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Weighing the Benefits and Burdens of Witnessed Resuscitation

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More than 80% of sudden cardiac arrests occur outside hospital settings.¹ Less than 10% of these patients survive to hospital discharge, accounting for hundreds of thousands of deaths annually worldwide.^{2,3} Prior work on interventions for sudden cardiac arrest has largely focused on patients' immediate⁴ and postresuscitation⁵ care. However, sudden cardiac arrests affect not only the patients but also their family members, some of whom may have witnessed the arrest and resuscitative efforts. Minimizing the adverse mental health outcomes for these family members is an important component of easing the public health burden of sudden cardiac arrests.

There are no accepted strategies for reducing psychological trauma in bystanders who witness a sudden cardiac arrest. One controversial but understudied approach is family-witnessed resuscitation, in which relatives are invited to be present for attempts to resuscitate. Theoretical benefits, such as transparency and a sense of closure for families, must be balanced with possible harms, including interference with resuscitation efforts, medicolegal complexities, and psychological harm from observing potentially brutal and dehumanizing events.⁶ Current American Heart Association guidelines note the rela-

tively thin evidence supporting family-witnessed resuscitation but offer a cautious endorsement: "In the absence of data documenting harm and in light of data suggesting that it may be helpful, offering select family members the opportunity to be present during a resuscitation is reasonable and desirable."⁷

In this issue of the *Journal*, Jabre and colleagues present an innovative and ambitious study evaluating out-of-hospital sudden cardiac arrests in France.⁸ The investigators enrolled 570 relatives of patients having a sudden cardiac arrest. Emergency medical service units were randomly assigned to follow standard practice regarding family presence during resuscitation or to systematically offer family members the choice to observe or not observe the resuscitation. When given the choice to do so, 79% of these relatives observed resuscitative efforts, as compared with 43% of those in the control group. The primary outcome, the proportion of relatives with a score higher than 30 on the Impact of Event Scale (scores range from 0 to 75, with higher scores indicating greater severity of post-traumatic stress disorder-related symptoms) at 90 days, was greater in the control group than in the intervention group (37% vs. 27%;

adjusted odds ratio, 1.7; 95% confidence interval, 1.2 to 2.5; $P=0.004$). Anxiety was also higher in the control group. Secondary analyses that compared outcomes of family members who witnessed the arrest and those who did not, regardless of study-group assignments, showed better mental health outcomes in those who witnessed the arrest, with no significant differences in medical team performance or patient survival.

This study provides useful data that will advance debate surrounding family-witnessed resuscitation. Most notably, when offered the choice to witness resuscitative efforts, most relatives opted to do so, and having that choice improved mental health outcomes, with no evidence of harm to any stakeholders. However, several considerations warrant caution before this is translated into clinical practice. First, it is critical to underscore that the tested intervention was offering relatives the choice to be present at the sudden cardiac arrest. Secondary analyses that compared groups of patients who actually witnessed the resuscitative efforts and those who did not, while suggesting benefit, must be interpreted with caution, because this was not the basis of randomization. Second, the intervention involved well-trained medical teams that followed a scripted protocol, a designated support assistant charged with carefully explaining the resuscitative efforts, and a comprehensive postresuscitation debriefing from a qualified physician. Thus, it would be imprudent to adopt this strategy into clinical practice without a similar commitment to training and staffing emergency response teams and without an understanding of the cost-effectiveness of such an approach.

Third, it would be helpful to know whether characteristics (either of the arrest event or the family) predict benefits from this choice. Fourth, a better understanding of why this intervention improved mental health outcomes would help in the interpretation of the findings of the study. A qualitative study of these families may elucidate what really matters to relatives under such trying circumstances and suggest further refinements to this delicate intervention. Finally, although the choice and timing of the outcomes of the trial are substantiated by prior research,⁹ it would be valuable to know the effect of the intervention beyond 90 days and on other rele-

vant downstream measures, such as complicated grief.

Family members of patients who have an out-of-hospital sudden cardiac arrest face many hardships, most commonly the death of their loved ones. Research in end-of-life care has sought to better understand the balance between support for autonomy and informed decision-making and more paternalistic instincts to protect patients from difficult scenarios and options.¹⁰ In the case of sudden cardiac arrest, offering the choice to families to witness resuscitative efforts may lessen their psychological burden, and this strategy warrants further consideration by clinicians, researchers, and policymakers. Future studies should aim to improve our understanding of why this choice may reduce the suffering of family members and whether such an approach could be implemented in practice in a safe and cost-effective manner.

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