Family Presence During Trauma Resuscitation: Family Members' Attitudes, Behaviors, and Experiences

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Background The paradigm is shifting from separating family members from their children during resuscitation to one of patient- and family-centered care. However, widespread acceptance is still lacking.
Objective To measure attitudes, behaviors, and experiences of family members of pediatric patients during the resuscitation phase of trauma care, including family members who were present and those who were not.
Methods An observational mixed-methods study using structured interviews and focus groups was conducted at 3 level 1 pediatric trauma centers. Family members of children who met trauma team activation criteria (N = 126; 99 present, 27 not present) were interviewed; 25 also participated in focus groups.
Results Mean attitude scores indicated a positive attitude about being present during the resuscitation phase of trauma care (3.65; SD, 0.37) or wanting to be present (3.2; SD, 0.60). Families present reported providing emotional support (94%) for their child and health care information (92%) to the medical team. Being present allowed them to advocate for their child, understand their child's condition, and provide comfort. Families in both groups felt strongly that the choice was their right but was contingent upon their bedside behavior.
Conclusions Study findings demonstrated compelling family benefits for presence during pediatric trauma care. This study is one of the first to report on family members who were not present. The practice of family presence should be made a priority at pediatric trauma centers.
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Health care providers formally recognized the importance of keeping families together during critical medical care more than 30 years ago. In 1982, Foote Hospital, Jackson, Michigan, allowed family members to be at the bedside of their loved ones during resuscitation.[1] This innovative practice launched a new paradigm and inspired emergency departments and critical care units across the country to redefine hospital family presence practices and implement formal policies. Today, family presence during emergency medicine and critical care is endorsed by numerous national nursing and medical organizations.[2-7]

In addition, the Institute of Medicine (now National Academy of Medicine) identified patient-family centeredness as an important quality measure in their 2006 pediatric subcommittee report on the state of pediatric emergency care in the United States.[8] That same year, a national consensus conference provided recommendations on family presence during pediatric resuscitation, prompting the American Academy of Pediatrics and American College of Emergency Physicians to publish a joint policy statement recommending family presence be incorporated into all phases of emergency care.[7,9]

Family presence offers many benefits to patients and their families, with little interference with care.

Outcomes of family presence studies are shifting the paradigm from family-member separation from their children during trauma resuscitation to one of patient- and family-centered care and inclusion. However, widespread acceptance is still lacking. Despite national and international recommendations, the practice of family presence varies in hospitals across the United States. The most frequently voiced concerns from health care providers about family presence are related to the well-being of families and the delivery of optimal patient care.[10-14] Studies evaluating family members' experiences at the bedside and their perceptions of care during medical or trauma resuscitations have been limited by small numbers of participants and the use of singular data sets, usually surveys.

The purpose of this study was to measure the attitudes, behaviors, and experiences of family members whose children were injured and evaluated by a designated trauma team during trauma activations. This report is part of a larger study evaluating the overall impact of family presence on pediatric trauma care, including clinical outcomes.

Methods

Design and Setting

We conducted an observational, mixed-methods study of family members of pediatric trauma patients by conducting telephone interviews and focus group meetings after the event. The study was conducted at 3 regional American College of Surgeons–designated level I pediatric trauma centers with a combined annual emergency department census of 250 000 pediatric patients. All sites obtained institutional review board approval to conduct this study.

Current practice at the 3 participating trauma centers encouraged care centered on the patient and the patient's family, including family presence during trauma team activations. Each organization had a written family presence policy modeled after the national Emergency Nurses Association's guidelines.[15] All emergency department and trauma staff received family presence education before and independent of this study, which included the new-hire orientation process, educational tools, and simulated scenarios.

An essential component of each site's family presence guidelines was the designation of a family

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Table 1
Data collection methods

Outcome instrument and psychometrics properties	Data source	Outcome variable of family members
Family Present Survey Three sections measuring attitudes, behaviors, and experiences Content validity[10,12] Construct validity identifying 2 factors (current study) Cronbach α: 0.92[12]; 0.81[10]; 0.89 (current study)	Telephone interviews using Family Present survey (n = 99) Total of 36 quantitative and qualitative survey items	*Attitudes* about being present (Parental Family Present Attitude Scale-FM) 11-item, 4-point Likert level of agreement scaling (quantitative data) Total mean scores ranging from 1 to 4; high score indicating a highly positive attitude about being with their child during their trauma evaluation *Behaviors* during family presence 17-item, yes/no checklist (quantitative data) *Experiences* during family presence 8-item, yes/no questions with in-depth interview probing (audio recorded) to elicit responses (quantitative and qualitative data)
Family Not Present Survey Two sections measuring attitudes and experiences Content validity (current study) Cronbach α: 0.89 (current study)	Telephone interviews using Family Not Present survey (n = 27) Total of 17 quantitative and qualitative survey items	*Attitudes* about not being present (Parental Family Not Present Attitude Scale-FM) 9-item, 4-point Likert level of agreement scaling (quantitative data) Total mean score from 1 to 4; high score indicating a highly positive attitude about wanting to be with their child during the trauma event *Experiences* of not being present 8-item, yes/no questions with in-depth interview probing (audio recorded) to elicit responses (quantitative and qualitative data)
Family present/not present focus groups Group discussions with families present/not present were audio recorded, transcribed, and validated for accuracy Met criteria for rigor, including adequacy, auditability, and credibility[19]	In-person focus groups conducted by trained focus group moderator using a standardized scripted guide Focus group (n = 17) for families who were present Focus group (n = 8) for families who were not present	*Experiences* of being present/not present One-hour in-person family group interviews (qualitative data)

presence facilitator, whose role was to exclusively assess, prepare, and support the family.[15-17] Family members who chose not to be present or were denied the option were also supported by the facilitator. The facilitator role was usually performed by a social worker.

Participants

In our larger study, all children 18 years old or younger who met trauma team activation criteria based on each trauma center's guidelines were considered for inclusion. All 3 centers had a tiered trauma team activation system by which a designated trauma team evaluated and did triage on patients on the basis of a combination of injury and prehospital physical findings.[18] Family was defined by each organization as part of their family presence policy. Families in the family presence cohort were in the trauma bay during the trauma evaluation. The length of participation and procedures witnessed varied among family members. Families who did not participate in family presence also were included in the study.

Data Collection

Data collection involved structured telephone interviews and focus group meetings conducted 3 to 6 months after the event for families who were present (family present group) and those who were not present (family not present group) during their child's trauma evaluation. Outcome variables and data sources used are outlined in Table 1. We used quantitative and qualitative methods to triangulate the data.

Structured telephone interviews were conducted by 2 trained interviewers using the Family Present and Family Not Present surveys. A mean of 3 attempts were made to contact participants. All telephone interviews were 30 to 45 minutes long, audio recorded, transcribed, and validated for accuracy. Family members were also invited via telephone call to participate

in an in-person focus group. Each focus group meeting was held in a private professional location near the respective study site. A total of 6 focus group meetings were held. Those who accepted attended a 1-hour session conducted by a trained professional moderator who used a standardized scripted guide to prompt discussion. Group discussions were audio recorded, transcribed, and validated for accuracy.

Family Present Survey. A 36-item survey was used that consisted of 3 sections: (1) attitudes about family presence, determined using the Parental Family Present Attitude Scale-FM (PFPAS-FM); (2) perceptions of behaviors and interactions while in the room; and (3) experiences while at their child's trauma evaluation (Table 1).

Family Not Present Survey. A 17-item, investigator-developed survey measured attitudes, using the Parental Family Not Present Attitude Scale-FM (PFNPAS-FM), and experiences of not being present for the event (Table 1). This was a new instrument developed for this study and psychometrically tested. Because family members were not present in the trauma area, behaviors or interactions of family members in the family not present group were not measured.

Both surveys asked questions that explored family experiences of being present or absent during their child's trauma team evaluation. After each dichotomous question, the interviewer used in-depth probing to elicit further explanations. Although the Family Not Present Survey parallels and is scaled the same as the Family Present Survey, they are not identical. Both the PFPAS-FM and the PFNPAS-FM surveys used 4-point Likert scales to measure family presence attitudes as the attitudes related to the family members being present or absent.

Data were analyzed separately for those who were present vs not present during the event.

Psychometric Properties of the Surveys

The Family Present Survey has been used in previous studies, and its content validity has been estimated.[10,12,20] Similar to prior reports,[10,12] high internal consistency of the scale items was supported in our current study by a Cronbach α coefficient of 0.89 (Table 1). Construct validity of the PFPAS-FM survey (the attitude scale within the Family Present Survey), not previously evaluated but used in our study, yielded 2 attitude subscales when we conducted an exploratory factor analysis using the principal-component method with orthogonal varimax rotation. Factor selection criteria included eigenvalue greater than 1, a meaningful connection among the items on a given factor, and each factor having at least 3 loading items. We labeled factor 1 "Potential ramifications of family presence," defined as possible adverse effects of family presence on the patient, parent, or providers (a high score indicated that family presence did not have an adverse effect on those involved with the event). Factor 2 was labeled "Need to be there," defined as activities and behaviors that embody the parental responsibilities of caring for an injured child (a high score indicated the perception that family presence had fulfilled their need to be with their child during the trauma evaluation).

To estimate content validity of our new Family Not Present Survey, a 5-member panel of experts rated the survey items on the basis of the Lynn procedure,[21] a 2-stage process that incorporates rigorous instrument development practices (identification of content dimensions and then development of items for testing that are presented to at least 5 experts). The content validity index for each item was from 0.80 to 1.00; the content validity index for the entire survey was 0.98, indicating high internal consistency. The Cronbach α was 0.89 for the PFNPAS-FM, which also indicated high internal consistency of the scale (Table 1). Construct validity of the PFNPAS-FM survey could not be determined because of the small number of family members who were not present (n = 27).

Data Analysis

Continuous variables were summarized by using means, medians, and ranges. Chi-square or Fisher exact tests for categorical data, and 2-sample *t* tests, analysis of variance, Wilcoxon rank-sum tests, or Kruskal-Wallis tests for continuous variables were computed. Item and total mean scores and SDs were calculated for the PFPAS-FM and PFNPAS-FM after reverse scoring of the negative items. For 2-tailed tests, statistical significance was accepted at *P* less than .05. SAS version 9.2 (SAS Institute) was used for quantitative data analysis.

Qualitative responses from the parental telephone interviews and focus groups were analyzed using the constant comparative technique.[19,22] Data were analyzed separately for those who were present and not present during the event. The primary themes were identified and validated by using a thematic analysis technique.[23] Saturation of telephone interview and focus group data was reached before the end of the analysis.[24] For the telephone interviews, once saturation was reached, interviewers continued

to collect the quantitative data, but probe questions for detailed qualitative data were no longer asked.

Results

Demographic Findings

The Figure is a flow diagram of study enrollment. Of the 938 family members eligible for study inclusion, 800 provided consent. Of these, 74% agreed to be contacted for the telephone interview and focus group; however, 26% were not eligible because of a time lapse of longer than 6 months since the event or because they were not English speaking. Most eligible family members (n = 465; 79%) were unable to be interviewed for reasons outlined in the Figure. A total of 126 family members participated in telephone interviews. Reasons for family members not being present are shown in the Figure. No family member was denied the option to be present because he or she was screened as an inappropriate candidate.

Demographic characteristics of the family members in the 2 groups were similar (Table 2). Participants in the 4 family present focus groups included 17 family members (6 fathers, 11 mothers), and the family not present focus groups involved 8 family members (4 fathers, 2 mothers, 1 grandmother, 1 aunt as legal guardian). Complete demographic data were available for 95 of 99 children in the

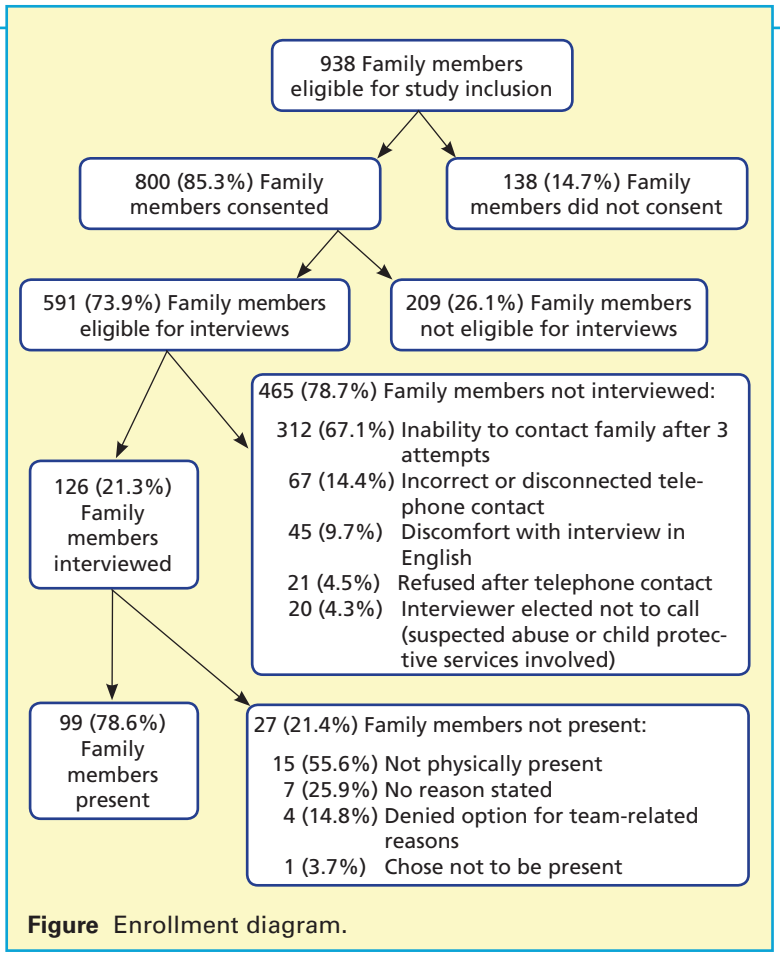

Figure Enrollment diagram.

Table 2
Family member demographics obtained during telephone interviews

Family member characteristic	Family present (n = 99)	Family not present (n = 27)	*P* (95% CI)[a]
Age, mean (SD), y	38.79 (9.27)	38.77 (9.89)	.99 (-4.02 to 4.06)
Female sex, No. (%)	75 (76)	22 (81)	.53 (-0.12 to 0.24)
Relationship to patient, No. (%)			
Mother	65 (66)	22 (81)	.12 (-0.04 to 0.35)
Father	23 (23)	4 (15)	.34 (-0.09 to 0.26)
Grandparent	6 (6)	0 (0)	.19 (-0.03 to 0.15)
Other	5 (5)	1 (4)	.78 (-0.08 to 0.10)
Race/ethnicity, No. (%)			
White	41 (41)	10 (37)	.65 (-0.16 to 0.26)
Black	46 (46)	9 (33)	.21 (-0.08 to 0.35)
Hispanic	8 (8)	6 (22)	.04 (0.01 to 0.27)[b]
Other	4 (4)	2 (7)	.43 (-5.6 to 20.0)
Education,[c] No. (%)			
High school	30 (30)	10 (37)	.53 (-0.14 to 0.26)
College	56 (57)	15 (56)	.88 (-0.20 to 0.23)
Postgraduate	12 (12)	2 (7)	.48 (-0.09 to 0.18)

[a] The 95% CIs are for the differences between the 2 groups, using *t* tests, analysis of variance, Wilcoxon rank sum tests, or Kruskal-Wallis tests for continuous variables and χ^2 or Fisher exact tests for the categorical variables.

[b] Statistically significant, with $P < .05$ and 95% CI.

[c] Data missing for 1 family member who was present (n = 98).

Table 3
Pediatric trauma patient demographics

Trauma patient characteristic	Family present (n = 95)	Family not present (n = 27)	*P* (95% CI)[a]
GCS score, total, mean (SD)	14.2 (2.41)	13.3 (3.84)	.26 (-0.63 to 2.43)
GCS score, motor, mean (SD)	5.8 (0.89)	5.3 (1.65)	.14 (-0.15 to 1.15)
GCS score, total < 8, No. (%)	5 (5)	3 (11)	.06 (-0.05 to 0.25)
ISS, mean (SD)	3.3 (4.79)	7.6 (7.60)	.009 (-7.32 to -1.28)[b]
ISS > 15, No. (%)	4 (4)	5 (19)	.14 (0.01 to 0.35)
Trauma score, mean (SD)	13.6 (2.34)	12.6 (2.62)	.08 (-0.09 to 2.10)
Age, mean (SD), y	8.25 (4.55)	8.20 (4.50)	.96 (-1.88 to 1.98)
Male sex, No. (%)	54 (57)	16 (59)	.78 (-0.24 to 0.31)
Race/ethnicity,[c] No. (%)			
White	38 (38)	7 (26)	.58 (-0.28 to 0.49)
Black	40 (40)	14 (52)	.46 (-0.19 to 0.42)
Hispanic	11 (11)	5 (19)	.74 (-0.30 to 0.42)
Other	10 (11)	1 (4)	.07 (-0.11 to 0.16)

Abbreviations: GCS, Glasgow Coma Scale; ISS, Injury Severity Score.

[a] The 95% CIs are for the differences between the 2 groups, using *t* tests, analysis of variance, Wilcoxon rank sum tests, or Kruskal-Wallis tests for continuous variables and χ^2 or Fisher exact tests for the categorical variables.

[b] Statistically significant, with $P < .05$ and 95% CI.

[c] Data on race were available for all 99 patients in the family present group.

family present group and 27 in the family not present group (Table 3). Overall, children in the family not present group were more severely injured, as indicated by Injury Severity Score ($P = .009$; Table 3), a post hoc score assigned after hospital discharge. Both groups had equivalent representation of severely injured children, as measured in real time in the trauma bays by a Glasgow Coma Scale score of less than 8, a Trauma Score in the lower third of the scale, and need for intubation in the trauma bay. No child required cardiopulmonary resuscitation in the emergency department.

Family Presence Attitudes

Data on attitudes pertaining to family presence were compiled from the telephone interviews. Overall, for families present, the total mean score on the PFPAS-FM survey 4-point Likert scale was 3.65 (SD, 0.37), indicating that parents had a strongly positive attitude about being in the trauma bay with their child during the initial trauma care.

Most parents felt that they had the right to be present during their child's initial trauma evaluation.

The mean score for factor 1 (Potential ramifications of family presence) was 3.56 (SD, 0.49; range, 2.0-4.0), indicating that parents believed that being there during the event did not negatively affect the team or their child's care. The mean score for factor 2 (Need to be there) was 3.78 (SD, 0.33; range, 2.8-4.0), reflecting that parents strongly believed that family presence had fulfilled their need to be with their child during the trauma evaluation. The attitude items with the highest mean values included "[it] was the right thing for me to do because I needed to be there" (3.83; SD, 0.38; range, 3.0-4.0) and "[it] helped me know that everything possible was done for my child" (3.81; SD, 0.39; range, 3.0-4.0).

Twenty-seven family members who were not present were interviewed using the PFNPAS-FM survey. The total mean attitude score was 3.2 (SD, 0.60; range, 1.33-4.0), indicating that although they had not been there during the initial trauma evaluation, they had a positive attitude about wanting to be with their child during the event. The attitude items with the highest mean values included agreement that if they had been there during the initial evaluation, it "would have been comforting for my child" (3.52; SD, 0.71; range, 2.0-4.0) and "would have been the right thing for me to do because I needed to be with my child" (3.44; SD, 0.82; range, 1.0-4.0).

Family Members' Behaviors and Interactions During Family Presence

Family members who were present during the trauma evaluation commented on their behaviors. Almost all parents reported positive interactions that included being near (91%), talking to (94%),

touching (90%), and providing emotional support (94%) to their child. Most recalled having an interactive relationship with the trauma team, asking questions about their child's care (81%) and providing the team with important health care information (92%). A few family members needed to step out of the trauma room for personal reasons (11%). Only 8% reported being unable to control their emotions.

Family Member Experiences

Family member experiences related to their child's trauma evaluation (n = 97) are reported in Table 4. All family members who were present felt it was not only important for them to be there but also their right to be present. Nearly all agreed that being present in the trauma room decreased their child's anxiety and helped them better understand their child's condition. Less than one-third of family members believed that their presence made a difference in how the trauma team cared for their child. All family members stated they would choose to be present again if a similar situation arose.

Most family members who were not present wanted to be there with their child in the trauma room (Table 4). Similar to families who were present, they felt that being there would have decreased their child's anxiety associated with the event and would have helped them better understand their child's condition. Few believed that being present would have made a difference in how the trauma team cared for their child.

Qualitative analysis of the in-depth responses from family members collected during the telephone interviews and focus groups identified 8 shared themes related to family members' experiences (Table 5). The majority of family members, whether they were present or not, felt strongly that family presence was their right; however, many identified conditions where their right to be there may have limitations. They believed that if being present jeopardized their child's care, this right could be terminated. Both groups agreed that being in the room allowed (or would have allowed) them to better advocate for their child, and that it was their responsibility as a parent to keep their child safe. They also identified their role in information sharing as important because they provided the health care team pertinent medical history and patient information. Both groups independently identified the significance of being present to help comfort their child. They related that witnessing their child's care in real time alleviated (or would have alleviated) the fear of the unknown and helped (or would have helped) them gain an understanding of the resuscitation process.

Table 4
Interview responses of family member experiences from the Family Present and Not Present surveys

Family present (n = 97)	Yes No. (%)
Did you feel it was important for you to be there with your child?	97 (100)
Did being there help you understand your child's condition?	91 (94)
Did being there make a difference in how the trauma team cared for your child?	29 (30)
Did being there help decrease your child's anxiety?	92 (95)
Did being there help decrease your anxiety?	87 (90)
Did you believe you had a right to be present?	87 (90)
Would you want to be in the room with your child again during his/her medical care?	97 (100)
Was the experience what you expected?	65 (67)
Family not present (n = 27)	**Yes No. (%)**
Do you feel it would have been important for you to have been there with your child?	20 (74)
If you had been there, do you think it would have helped you understand your child's condition?	17 (63)
If you had been there, do you think it would have made a difference in how the trauma team cared for your child?	3 (11)
If you would have been there, do you think it would have helped to decrease your child's anxiety?	15 (56)
If you would have been there, do you think it would have helped decrease your anxiety?	14 (52)
Do you believe you had a right to be there with your child during the initial medical care?	20 (74)
If this situation happened again, would you want to be in the trauma room with your child during his/her medical care?	22 (82)
Did you want to be present in the trauma room during your child's medical care?	22 (82)

Discussion

Our study reports results of an in-depth analysis of family attitudes, behaviors, and experiences during pediatric trauma team evaluation at 3 level I pediatric trauma centers. The themes identified through telephone interviews and focus groups demonstrated congruency across data types. Most parents felt that they had the right to be present during their child's initial trauma evaluation. Parents perceived their presence as the opportunity to fulfill their parental role as a provider of support and an advocate for their child, and they felt strongly that they were uniquely prepared to fulfill this role. Even when not present, family members expressed

Table 5
Qualitative thematic analysis of family member experiences obtained from telephone interviews and focus group for families present and not present

Qualitative themes	Family present	Family not present
The choice to be there is my right.	"I think I should know what's going on with my son . . . As a parent I believe I have the right [to be there] as much as I'm the one to give consent, so certainly I believe that I should be there." – Dad	"I believe I have a right. What if it escalated to be more than it was and I couldn't be there to say some last things. I wouldn't want him to pass while I'm not there. For me, I would have wanted to be there knowing that I was able to say something . . . I love you and that you're truly cherished. So for things like that I should have the right in either circumstances and choose to go in if I want to or choose not to." – Mom
There are limitations to my being there.	"If my being in the room impeded in any way the care . . . if my physical body being in the space or my reaction affected how the professionals could focus on my child, then I do not think I should be there." – Mom	"I believe any parent has a right to be in the emergency room until they prove that they are in the way . . . but the first minute that you jeopardize that child's care, then you forfeit that right." – Mom
I can better advocate on behalf of my child.	" I just want to be there the whole time, making sure she is safe." – Mom	"Somehow, as a parent, you feel that you are advocating . . . that is the emotional response." – Mom
It helps me to (or would have helped) comfort my child.	"He was afraid. He needed a familiar face, not just faces of people he didn't know. He needed to have me or his sister, somebody there to keep him calm and inspire him to keep going on, hanging in there." – Mom	"Just so that I could give him the sense of 'mommy is here' . . . and everything they are doing is because they are trying to help you . . . but [me] not being there and seeing all these people that you haven't seen before, and lights, and machines, all that stuff is very overwhelming. The sense of death would probably be in him and I would not want him not to feel the sense of 'am I going to die?'" – Mom
It gives me comfort and peace of mind.	"It made me feel calm. If I wasn't there I'd go crazy. If I wasn't in there I would not really know what would be going on. By me being in there, I understood everything. The doctors were letting me know stuff and seeing his reactions made me feel better." – Mom	"In the waiting room . . . you don't know what is going on in there. You have no clue. I would rather know and see what is going on, see my baby. I guess they do this to protect emotions and feelings, but the waiting period can give somebody a heart attack." – Mom
Family presence lets me see my child's care.	"I had no idea how badly she was injured, so my level of anxiety could not have been any higher when I walked through the door…so to see that she was awake, alert, and looking at me, recognizing me, moving everything . . . the whole thing was just better because I could lay eyes on her." – Mom	"[If] I was there I would have seen what they have done already. But coming in a little later, it was second-hand information. It was kind of hard information." – Dad
Desire for real-time observation	"I asked questions and they explained and I talked to everybody and they explained what was going on. So they made me a part of everything that was going on versus you don't have to hear it through everybody else. I was actually talking to the people who were doing the test for everything." – Mom	"It was kind of hard to understand the processes of what is going on when you are getting it after the fact." – Dad
Trust the staff to give the best care possible	"I believe if, if my child . . . if I wasn't there, my son still would get the care that he needs and that he deserves. It's just something about a parent being present, especially when you're in the room full of, of strangers." – Mom	"I just trust them to do the best job they can do to make sure he is okay. Even though I'm in there or not. I just trust them to do all the things they need to do." – Mom

the importance of being there to emotionally support their child and witness their care in real time. To our knowledge, this study is one of the first to document that the attitudes and experiences of family members who were not present with their children were similar to those who were present.

Our overall study findings are consistent with prior research on family members' attitudes about family presence. Direct accounts from family member of their experiences, surveys, and postevent interviews document the positive perceptions and experiences involving family presence.[10,12,25-31] Being

present reduces parent and child anxiety, helps children better cope with pain and fear, allows parents to witness that everything possible was done for their child, and facilitates the grieving process in the event of a child's death.[1,22,26,27,31-35] Several studies have highlighted the benefits of family presence without interference in patient care.[16,36-39]

Health care providers working in pediatric trauma resuscitation may gain knowledge from the findings of both parental groups studied. Family members in our study identified the importance of not interfering with the care their child receives. They highlighted the need to monitor their own behavior and remain calm to provide the needed support to their child and allow the health care team the physical and emotional space to deliver the necessary care. The extent to which this form of self-regulation of behavior was described by participants has not been previously reported in the literature, to our knowledge.

Study findings support the value of having written family presence policies in place as well as staff empowerment and education in family presence as an antecedent to the experience. A process for training family facilitators is also essential. Although most facilitators in our study were social workers, any health care provider can be trained to fill this role.

We chose to use multiple data sources, methodological approaches, investigators, and data analysis methods to strengthen our study design and provide a stronger interpretation of our findings.[40,41] This process of triangulation in research design increases validity of the findings by incorporating multiple perspectives, thus minimizing data collection and investigator bias.[42] We hypothesized that this process would not only contribute to a better understanding of the family presence phenomenon but also uncover significant information that may have remained unidentified with the use of only a single approach.[42,43]

Limitations

Our study has several limitations. Experiences of non–English-speaking families may have been different from those of English-speaking families and need to be explored. Family presence, however, was offered with interpreter services at all 3 sites, and no family member was excluded from participation in the trauma bay for this reason. Second, although we realize that a randomized controlled trial would have been the ideal study design, we believed it was not ethically feasible because of the widely accepted benefits of family presence. Third, our 3 metropolitan study sites had existing family presence programs in place unrelated to our study. Our findings may have been more positive because of prior education and acceptance by emergency department and trauma teams; results could be different at organizations in which a culture of family-centered care is less established. Having a family facilitator with the family has been known to improve family and provider satisfaction, although not all centers will have sufficient staff and timely resources available to provide this support.[17] We acknowledge that lack of family facilitation may lead to more varied experiences.

Last, we had a relatively low overall response rate for the telephone interviews. Our experience is in line with the current trend of interview respondents. In a recent assessment of public opinion surveys conducted by the Pew Research Center, they noted increased difficulty with contacting potential respondents and a dramatic decline in the successful response rate from 36% in 1997 to 9% in 2012.[44] The low response rate is further reflected in the subcategories of family members who were not present. We had small representation of family members who were not present, although the ratio of those present (n = 99) to those not present (n = 27) in our study was similar to what is seen in clinical practice: One-third of our trauma patients present for care without family members. Our data show that the experiences and attitudes of those family members who were not present reflected an attitude of wanting to be present, but circumstances around the event prohibited them from being with their child during the resuscitation. Given that only 1 parent preferred not to be present (with a possible maximum of 8, if we are to assume that the 7 who did not state a reason chose not to be present), the attitudes and experiences of family members who choose not to be present need to be further explored.

> Parents perceived that being present was an opportunity to fulfill their parental role as a provider of support and an advocate for their child.

Conclusion

The findings from our study demonstrated compelling family benefits for presence during pediatric trauma care. The combination of different research methods allowed us to explore the complexities of trauma resuscitation as experienced by families and generate a deeper understanding of the thoughts and

behaviors that govern their responses during these emotionally charged situations. Cataloging the attitudes, behaviors, and experiences of families gives health care providers evidence to better prepare families for participation, support them in their decisions, and guide best practices that keep families together while safely delivering trauma care.

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This article has been designated for CE contact hour(s). The evaluation demonstrates your knowledge of the following objectives:

1. Describe the reported similarities between family members who were present during trauma resuscitation and those who were not.
2. Identify 5 qualitative themes expressed by family members about their experience with family presence during pediatric trauma.
3. Discuss the implications of this study for emergency and critical care practice settings.

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