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ETHICS CASE

Should Family Be Permitted in a Trauma Bay?

Commentary by Matthew Traylor

Editor's Note: Matthew Traylor is the winner of the 2017 AMA Journal of Ethics *John Conley Ethics Essay Contest.*

Abstract

This essay explores how some of the arguments advanced for and against family presence during cardiopulmonary resuscitation might apply to the question of whether family should be permitted in the trauma bay. While the first section suggests that many of the proposed benefits might apply to family presence during trauma resuscitations, the second section contends that family presence in the trauma bay could detract from the quality of patient care, violate patient privacy, and be psychologically damaging for the witnessing family. The essay concludes by proposing a chaperoning system that could mitigate some of the proposed concerns with a family presence policy and by analyzing some of the ethical commitments that underlie the discussion of family in the trauma bay.

Case

A 28-year-old man is involved in a motor vehicle collision on a country road in rural North Carolina. He was driving a large SUV and restrained by a seatbelt. According to witnesses, the driver appeared to lose control of the vehicle while driving over an icy overpass. At initial assessment by emergency medical service (EMS) professionals, the patient was obtunded and hypotensive, for which he was emergently intubated; his passenger was pronounced dead at the scene. Shortly after intubation, the patient suffered a cardiac arrest. EMS performed eight minutes of cardiopulmonary resuscitation before his spontaneous return of circulation. The patient was brought via helicopter to a level I trauma center.

In the trauma bay, the team performs a primary survey (a specific, targeted exam done in the trauma bay to identify life-threatening injuries) during which the patient requires bilateral thoracotomy tube insertion and central line placement. After placement of the left chest tube, a liter of blood immediately drains into the device's collection chamber. After further examination, the team finds evidence of severe chest trauma: wide chest wall ecchymosis (severe bruising), subcutaneous crepitus (air under the skin suggesting

traumatic injury to the lung), and extensive bilateral rib fractures. Extended focused assessment of sonography in trauma (FAST) exam (a quick abdominal ultrasound to identify intra-abdominal hemorrhage after traumatic injury) reveals no intra-abdominal fluid collections; however, the patient has what appears to be blood in the pericardial sac and a large undrained hemothorax (collection of blood) in the left chest. A massive transfusion protocol is initiated to try to compensate for his blood loss. Nevertheless, he remains hypotensive and tachycardic. The trauma team plans for exploratory thoracotomy to identify and treat a suspected intrathoracic injury. As the trauma team begins coordinating with members of the operating room staff, the on-call chaplain approaches the senior attending physician with a request. The patient's wife, who has just arrived at the hospital, has asked for permission to come to the trauma bay to see her husband prior to surgery.

The attending physician looks at her patient and at members of the trauma team engaged in a flurry of movement as they prepare the patient for immediate transport to the operating room. With tubes protruding from the patient at nearly every orifice and a pool of blood expanding beneath his stretcher, the attending physician observes a scene that could be traumatizing to even a seasoned clinician and wonders how to respond to the chaplain.

Commentary

Our case of this 28-year-old man resembles two pioneering cases described by Hanson and Strawser in 1982 at Foote Hospital in Jackson, Michigan [1]. In one, a family member refused to leave the patient after riding in the ambulance during an ongoing resuscitation. In the other, the wife of a wounded police officer begged to be allowed to enter the resuscitation room to be with her husband, even if only for a few minutes. Following these events, Foote Hospital questioned the policy of routine exclusion of family from resuscitation procedures and began allowing relatives to be present during resuscitation attempts. Since then, a substantial body of literature has developed exploring family presence during resuscitation (FPDR), much of it primarily focused on cardiopulmonary resuscitation (CPR). FPDR parallels medicine's growing emphasis on respect for autonomy and family-centered care [2, 3], and evidence to be discussed here suggests it has numerous benefits and that separating patients and families during CPR might be a paternalistic practice that could be doing more harm than good.

However, this essay argues that many of the ethical, aesthetic, and practical features of the trauma resuscitation in this case, and of the trauma setting in general, amplify several of the proposed concerns with FPDR and that hasty extrapolation from evidence supporting FPDR to a similar family presence policy in the trauma bay could do harm to both patient and family. A cautious adoption of family presence in the trauma bay is urged, and the essay concludes by offering suggestions for appropriate chaperones for

family in the trauma bay as well as education on, and expectation management for, the events therein.

The Benefits of Family Presence

Evidence suggests that FPDR is exceedingly popular among patients and families [4-8]. From the patient's perspective, the knowledge that family can be present provides comfort and promotes a sense of well-being [9, 10]. Family can also advocate for the patient and help "humanize" the patient for the health care team [11]. It has also been suggested that the Hawthorne effect, which happens when subjects change their behavior due to becoming aware of being observed [12], might apply to FPDR, with clinicians being more attentive when under scrutiny from family members [13]. Another benefit of relatives' presence seems to be lower levels of psychological distress for the witnessing relatives. A randomized controlled trial found that relatives who had the opportunity to witness CPR had significantly lower rates of symptoms of posttraumatic stress disorder (PTSD) than those who did not, while relatives who did not witness CPR experienced more depression and anxiety than those who did [14]. Those relatives who were offered the opportunity to be present during CPR had less intrusive imagery, posttrauma avoidance behavior, and symptoms of grief when assessed three months [14] and one year [15] later. Witnessing resuscitation can inform the family about the severity of their loved one's condition and can provide reassurance that all measures were taken to save the patient's life [5, 9]. In the event that the resuscitation is not successful, being present can facilitate the grieving process for the family by allowing the opportunity for a last goodbye, aiding in closure and bringing a sense of reality to the loss so as to avoid a prolonged period of denial [1, 16, 17].

These benefits could potentially carry over to the trauma setting. In our case, if the patient's wife is admitted to the trauma bay, she would certainly witness the full gravity of her husband's condition and the methods employed to save his life rather than be left in the waiting room to agonize over the unknown. Should the worst eventually happen, that brief time with her husband in the trauma bay might facilitate psychological acceptance of the loss and, by blunting its suddenness, potentially reduce her own future psychiatric morbidity [18, 19]. Her presence with her husband could also facilitate transparency and communication with the medical staff, thereby enhancing the family-staff relationship [16]. And, perhaps most fundamentally, allowing the patient's wife to be with her husband in what could be his last moments respects her wishes as an autonomous decision maker and tacitly endorses the notion that dying is more than just a clinical process and death a failure of sufficient medical intervention.

Arguments against Family Presence in the Trauma Bay

Although many professional organizations now advocate for FPDR, including the American Heart Association [20], the American Association of Critical-Care Nurses [21], the Emergency Nurses Association [22], and the Resuscitation Council (UK) [23], family

presence is not universally endorsed, particularly in the trauma setting. In a survey of members of the American Association for the Surgery of Trauma (AAST), 97.8 percent reported believing that family presence during all phases of trauma resuscitation is inappropriate. Of those AAST members who reported experience with family presence, 74.8 percent characterized the experience as negative [24]. The disconnect between the relative promotion of FPDR in major professional guidelines [25-28] and its lack of acceptance in the trauma setting suggests that family presence during CPR and family presence in the trauma setting might not be entirely analogous.

Several arguments have been advanced against family presence that are especially forceful when applied to the environment of the trauma bay. First, the presence of family might impair the delivery of care in the trauma bay. In the AAST survey, the majority of AAST members strongly agreed that family presence during trauma resuscitation would interfere with patient care [24]. Although several studies of FPDR in general have reported that family members tend not to directly disrupt resuscitation efforts [1, 5, 14], in the trauma setting, family presence can indirectly impact the quality of care provided. The increased crowding and commotion caused by distraught family could provide unnecessary distraction to the trauma team, especially during moments of critical task performance. In our case, the presence of the man's wife could pose an increased risk of harm to the man himself, whether through her direct interference with the resuscitation itself or through an indirect effect on overall resuscitation quality. Respondents in the survey of AAST members reported believing that family presence would increase the stress level of the trauma team, possibly leading to more errors [24]. Helmer et al. compared the resuscitation of a critically injured trauma patient to the operation of an aircraft in that both require fast assimilation of data and quick decision making. They discuss the Federal Aviation Administration's "sterile cockpit rules" that prohibit unauthorized persons on the flight deck as well as crew member participation in nonessential activities during critical moments of aircraft operation and suggest that keeping potential distractions to a minimum in the trauma setting would be advisable as well [24].

Second, allowing relatives to be present in the trauma bay could in fact violate the patient's wishes regarding privacy. In one survey of patients' and family members' opinions on FPDR, 22.2 percent of respondents wanted no family presence and 43.7 percent only wanted certain, predefined family to be present [29]. Patients undergoing trauma resuscitation are often significantly incapacitated and rarely in a position to give consent for family presence or to articulate which family members they would want permitted to be present. Automatically admitting family might contravene the patient's incommunicable desire for privacy.

Finally, events in the trauma bay could be excessively disturbing or even traumatic for relatives, such as the wife in our case. Families of critically ill patients frequently develop

anxiety, depression, and symptoms of PTSD during and after hospitalization [30-33]. Although, as previously discussed, some relatives might benefit from witnessing CPR in a controlled hospital setting, PTSD symptom scores were significantly higher among witnesses of out-of-hospital resuscitations where the atmosphere is less controlled than among nonwitnesses [34]. One can imagine that, to the medically naïve observer, a trauma resuscitation more closely resembles the chaos of an out-of-hospital rescue than a well-run code on the hospital floor. Although television shows—beginning with *St. Elsewhere* and *ER* and progressing to the "hyperrealistic" shows currently airing—and the internet have provided the public with glimpses of what occurs in the trauma bay, these accounts are often highly scripted and edited. The sights, sounds, smells, and full sensorium of a trauma resuscitation are frequently psychologically overwhelming, even to medical professionals [35]. Several brief but poignant accounts have been written by relatives of trauma victims describing the horror of witnessing medicine's final assault on their loved ones [36].

Guidance in the Trauma Bay

Some of the concerns about family presence during trauma resuscitation could be mediated by a chaperone who acts as a liaison between the family and trauma team. Before entering the bay with family members, the chaperone can assess their willingness to observe, their perceptions about the trauma bay, their customary coping strategies, their cultural beliefs, and other factors that might affect their experience. He can also identify family members who are overly aggressive or intoxicated or who might otherwise cause significant disruption. Moreover, he can prepare the family beforehand by providing information on the expected procedures and interventions likely to take place and guide the family through the resuscitation while it occurs, answering questions and providing support. However, while a chaperone might be able to intuit certain relationship dynamics between a patient and potential family witnesses by speaking with the family in advance, patient privacy ultimately remains a concern as it is often impossible to definitively determine if an incapacitated patient would approve of family presence.

Similar to our case, in one of the few hospitals currently with a family presence policy for trauma [37], the chaplain acts as the chaperone. Provided that the chaplain has enough medical knowledge to interpret the events of the trauma resuscitation in a way the family can understand, this is an ideal choice. Hospital chaplains are trained to communicate effectively with distraught or grieving families across a variety of cultures and faiths. If an appropriate faith leader cannot be found, or if the family is uncomfortable with a chaplain, another member of the medical team who can communicate compassionately with the family can fill the role.

Utilitarian Autonomy versus Deontological Constraints

Even if the strongest versions of the arguments against family presence are accepted, would we still be justified in barring family members from the trauma bay? The underlying ethical question reduces to a discussion of the conflict between the utilitarian implications of promoting respect for family autonomy and a deontological restriction of family presence because individual patients or family members might be harmed, even if the outcome tips toward the good on a more consequentialist evaluation. Are we prepared to accept that the benefits of allowing family presence in the trauma bay will do more good for a greater number of trauma patients and their families in the aggregate even though in some cases the quality of care might be compromised, the patient's privacy might be violated, and the family might suffer psychological distress? Or do we insist that allowing a policy of family presence that could do some harm, even if only in a small minority of cases, is indefensible as it sacrifices some number of individuals as ends-in-themselves to a notion of an expected greater good? Ultimately, as medicine expands even beyond the notion of a classic liberal individualism [38] that protects specific basic liberties and interests of patients as individuals to encompass an emphasis on the rights of families in the care process [2], family presence during trauma resuscitation will likely become more commonplace. If a utilitarian ethos is to predominate, we would do well to ensure that attempts at beneficence do not run roughshod over the obligation to do no harm by establishing effective chaperoning systems that can support witnessing families through what could be one of the most traumatic experiences of their lives.

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