Experiences of Families When Present During Resuscitation in the Emergency Department After Trauma

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ABSTRACT
Several organizations have published national guidelines on providing the option of family presence during resuscitation (FPDR). Although FPDR is being offered in clinical practice, there is limited description of family experiences after FPDR. The aim of this study was to describe family experiences of the FPDR option after trauma from motor vehicle crashes and gunshot wounds. A descriptive, qualitative design based on content analysis was used to describe family experiences of the FPDR option. Family members (N = 28) were recruited from a major level 1 adult trauma center in the Midwest. Participants in this study were 1 family member per patient who were 18 years or older, visited the patient in the surgical intensive care unit, spoke and understood English, and had only one critically injured patient in the family. Family interview data on experiences during FPDR after trauma were used to identify themes. Two main categories were found. Families view the role of health care professionals (HCPs) to "fix" the patient, whereas they as family members have an important role to protect and support the patient. Subcategories related to the role of the HCP include the following: multiple people treating the patient, completion of many tasks with "assessment of the damages," and professionalism/teamwork. Important subcategories related to the family member role include the following: providing information to the HCP, ensuring that the medical team is doing its job, and remaining close to provide physical and emotional comfort to the patient. Health care professionals are viewed positively by the family, and the role of the family is viewed as important. Families wanted to be present and would recommend the choice to other family members. The findings of this study support that the FPDR option is an intervention that helps family members build trust in HCPs, fulfills informational needs, allows family members to gain close proximity to the patient, and support their family member emotionally.

Key Words
Family, Family presence, Resuscitation, Trauma

Unexpected traumatic injury and subsequent resuscitation may be a cataclysmic event, the effects of which reverberate throughout the family unit. Annually, more than 1 million Americans undergo resuscitation and survive traumatic injuries, only to produce major life changes for families. Because of the complex nature of family needs following injury, high anxiety, and frequency of reported stress-related symptoms, multidisciplinary interventions are essential for promoting positive family outcomes. In many organizations, health care professionals (HCPs), recognizing the importance of family presence on patient recovery, have been offering the option of family presence during resuscitation (FPDR) for several years as a multidisciplinary intervention.

The American Association of Critical-Care Nurses, the American Heart Association, the Emergency Nurses Association, and the Society of Critical Care Medicine have published national clinical guidelines on providing the FPDR option. However, FPDR remains controversial, underutilized, and not the usual practice after trauma.

Although FPDR may be offered in some clinical practice settings, there is a lack of qualitative research on family experiences after FPDR. Therefore, the purpose of this study was to describe family experiences of the FPDR option after trauma from motor vehicle crashes (MVCs) and gunshot wounds (GSWs).

FAMILY PRESENCE DURING RESUSCITATION
Family presence during resuscitation means that the family is present at a location that affords visual and/or physical contact with the patient during resuscitation.
Resuscitation is a sequence of events initiated to sustain life or prevent further deterioration of the patient's condition in an acute health episode. Most research has explored the views of family members and HCPs from survey methods. Findings demonstrate that FPDR has benefits to families, FPDR does not negatively impact patient care, and families expect to be present.17

Family Benefits
Quantitative research suggests there are some benefits for family members who witness the resuscitation of a family member.3,10,13,16,18,21 These benefits include knowing that everything possible was being done for the patient, feeling of being supportive and helpful to the patient and staff, sharing critical information about the patient's condition, maintaining family-patient relationships, closure on a life shared together, and fostering grieving.13,16,22-24

Health Care Professionals' Concerns
There also are a variety of anecdotal concerns from HCPs for not providing the FPDR option, which include that the event may be too traumatic for family members, clinical care might be impeded, family members may become too emotional or out of control, staff may experience increased stress and performance anxiety, staff are focused on the patient and may not be available to assist family members, nursing shortages, and legal concerns.13,14,16,19,21-23,25-30 These anecdotal reasons are based on personal opinion that may contribute to the apprehension and controversy among HCPs for offering the FPDR option.

Recent findings from a study in which HCPs were asked to evaluate the outcomes of FPDR suggest that family members tolerated the event, did not interfere with care, and team communication was not affected.31 Comments reflected that family presence was beneficial and emotional and a family facilitator was needed. Results suggested that the variety of anecdotal reasons from HCPs for not providing the FPDR option may be unfounded.31

Family Expectations
Despite the concerns of HCPs, families report that they would agree to be present again if a similar event occurred.10,18,52 Family members not only emphatically asserted the right to be present but stated that FPDR was important and helpful to them.3,12 In addition, prior quantitative research results indicate that there have been no adverse psychological effects for family members and the operations of HCPs were not disrupted when the option of family presence was provided.31,32 A few recent quantitative studies compared family expectations of those who participated in the FPDR option and those who did not participate.20,33,34 All the family members preferred to be present and felt that the FPDR option helped reduce anxiety and promote an understanding of the situation.

Summary
Overall, descriptive designs and survey methods were used in prior quantitative studies. Of the many quantitative studies conducted on FPDR from the perspective of the family with an adult population, only 3 were from the perspective of family members when the patient survived. Only 2 of these studies allowed family members of trauma patients to participate.35,36

Qualitative Studies
The FPDR qualitative research exists on the perspective of HCPs,17,22,36 family facilitators,27 family experiences observing procedures19 and cardiopulmonary resuscitation,30 and patient preferences.32 Interviews have been conducted to examine family preferences for the FPDR option, but none of the family members were actually present during resuscitation procedures; the research questions asked respondents to consider what their thoughts and opinions would be if ever in an FPDR situation.39 Minimal qualitative research exists to describe actual family experiences after FPDR. None of the studies reported on family experiences with FPDR after trauma. In addition, none of the qualitative studies have reported on interviews with family members immediately after participation in the FPDR option. Therefore, describing family experiences after participation in a FPDR option after trauma requires further scientific investigation.

METHODS
Design
A descriptive, qualitative design based on content analysis was used to describe family experiences of the FPDR option after trauma from MVCs and GSWs. Qualitative content analysis is a method that translates text into meaning through the process of coding and theme identification.40 This methodology allows the researcher to determine a "social reality" through an organized scientific process of data reduction.41 After the identification of categories, a thematic map was constructed.

Setting
Family members were recruited from a major level 1 adult trauma center in the Midwest. The critically ill trauma patients were admitted to a 21-bed surgical intensive care unit (SICU). Trauma patients were defined in this study as individuals, 18 years and older, admitted to the SICU, and required resuscitation prior to admission.
Sample
Participants included in this sample were a subgroup of participants enrolled in a larger comparison study to examine the effects of the FPDR option on family outcomes of anxiety, stress, well-being, and satisfaction and compare those outcomes in family members who participate in FPDR with those family members who do not participate in FPDR. A convenience sample of family members of critically ill patients who were resuscitated was asked to participate in this study. Families were defined as a group of individuals bonded by biological, legal, or social relationships. Both sexes and all minorities and nonminorities were eligible to participate in this study. Participants were enrolled until no new data emerged from the interviews.

Participants in this study were 1 family member per patient who were 18 years or older, visited the patient in the SICU, spoke and understood English, and had only one critically injured patient in the family. Excluded from the study were families of trauma patients younger than 18 years and those patients with cardiac, burns, suicidal, and brain injuries because they were admitted to other units or specialized facilities. Families were also excluded if the patient was a victim of domestic assault or a potential organ donor. Police holds were excluded because these patients cannot have visitors. In addition, family members were excluded if there was a fatality in the trauma event.

Procedure
After institutional review board approval, family members who participated in the FPDR option were asked to participate in this study within 2 days after admission to the SICU. Written, informed consent was obtained from all participants. Data were collected from October 2010 to June 2012. Participants were asked in an open-ended interview format to describe the following:

- What was it like to be present with your family member?
- What did you see during the resuscitation of your family member?
- How long did you stay with your family member?
- What else do you want me to know about your experience?

Interviews lasted between 10 and 30 minutes. Interviews took place in patient rooms (when the patient was off to a procedure) or a quiet, private room away from hospital wards. Researchers wrote down responses from family members verbatim. Participants received $20.00 for their time.

Measures
Family demographics (such as gender and relationship to patient) were obtained from the participant. Patient demographics (such as age, gender, and cause of injury) and the resuscitation procedure that occurred during FPDR were obtained from the medical record. Family interview data were used to identify themes. These data included family members' comments on their experiences during FPDR after trauma.

Analysis
Interview data were analyzed using qualitative content analysis. The unit of analysis was the interview text related to the experience of being present with a family member undergoing medical care after trauma. Interviews were read multiple times for the researchers to gain an overall sense of the interview content. Categories were created through the process of inductive analysis and open coding. The researchers met to review and agree on theme identification.

Ensuring Rigor and Trustworthiness
To ensure rigor and trustworthiness in this study, transferability, credibility, dependability, and confirmability were identified and addressed. Transferability is the degree to which the findings apply to other settings. To address transferability, the researchers provided thick description about the context of the research setting, participant experiences, data analysis, and study findings to allow readers to make judgments regarding transferability.

Peer debriefing was performed with the research team to meet the requirements of credibility. After conducting interviews with families, researchers shared experiences with members of the study team to overcome judgments and emotions experienced during the interview process that could have had an effect on the analysis of data. This allowed the researchers to acknowledge preconceived ideas and beliefs about the area of study to reduce bias in ongoing analysis.

Dependability was enhanced by a stepwise approach to data analysis. It is important to detail the process of the study so that a future researcher can replicate the work. Study concepts, data, and findings were reviewed by all members of the research team.

Confirmability is the extent to which the results and conclusions of the study reflect the experiences and ideas of the participants rather than those of the researcher. Confirmability was addressed in the current study by maintaining an audit trail that defines all data collected and analyses performed during the research process.

RESULTS
Sample Family
Of the 28 family members who participated in the FPDR option in this study, the majority of them were female (71% female and 29% male). Age range for the sample was 21 to 75 years ($M = 47$ years, $SD = 13$ years,
median = 46 years). Participants predominately self-identified as white (82%). Family member relationship was reported as spouse or parent (both 29%). Family member education ranged from 11 to 20 years (M = 14, SD = 2, median = 13 years).

**Patients**
The majority of trauma patients in this study were injured from MVCs (79% MVCs and 21% GSWs). Most were men (69% male and 32% female) and single (33%). Patients ranged in age from 18 to 85 years (M = 46 years, SD = 21 years, median = 48 years). Initial Glasgow Coma Scale scores ranged from 3 to 15 (M = 13, SD = 4, median = 15). Injury Severity scores ranged from 1 to 43 (M = 15, SD = 10, median = 13). Further details of the sample demographic are given in the Table.

**Experiences of Families When Present During Resuscitation**
Two main categories emerged from the data. The first category and subcategories describe the family member's perception of HCPs (Figure 1), and the second category and subcategories describe the role of the family member in the context of the patient (Figure 2). The following content supports the findings with interview text.

**Role of HCPs to “Fix” the Patient**
Family members who were present in the trauma room were asked to share what they saw and what the experience of being present was like for them. It was evident from the interviews that family members had a clear delineation of roles for HCPs and for themselves as a family member. Family members felt the HCP was there to “fix” the physical injuries of the patient, whereas their role was to protect and support the patient.

**Multiple People Helping the Patient**
Many family members commented about the number of HCPs helping the patient. One participant described this image as “all hands on deck.” For another participant, the image was “many doctors around the patient.” Another felt “overwhelmed but was impressed” by the number of HCPs. One participant shared, “The accident happened about a half mile from my home. I arrived to the hospital before the helicopter came ... there was a lot of staff, twenty plus staff members working in the room.”

Despite being overwhelmed by the army of HCPs, all family members were relieved that staff members were there diligently helping the patient. For one family member, he knew that there were many people in the room, but having the opportunity to be present helped him focus on his family member rather than on the commotion of things that were being done. He shared, “There were all these people and things going on around me, but it was just me and him to me. It was the longest ten minutes waiting....”

| TABLE Study Sample Demographic Characteristics (N = 28) |
|---------------------------------|-------------|----------------|
| Family member                  | Mean (SD)/n | Range/%        |
| Age, y                         | 47 (13)     | 21-75          |
| Education, y                   | 14 (2)      | 11-20          |
| Sex                            |             |                |
| Male                           | 8           | 29             |
| Female                         | 20          | 71             |
| Race                           |             |                |
| White                          | 23          | 82             |
| African American               | 2           | 7              |
| Hispanic                       | 2           | 7              |
| American Indian                | 1           | 4              |
| Relationship to patient        |             |                |
| Spouse                         | 8           | 29             |
| Parent                         | 8           | 29             |
| Child                          | 5           | 18             |
| Sibling                        | 2           | 7              |
| Other                          | 5           | 18             |
| Patient                        |             |                |
| Age, y                         | 46 (21)     | 18-85          |
| GCS score                      | 13 (4)      | 3-15           |
| ISS score                      | 15 (10)     | 1-43           |
| Sex                            |             |                |
| Male                           | 19          | 68             |
| Female                         | 9           | 32             |
| Marital status                 |             |                |
| Married                        | 10          | 37             |
| Single                         | 9           | 33             |
| Divorced                       | 6           | 22             |
| Other                          | 3           | 7              |
| Injury                         |             |                |
| MVC                            | 22          | 79             |
| GSW                            | 6           | 21             |
| Mode of arrival                |             |                |
| Ambulance                      | 18          | 64             |
| FFL                            | 10          | 36             |

Abbreviations: FFL, Flight for Life; GCS, Glasgow Coma Scale; GSW, gunshot wound; ISS, Injury Severity Score; MVC, motor vehicle crash.
Completion of Many Tasks and “Assessment of the Damages”

Family members were acutely aware of the activities the trauma team completes when a patient is being treated for an injury sustained in an MVC or a GSW. Participants talked about how the team, “assessed all the damages.” Of all the things that the trauma team does, many family members described the ripping or cutting of the patients clothing. They also understood many of the interventions that were completed by the team. Some of the observations of family members included the following:

- I saw them checking his breathing and putting in the IV.
- They rolled her to check for injuries.
- They splinted her femur.
- I saw three IVs and a chest tube go in.

Approximately half of the family member participants worked in the health care field. These family members were acutely aware of all that was being done to treat the patient. One of the nurse participants shared, “I snapped into caregiver mode.” For another participant, her military background shaped her experience. She shared that her professional experience made her less emotional about the resuscitation.

Regardless of professional background, all participants felt it was comforting and reassuring to be present to watch the HCP work. This was best summarized in the statement from another participant, “It was very reassuring to see everything.”

Professionalism and Teamwork

Family members valued the professionalism and teamwork skills of the trauma team. Some of the comments from family members included the following:

- They were professional and got the job done. They were very efficient and made sure the patient is taken care of; then moved on.
- He was treated with respect and I was very appreciative of all the HCP working together.
What I remember the most was how impressed I was with the trauma team.

Everyone was very cordial and very informative.

I was kept informed as things were being done. I felt comfortable … it was impressive. I was right up near the bed. They gave me the option and that was important. It would have been a lot harder to be stuck in the waiting room. Everyone was so helpful and they each had a job to do. It was impressive how organized everything was for so much going on.

Family members expressed gratitude for the information HCP provided.

**Role of Family Members—to Protect and Support the Patient**

Although family members appreciated the role of the HCP, they felt they had an important role as well. Participants talked about how they were able to protect, comfort, and support their family member.

**Provide Information to the Medical Team and Other Family Members**

Family members expressed the importance of being able to provide information the HCP needed to care for the patient. “I needed to make decisions for him … staff needed to know his history, medications, and insurance and he wasn't able to answer.” In addition to providing medical information, family members were also able to give updates to other family members who were not present during the resuscitation process. “It was extremely helpful to other family members in the waiting room because I was able to tell them what was going on in lay terms.”

**Ensure the Team Is Doing Its Job**

Family members were grateful to watch the team work and felt it was important that they were able to see all that was being done for the patient. One participant shared, “I just wanted to make sure he was okay and everyone was doing their job.” In the words of another participant, “I wanted to know the test results and tried to find the doctor. I wanted to know exactly what was known.”

For one family member, it was critical that the presence option was available because she was determined to be present whether she was invited or not. She shared, “I pushed my way into the room … I wanted to see everything.”

**Be in Close Proximity to Provide Physical and Emotional Comfort**

Close physical proximity to the patient was important because it allowed the family member to comfort the patient. One participant shared, “I was able to help comfort him and make him less afraid. I thought he was going to die. I helped him see the purpose of life and provided spiritual support. I recommend this to other families.” Other descriptions that capture the importance of this concept include the following:

- It was helpful to be able to reassure my husband.
- My son knew I was there … it helped him not to worry.
- I needed to be there, it was very important to me that she (sister) knew I was there, very important!
- Some family members were not able to get as close to their family member as they would have liked. One participant shared, “I wish I could have been closer so I could hold my dad's hand.” In another family member’s words,

- I was so grateful to be able to comfort my son … he was crying due to pain. I needed to reassure him and tell him not to worry about the car. I wished I could have gotten in sooner and had been more assertive to be near my son.

The majority of the participants felt that staying with the patient was extremely important and wanted other family members to have the option. Family members were grateful for the opportunity to be present and recommended that other family members have the choice to be present as well. The experience of being present was captured best in one participant’s statement about being in the trauma room with the patient, “… it lessened my anxiety and I was glad to have the opportunity.”

One participant had a slightly different response about offering family presence to other families. Although he was grateful he was able to be with his son, he was not sure that being present was the right choice for others. He was with his son from the moment he was shot until his son was taken to the SICU. He shared:

- I think that staying is different for every person … some people couldn’t do it. I was in shock and that kept me calm and made me able to stay with him. I was glad he knew I was with him all the way. I have dreams … it all flashes on me.

One participant shared that staying "depends on the person." Although these participants were not sure that others would want the opportunity, they were sure they made the right decision to be present for themselves.

**LIMITATIONS**

One limitation was that written field notes, instead of an audiotape, were used to record interview data. Another limitation was the use of convenience sampling. The FPDR option was offered only when the trauma team...
and family were available. The data are situational, so the impact of the FPDR option on family outcomes over time remains to be examined in further research. However, the time of interviewing participants in this study may capture how they perceive their ability to manage the situation immediately after participating in the FPDR option. Participants in this study were family members of patients with trauma from MVCs or GSWs. The findings may not be transferable to family members of patients injured from other types of trauma.

**DISCUSSION**

The purpose of this study was to describe the experiences of family members who were present during resuscitation after trauma from MVC or GSW. Families identified 2 roles as important to the care of the trauma patient. The trauma team's role was to “fix” the patient, whereas family members were there to protect and support the patient. The literature consistently shows that families are an important source of support for patients. Ellison found that FPDR was important to nursing staff members because they believed that it fulfilled family needs such as comfort, reassurance, spiritual needs, and clear explanations of care. While family members in the current study appreciated seeing and experiencing all that was done for the patient, they also believed they served an important role that was separate from the HCP. A difference in the Ellison study was the fact that resuscitative efforts were during cardiac arrest situations and invasive procedures. The current study focused on resuscitation efforts for patients who survived traumatic injury (end-of-life decision making was excluded from this study) and none of the patients experienced cardiac arrest. Given that many of the patients could still communicate with their family member, this might explain why families felt their role to comfort and protect was so important.

Families in the current study were aware of the procedures done for the patient. This may be because some of family members worked in health care occupations. In contrast to our findings, other authors found that staff were concerned about what family members would be able to understand during a resuscitative situation. Given that cardiopulmonary resuscitation was not performed on patients in the study, this may explain the differences in HCP and family perspectives. While trauma resuscitation involves many people as a cardiac arrest would do, there may be more opportunity for explanation of medical procedures as well as formalized informational support for family members in the current study. In addition, families in the current study had a family facilitator present who may have enhanced their understanding of the situation.

The concerns of HCPs about being watched during the resuscitation procedure and the potential negative effects this may have on family members have been documented previously. However, despite these concerns, family presence seems to increase professionalism of the health care team and no literature to date supports psychological disturbances for family members or disruptions by family members during the resuscitation. In this study, family members valued the professionalism and teamwork skills of the trauma team. Families could not say enough about how much they appreciated the professional behavior they observed from the HCP. There was no negative feedback about the medical team from participants in the study or disruptions from family members during resuscitation efforts.

Some providers have expressed concern about the welfare of families during resuscitative efforts and the need for staff to explain everything families observe; however, in a qualitative study looking at the perspective of patients after a resuscitation experience, participants wanted HCPs to “get on with their job” and did not want them concerned with anything other than care of the patient. Families in the current study felt it was comforting and reassuring to be present and watch HCPs work. From the descriptions family members provided, they were well aware of what the team was doing to help the patient. Although many of the family members commented on the “army” of HCPs working on the patient, all family members were relieved that there was a team devoted to helping their family member. None of the family member participants commented on needing more attention from the HCP or having concerns they were not cared for as the patient’s family member. In the eyes of family members, the HCP was there to “fix the patient.”

Providing information and allowing for close proximity to the patient are important family needs that must be met by health care providers. Families in the current study valued not only the option to be present but also for the opportunity to provide patient information to the medical team, such as allergy information, current medications, and medical history. Families wanted to have close physical proximity to provide comfort by holding their family member’s hand and to reassure them with words. When family members were not able to achieve close physical proximity, they expressed regret. One family member shared that she wished she had been more assertive so she could have held her father’s hand. Another shared that she would be in the trauma room whether she was invited or not. For family members, making sure the patient knew they were there was of critical importance. Similarly, McMahon-Parkes et al found that family members “being there” helped the patient with emotional support, understanding, and advocacy. Eichhorn et al also found that patients felt their family member’s presence was comforting and helped remind the medical team of their “personhood.” Wagner found that families want to make sure that HCPs are “doing their job” to provide care.
Similarly, family members in this study articulated a need to make sure the trauma team was doing its job and the importance of seeing everything that was happening with the patient.

It was important to the majority of family members in this study that other families are given the option of family presence. Family members shared that the experience of being present in the trauma room lessened their anxiety. This is consistent with what is found in the literature; the family presence option is important and helpful to patients and families. Family presence during resuscitation helps family members build trust in HCPs, fulfills informational needs, allows family members to gain close proximity to the patient, and fosters family members to support the patient emotionally.

**IMPLICATIONS**

The FPDR option is recommended as a multidisciplinary option in clinical practice. The family is seen as the primary partner in the FPDR venture. This implies sharing information, communication, and equal participation in decision making. Study results support an HCP-family partnership. The FPDR option is consistent with the core principles of a partnership that recognizes the integral role of family on the health and recovery of the patient.

It is important to have a hospital policy and procedure for the FPDR option. The policy has been in effect at the study institution for more than 5 years. In addition, multidisciplinary education needs to continue to support the FPDR option. It is important that ongoing education about FDPR occurs and specific guidance on best practices for HCPs be updated regularly.

Early interventions in critical care to assist families in tapping their own resources, empowering them to understand the current situation, and supporting coping mechanisms need to be based on a multidisciplinary practice model. The FPDR option is a multidisciplinary intervention that is intended to provide information, promote more realistic understanding of critical injury, and allow the family member to be near the patient.

The data from this study support the FPDR option in the trauma setting and confirm that it holds great value for families. Despite the chaos of the emergency department setting, families held a positive view of HCPs. Despite the chaos of the emergency department setting, families held a positive view of HCPs. Families in this study wanted to be present and recommended that other family members be given the option to be present. These findings also show that FPDR offers family members a role in the care of the trauma patient. Further research is needed with other populations for both the patient and family perspectives to clarify the meaning of FPDR in these role contexts.

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