family members were contacted by telephone 90 days after their relative’s successful or unsuccessful resuscitation and asked to complete the Impact of Event Scale (IES-10).
5. A professional should be available to explain the procedures performed on the patient.

The incidence of out-of-hospital cardiac arrest is increasing...
The primary outcome was the frequency of symptoms of post-traumatic stress disorder at 90 days (intention-to-treat analysis), and the secondary outcomes included the frequency of symptoms of anxiety and depression (observed-cases population).

In total, 211 (79%) of the 266 family members in the intervention group took up the offer to watch their relative being resuscitated, and 131 (43%) of those in the control group witnessed resuscitation. Fewer than one in five (17%) of the patients being resuscitated survived to hospital admission and only 20 patients (4%) were still alive at day 28.

Family members who were given the opportunity to observe resuscitation were less likely to have symptoms of post-traumatic stress disorder than those not given the chance to be present. The results were similar for an analysis that excluded the 20 resuscitated patients who were alive at day 28.

Being offered the chance to be present at resuscitation also resulted in a lower frequency of anxiety symptoms at follow-up, but had no significant effect on the frequency of symptoms of depression. Furthermore, relatives in either group who actually witnessed resuscitation attempts were less likely to have symptoms of post-traumatic stress disorder than were those who were not present.

Allowing a family member to observe resuscitation did not influence the nature of the resuscitation attempt, the effectiveness of resuscitation, the stress experienced by the healthcare team or the incidence of subsequent medico-legal claims.

**References**


Robinson SM (1998) Do families want to witness the impact of cultural variables on whether people want to witness resuscitation.

Dr. John W Albarran, associate professor of critical and cardiovascular nursing, University of the West of England, Bristol