This is the author accepted manuscript version of: Ghavi, A, Hassankhani, H, Powers, K, Sawyer, A, Karimi, B & Kharidar, M 2023, 'Parental supporter during pediatric resuscitation: Qualitative exploration of caregivers' and healthcare professionals' experiences and perceptions', International emergency nursing, vol. 72, 101381.

The final published version can be found at: https://doi.org/10.1016/j.ienj.2023.101381

Parental supporter during pediatric resuscitation: Qualitative exploration of caregivers' and healthcare professionals' experiences and perceptions

ABSTRACT

***Background*:** Child resuscitation is a critical and stressful time for family caregivers and healthcare professionals. The aim of this study was to explore caregivers' and healthcare professionals' experiences and perceptions of a parental supporter during pediatric cardiopulmonary resuscitation to provide guidance to healthcare professionals on supporting parents and other family caregivers during resuscitation.

***Methods*:** This study used an exploratory descriptive qualitative approach. The setting was two large referral pediatric governmental hospitals. Participants were 17 caregivers who had experienced their child's resuscitation, and 13 healthcare professionals who served on resuscitation teams in emergency rooms or intensive care wards. Semi-structured, in-depth interviews were conducted and data were analyzed using thematic analysis. COREQ guidelines were followed.

***Results*:** Participants shared their experiences and perceptions of a parental supporter during pediatric resuscitation in three themes: 1) Requirement for the presence of a parental

supporter, 2) Expectations of the parental supporter, and 3) Characteristics of the parental supporter.

***Conclusions*:** Study findings highlight the need for a parental supporter during pediatric resuscitation; however, there is no defined parental supporter role in current guiding policies due to limited research on this role. More research on the parental supporter role is needed so effective policies and protocols can be developed to enhance family-centered care practices in pediatric emergency and acute care settings.

Keywords: Caregiver, Parents, Resuscitation, Pediatrics, Healthcare Professional, Qualitative Research, Family Nursing

Highlights

- There is a clear need for presence of a parental supporter during pediatric resuscitation, whether witnessed by the caregivers or not.
- Participants' words indicated that essential duties of the parental supporter in pediatric resuscitation are providing information, reassuring, supporting the family, and promoting parent-child connectedness.
- Based on participants' experiences, characteristics of individuals who may be best suited for parental supporter role are those having a compassionate and supportive personality, experienced in resuscitative care, and familiar with the native culture and language.

- Identifying the duties and characteristics of the parental supporter may facilitate development of clinical policies and protocols to ensure support for caregivers; thus, study findings can help nurses enhance family-centered care during critical situations.

1. Introduction

Pediatric healthcare professionals (HCPs) provide care to both the child and their family caregiver(s) such as parents, grandparents, or guardians. A critical and stressful time for family caregivers and HCPs is the resuscitation of a child [1,2]. Pediatric cardiac arrest in children and adolescents occurs at a rate of 2.28 to 8.04 (100,000 cases/year), with cardiopulmonary resuscitation rates per age group ranging from 65.5-72 (infants), 3.7 (children), and 6.3 (adolescents) for the 100,000 cases/year [3]. In Asian countries, pediatric cardiac arrests occurred in 1.5% of the total number of patients under 17 years of age [4]. Anxiety, stress, depression, and post-traumatic stress are specific psychological effects that can occur among caregivers when their child requires resuscitation [5]. Therefore, pediatric resuscitation is one of the most critical times when caregivers need to receive support [5-7]. Leaving caregivers unattended and unsupported, whether they are witnessing the resuscitation or not, is not appropriate [8].

Pediatric HCPs have an important role in providing parental support when children are critically ill in intensive care wards or emergency departments [5,9]. In addition to practicing with clinical expertise, HCPs should also be sensitive to the needs of caregivers and consider

provision of support [10]. Providing support to caregivers is an evidence-based practice [11], and a crucial part of family-centered care (FCC) [12]. The focus is on supporting the family and meeting the needs of both the family and the child, which is essential according to the perspectives of caregivers [13]. Therefore, providing available family support resources and considering the supportive roles that HCPs can perform is important for optimal FCC [12,13]. Nurses can support critically ill children and their families in the emergency department by implementing elements of FCC [9].

The Pediatric Advanced Life Support guidelines from the American Heart Association recommend that when family is present during pediatric resuscitation, it is beneficial for a designated member of the healthcare team to answer their questions and provide comfort and support [14]. The Resuscitation Council UK and the European Resuscitation Council also recommend support for family members during resuscitation [15,16]. Additionally, published review articles confirm that support for caregivers during and after pediatric resuscitation is crucial [17,18]. Even if the caregivers are not present at the time of resuscitation or decline the invitation to be present in the resuscitation room, they continue to need support while their child is resuscitated [7,19]. Care in this critical time can be provided by a parental supporter, also called a family facilitator, within or outside of the resuscitation room [1,20,21]. In addition to meeting caregiver needs, presence of a parental supporter can allow the resuscitation team to fully focus on the care of the child [22,23]. Despite the importance of this role, few studies have investigated it. A recent study by Powers et al (2022) examined how critical care nurses perceive and perform the family support person role during resuscitation, but the focus was on supporting family of adult patients and

87 the lived experiences of family members were not explored [24]. The nature of this role on
88 the resuscitation team has not been clarified in pediatric settings; therefore, this study aimed
89 to explore caregivers' and healthcare professionals' experiences and perceptions of a parental
90 supporter during pediatric cardiopulmonary resuscitation to provide guidance to HCPs on
91 supporting caregivers during resuscitation. The caregivers' and healthcare professionals'
92 experiences can enrich understanding of parental supporters during pediatric resuscitation.

93

94 **2. Methods**

95 This qualitative study used an exploratory descriptive approach. The Consolidated Criteria
96 for Reporting Qualitative Research (COREQ checklist) [25] was followed during preparation
97 of this manuscript (Supplementary File 1).

98 *2.1. Setting and Participants*

99 The setting was two large referral pediatric governmental hospitals in the two Iran capital
100 cities of Tabriz (East Azerbaijan Province, in northwestern Iran) and Mashhad (Khorasan
101 Razavi province, in northeastern Iran). The persons of Iran are largely of two ethnicities:
102 Turkish (in western Iran) and Persian (in eastern Iran). In this study, the term caregiver refers
103 to the child's mother, father or grandparent. Using purposeful sampling, there were 17
104 caregivers (4 parent pairs, 3 fathers, 5 mothers, and 1 grandmother) of 13 children and 13
105 HCPs (8 nurses and 5 physicians) who participated in the study. Selection criteria were: a)
106 Child caregivers who experienced successful or unsuccessful resuscitation of their child, and
107 the time of the interview was more than 3 months after the resuscitation crisis to allow for

caregivers' psychological symptoms to lessen [26] or b) Nurses and physicians who were working in emergency rooms or intensive care wards with at least 2 years of experience on the resuscitation team to ensure rich, informed experiences.

2.2. Data collection and analysis

Hospital managers aided in participant recruitment by identifying HCPs who met the inclusion criteria for participation in this study. They recommended potential HCP participants with resuscitation experience who could provide insight based on their rich, informed experiences. The caregivers were identified by a review of medical records of children that were resuscitated in the pediatric hospitals. For the HCPs and caregivers who were deemed eligible to participate in this study, we then sent an email message to explain the study and invite them to participate. There were 13 HCPs who agreed to participate voluntarily. For the potential caregiver participants, we sent 287 messages to caregivers who were eligible and 17 agreed to participate in this study, while 270 caregivers did not respond or did not agree to participate. After participants were identified, face-to-face individual interviews were scheduled. The first author conducted the semi-structured, in-depth individual interviews from December 2021 to October 2022. Interviews were tape-recorded and occurred at the hospitals (for HCP participants) and at the caregivers' homes (for caregiver participants). Each of the interviews lasted between 45 to 80 minutes.

Interview guides were designed to elicit caregiver and HCP participants' experiences and perceptions of a parental supporter during pediatric cardiopulmonary resuscitation. Caregiver and HCP participants were encouraged to share their experiences and perceptions about the need for a parental supporter during resuscitation of children, how this need was or could be

met, and perceptions of strategies that HCPs can utilize to effectively support caregivers during a resuscitation crisis which was defined as cardiopulmonary arrest. The interview guide questions are available in Supplementary File 2. To promote an in-depth understanding of participants' experiences and perceptions, clarification and probing questions were asked after each of the interview guide questions. During the interviews, the term "cardiopulmonary resuscitation" and other technical terms (such as intubation, chest compressions) were used with HCP participants, but in interviews with caregivers, simplified language was used when explaining terms (for example, "when a tube was inserted in your child's mouth" or "when your child's chest was pushed"). Illustrations were also shown when needed to ensure caregivers understood the questions, and these involved non-living subjects (i.e. illustrations of manikins and from books). Interviews were continued until data saturation was reached [27], which was confirmed when no new information or codes were uncovered in the last 5 interviews (conducted with 2 HCPs and 3 caregivers).

Recorded interviews were transcribed verbatim and then thematic analysis was performed by two researchers according to Braun and Clarke's (2006) method [28]. First, the text of each interview was read several times. The text was then broken down into meaningful units and coded by hand and through use of MAXQDA 2020 software. A list of codes related to all transcribed texts was prepared and each code was identified to which domains it belongs. The codes were also categorized according to their similarities and differences. To increase trustworthiness, this process of data analysis was conducted by two researchers who extracted and then categorized the codes, with each researcher independently coding each interview and then collating them into preliminary themes and subthemes. Next, the extracted themes

and subthemes were discussed, and confirmed and agreed upon by the two researchers and presented for agreement of the other authors. Participant quotations were selected to enrich understanding of the themes.

2.3. Ethical considerations

This study was approved by the ethics committee with the ID IR.AZMED.REC.1398.1080. The interviews with child caregivers who experienced their child's resuscitation crisis were conducted more than 3 months after experiencing the resuscitation crisis to allow for their psychological symptoms (depression, anxiety, PTSD) to lessen [26]. The objectives and procedures of the study were explained to all caregiver and HCP participants, including measures to protect confidentiality. Participants' personal information was kept confidential, and their experiences and perceptions were used in the study without names and identifying details. Written informed consent was obtained from all participants. Caregiver and HCP participants received psychological support during and after their interview as needed by a psychologist who collaborated in this study.

2.4. Rigor

The criteria of credibility, dependability, confirmability, and transferability were considered to increase the trustworthiness and rigor of the research [29-31]. The credibility of the study was ensured by prolonged engagement with the participants, checking findings with experts (external audits), and checking findings with participants (member checking). The prolonged engagement with the data supported the dependability of this study. To promote confirmability of the findings, an audit trail was created, thus careful recording of the

complete study process and findings allowed other researchers to examine the process and the results of the research. In this regard, the findings were confirmed by two experienced head nurses (pediatric intensive care ward and emergency room) who did not participate in the study. To obtain transferability, different persons were involved, both HCPs (nurses and physicians) and caregivers (who had children with chronic and acute illnesses, different literacy levels, urban and rural residences).

3. Results

In this study, there were 17 caregivers of 13 resuscitated children (aged one month to five and a half years; 6 boys and 7 girls) who participated. At the time of each caregiver interview, between 3 and 12 months had passed since the resuscitation. The caregivers were aged 22 to 48 years, and nine were mothers, seven were fathers, and one was a grandmother. Eight of the caregivers had only one child (one of these children was born after many years of infertility). Five of the children had no previous history of illness or hospitalization. For these children, the resuscitation attempts were due to: delay in bringing the child to the hospital for gastroenteritis due to fear of getting infected with covid-19 (2 children), the concern for contracting influenza or covid-19 (2 children), and trauma (1 child). The other 8 children had a history of chronic illness, with the resuscitation attempts due to a medical cause of cardiac arrest. Five of the caregivers had experienced a successful resuscitation of their child. Yet, only one child survived resuscitation and was discharged home, while the other four caregivers experienced a successful resuscitation before the last unsuccessful resuscitation of their child. Next, there were 13 HCPs who participated. These participants were members of

a resuscitation team and worked in intensive care wards or emergency rooms of the two pediatric hospitals. Five were paediatric physicians and eight were nurses in different categories of practice (from bedside nurse to head nurse) and education (bachelor's to master's degree). Demographic details of the participants are provided in Table 1.

Table 1. Participants' demographic characteristics. (near here)

Participants shared their experiences and perceptions of a parental supporter during pediatric resuscitation. Three themes, with associated subthemes, were identified: 1) Requirement for the presence of a parental supporter (need parental supporter; support based on healthcare professionals' preference), 2) Expectations of the parental supporter (provide information during resuscitation; assurance to caregivers; physical-emotional support; promote a parent-child relationship), and 3) Characteristics of the parental supporter (an experienced member of the resuscitation team; familiar with the native culture and language; compassionate and supportive personality). Participant quotes were chosen to enrich understanding of themes and subthemes.

3.1. Requirement for the presence of a parental supporter

During pediatric resuscitation, it is necessary to have someone who is responsible for supporting the caregivers, whether they are witnessing the resuscitation or are outside of the resuscitation room. A parental supporter with a clear role and responsibilities is important so that the resuscitation team can focus on providing care to the child and the caregivers are not

left alone during the critical situation. In this theme, there were two subthemes. Supportive quotations are found in Table 2.

3.1.1. Need parental supporter

The experiences and perceptions of both HCPs and caregivers indicated that there is a need for a parental supporter to be physically present at the side of the caregivers, supporting them during the resuscitation of their child. Without a member of the healthcare team by their side, caregivers do not understand what happened, and they will be confused and anxious.

3.1.2. Support based on healthcare professionals' preference

The experiences of both doctors and nurses indicated they did not feel it was their responsibility to support caregivers during resuscitation due to the lack of a defined parental supporter role. This caused some HCPs to take care of the child only based on their job duties, and they did not pay attention to the caregivers. Yet, others also considered the caregivers' needs due to their own experiences. One of the nurse participants who had experienced the death of her own 5-year-old child in an accident supported caregivers during the resuscitation of their child based on her own experience as a bereaved individual. Thus, the HCPs chose to support or not support the family caregivers based on their own preferences and personal experiences.

Table 2. Supportive quotes for Requirement for the presence of a parental supporter (near here)

3.2. Expectations of the parental supporter

The person who supports caregivers during resuscitation of a child can have specific responsibilities to fulfill in order to effectively support the caregivers. In this theme, four subthemes were identified. Supportive quotations are found in Table 3.

3.2.1. Provide information during resuscitation

Based on the experiences and perceptions of caregivers and HCPs, caregivers often experience confusion when the team is resuscitating their child; therefore, many caregivers expressed a preference for someone to be available to answer their questions. In this regard, most of the caregiver participants described this need to receive information about their child's resuscitation. Conversely, a few caregivers expressed satisfaction with HCPs' behavior during the resuscitation of their child, which seemed to be due to having a HCP beside them, explaining the situation of their child. HCPs expressed how providing information to caregivers can not only help alleviate caregivers' confusion, but explanations can also be a form of psychological support.

The experiences and perceptions of HCP participants indicated that information provided to caregivers during resuscitation should consist of general explanations. A parental supporter should use simple and understandable terms and consider the caregivers' level of education. When providing information to caregivers about their child's condition, the parental supporter should consider whether the child's illness is acute or chronic. Participants explained that caregivers who have an awareness of their child's condition can prepare themselves, psychologically and mentally, for their child being in critical condition and even the possibility the child may die, but caregivers are more shocked when their child is acutely ill. The parental supporter must also be careful to be realistic, and HCP participants explained

how the possibility of unsuccessful resuscitation was told to caregivers while they also tried to maintain hope. Lastly, based on the HCPs' perspectives, it is also important that the parental supporter talk with the caregivers without blaming them for their child's condition.

3.2.2. Assurance to caregivers

The physical care provided during resuscitation can be perceived by caregivers as unpleasant, even violent. Therefore, it is important for the parental supporter to explain the need for the care being provided. HCPs described how caregivers can have misconceptions and distrust of HCPs' performance during resuscitation, making the need for reassurance evident. The parental supporter should also reassure caregivers that all of the resuscitation team members are doing their best to try to save the child's life. This reassurance can help to increase caregivers' trust in the team.

3.2.3. Physical-emotional support

Caregivers' and HCPs' experiences and perceptions reflected parental need for physical and emotional support during and immediately after their child's resuscitation. Caregivers desired to be taken into consideration and for HCPs to refrain from leaving them during and even after the resuscitation, at least as long as they are in the hospital or there is no support available from relatives and friends. Yet, not all caregivers longed to be accompanied by a member of the healthcare team. For example, a father expressed the need to be alone after his child died.

Providing a safe physical environment (such as when caregivers may fall due to collapse on hearing of the death of their child), giving caregivers a glass of water, providing medication

279 therapy (such as tranquilizer when prescribed by the doctors if caregivers wanted to calm
280 down), providing consolation that was consistent with the parent's culture, listening to
281 caregivers, and empathizing with caregivers verbally and non-verbally emerged from
282 participants' experiences in regard to provision of physical and emotional support.

283 *3.2.4. Promote a parent-child relationship*

284 Caregivers' experiences and perceptions indicated they had a need to see and communicate
285 with their child during resuscitation and, if possible, have skin-to-skin contact with their
286 child. They expected the parental supporter to be able to provide this for them. The
287 experiences of caregivers and HCPs indicated the need to facilitate parent-child connection
288 immediately after successful or unsuccessful resuscitations, such as embracing, touching,
289 kissing, talking to the child, etc. Again, it was felt that the parental supporter can provide this
290 opportunity for the caregivers.

291 The experiences of the caregivers whose children did not survive also showed the need for a
292 place and time without haste to say goodbye to their child. According to the HCP participants'
293 experiences, the parental supporter must consider the child's appearance after successful and
294 unsuccessful resuscitations in order to facilitate the parent-child connection. After successful
295 resuscitation, the parental suporter should explain the equipment attached to the child and
296 how to communicate with the child. In unsuccessful resuscitations, the child's appearance
297 should receive attention and they should be cleaned to help the caregivers' grieving.

298 The experiences of the caregivers of deceased children indicated they expected the parental
299 supporter to provide keepsakes of their child so they could maintain a connection with their
300 child after his/her death.

301 **Table 3.** Supportive quotes for Expectations of the parental supporter (near here)

302

303 ***3.3. Characteristics of the parental supporter***

304 Individuals best suited to support caregivers are those who have experience with resuscitative
305 care and who have received specific training on supporting caregivers in crisis so they can
306 remain focused in emotinal situations. They should also be familiar with the local culture and
307 possess certain personal characteristics and social skills. In this category, there were three
308 subthemes. Supportive quotations are found in Table 4.

309 *3.3.1. An experienced member of the resuscitation team*

310 The HCPs felt that an experienced, responsible person should fulfill the role of parental
311 supporter on the resuscitation team. They preferred a clinician, such as a physician or a nurse,
312 who is aware of resuscitation procedures and equipment and able to coordinate with the
313 resuscitation team. Most physicians believed that for the team to be able to focus on the
314 resuscitation, it is best for a nurse, who is familiar with the resuscitation process and the
315 child's condition, to support the caregivers during their child's resuscitation. It was explained
316 that having caregivers supported by a non-clinical staff member can cause parental unrealistic
317 expectations. Additionally, a parental supporter should be someone with experience in

meeting psychological needs and who has received training in managing crises that can occur in the time surrounding resuscitation.

Based on the experiences of HCPs, the parental supporter should not have other responsibilities, such as caring for the child being resuscitated or for other patients. This helps ensure the parental supporter can focus on the support needs of the caregivers.

3.3.2. Familiar with the native culture and language

The experiences and perceptions of the HCPs indicated that the person who supports the caregivers should be native to the caregivers' culture and familiar with the local language and beliefs of the local people. Familiarity with the culture and beliefs of the caregivers can be helpful during conversations that the parental supporter uses to support the caregivers emotionally during their child's resuscitation.

3.3.3. Compassionate and supportive personality

Participants (caregivers and HCPs) stressed that the parental supporter should have a kind and compassionate demeanor. They should be patient and have a calm personality so they can manage her/his emotions in the face of parental aggression and be able to calm the caregivers in crisis. The parental supporter must also be able to focus on their responsibilities, and be psychologically ready to support the caregivers. It is important that the parental supporter does not have mental and psychological conflicts due to the environment of family and society (for example, personal economic or family problems) that may distract them from their duties.

The parental supporter should preferably be an empathetic person with effective communication skills. In essence, a parental supporter should be able to put themself in the place of the caregivers so they are able to understand the terrible situation of the caregivers and communicate empathetically. Based on the experiences and perceptions of HCPs and caregivers, HCPs who are parents themselves have better empathy with caregivers who are experiencing the crisis of their child's resuscitation. It was also felt that the parental supporter should be the same gender as the parent they are supporting so that a female parental supporter can better support the mother or a male parental supporter can better support the father of the child.

Table 4. Supportive quotes for Characteristics of the parental supporter (near here)

4. Discussion

In this study, caregivers and HCPs shared their experiences and perceptions of a parental supporter during pediatric resuscitation, with three themes emerging during analysis of the interview data: Requirement for the presence of a parental supporter, Expectations of the parental supporter, and Characteristics of the parental supporter.

Studies show the need for a parental supporter, or family facilitator, to support caregivers, whether the caregivers are witnessing resuscitation or are outside of the resuscitation room [1,20,21]. This individual should be a member of the resuscitation team, and have an intermediate role, meaning that they communicate information between the caregivers and the team [20,32]. The parental supporter also interprets the resuscitation activities while

guarding against the potential for family to disrupt the resuscitation which enables other members of the team to focus on providing patient care [22,23]. The findings of previous studies are consistent with this study; a parental supporter is needed to both support caregivers and safeguard patient care. However, our findings showed that because the parental supporter role and responsibilities were not formally defined for participants in this study, this support for caregivers is performed informally and at the preference of individual resuscitation team members. To ensure FCC, it is important that the role of the parental supporter is defined and that a resuscitation team member be dedicated to performing this vital role. Due to little literature on the parental support role during pediatric resuscitation, more research is vital to be able to create formal policies in regard to this role.

The HCPs and caregivers participating in this study felt that one of the most important duties of the parental supporter is to answer parent questions and provide information about the situation and events of their child's resuscitation. Information sharing is one of the core principles of FCC [33,34]. The findings are consistent with existing research that highlighted the importance of giving information about a patient's status when the family is present during resuscitation [18,35]. Other recent studies also have confirmed this need for providing information to caregivers during resuscitation [1,20]. One study specifically found that providing information during resuscitation is necessary because otherwise, the caregivers may have the impression that the resuscitation is going well and then it is a terrible shock when faced with the death of their child [20]. Research has also demonstrated that if caregivers are informed about their child's resuscitative care, they can better understand that the actions taken are essential to support their child's life [36], and that HCPs have done

everything possible in this regard [1,37,38]. In this study, the participants' experiences and perceptions also showed that it is expected that a parental supporter will reassure caregivers that all necessary personnel are present and doing their best to support the child's life, which can help prevent doubts among the caregivers.

Providing physical and emotional support for caregivers, during and immediately after a resuscitation, was another parental supporter duty expected by participants in this study. This is consistent with other recent studies that found caregivers need HCP support during and immediately after the resuscitation of their child [39], and a care coordinator or family liaison can effectively support the emotional and physical needs of the family during resuscitation [24,40]. The experiences shared by participants in this study indicate it is best for the parental supporter to continue providing physical and emotional support for caregivers as long as they are present in the hospital or do not have available support resources. However, the desire for support may vary among caregivers. In this study, mothers tended to desire for support resources immediately after an unsuccessful resuscitation, but fathers tended to want to be left alone at this time and needed privacy. This finding may be reflective of the participants' culture. In Iranian culture, if a man cries, it considered a sign of his weakness. Thus, while fathers also needed to release their emotions at this time, it may be helpful to inquire about their needs and offer a private place if desired.

Based on the caregivers ' experiences, another identified responsibility of the parental supporter was to facilitate the parent-child connection and relationship during and immediately after resuscitation, and even to maintain contact for an extended time after the child's death. Prior studies showed that caregivers maintain relationships with their child

403 during critical situations through being near, talking, touching, and providing emotional
404 support to their child [7], and that caregivers expect HCPs to support them in being with their
405 child during last moments so they can say goodbye [20]. Yet, participants in this study
406 stressed the need to attend to the child's appearance after resuscitation because this is the last
407 image that caregivers have of their child, a finding also coinsistent with prior research [41].
408 Mementos of the child's last days are especially meaningful, and providing final mementos
409 influenced the degree to which caregivers perceived HCPs as caring and compassionate [42].
410 In this study, participants felt the parental supporter can provide mementos of their child to
411 help meet the caregivers' need for the parents-child relationship to continue in the years to
412 come.

413 The HCPs who participated in this study emphasized that the parental supporter should be an
414 experienced member of the resuscitation team and their only responsibility should be to
415 support the caregivers. This is consistent with the findings of literature reviews that showed
416 experienced staff have more desire for family presence during pediatric resuscitation and
417 they can better support caregivers [17,18,43,44]. It was felt that the parental supporter should
418 be a clinician who is aware of the resuscitation process and able to explain it to caregivers.
419 Another study also found that the resuscitation team preferred a clinician be responsible for
420 supporting caregivers during resuscitation of their child, as they are able to answer questions
421 [32]. In other studies, nurses were more often the clinician responsible to support the family
422 during resuscitation, and it was one of their key roles in resuscitation of children [21,32].

423 The participants in this study discussed essential characteristics of parental supporters. A
424 parental supporter must be a patient, calm person who can control their emotions so they can

manage the crisis situation and help calm the caregivers. Other studies have found that HCPs who support caregivers should have a kind and compassionate personality, be able to explain things clearly, have sufficient skills and expertise to interact with families in crisis and with other HCPs, and be trained for supporting caregivers [23,45]. Research has also found that HCPs empathized with caregivers and tried to understand them through putting themselves in the caregivers' situation and understanding the caregivers' experiences through their lens [23,46]. The participants in this study felt that if the parental supporter has a similar status to the caregivers, they will better be able to understand them. For example, if a parental supporter has a child themselves, they may better understand the feelings of caregivers experiencing their child's critical situation and can better support them. Having similar situations can help people to put themselves in the shoes of others. This is consistent with the findings of a systematic review that showed communication with other caregivers who endured similar circumstances provided helpful support for bereaved caregivers [47]. However, this does not mean that HCPs who do not have children are not able to support caregivers. These individuals may benefit from additional training to better understand caregivers' experiences, and this requires more research. Based on the perceptions and experiences of HCPs who participated in this study, it was also felt that HCPs who are responsible to support the caregivers during a paediatric resuscitation need to be emotionally and psychologically prepared and be 'in the moment' - as distracting personal circumstances will impact the support offered. Next, participants felt it is better to have a parental supporter from the same gender for each of the caregivers; a woman for mothers and a man for fathers. This may be due to the culture and religion of the study participants, who were all Muslim. Showing respect and dignity for cultural and socio-economic differences is part of providing

448 FCC [13]. The parental supporter can meet emotional, spiritual, environmental, and relational
449 family needs in a nondirective way [32]. Attention to the individual beliefs and cultures of
450 caregivers in crisis and avoiding judgment can help better support them. For example, in Iran,
451 some people believe in healing patients by praying to God, appealing to holy people (the
452 prophets and imams), repeating holy phrases, having a green cloth, and having Karbala soil.
453 Yet, others do not believe in these rituals. It may be helpful for the parental supporter to be a
454 native person of the same area to be familiar with the cultural and religious beliefs and values
455 of the caregivers. When this is not possible, collaborating with those having expertise of the
456 parent's culture may be useful. Therefore, presence of a cultural consultant familiar with
457 different cultures, spiritual beliefs, and religions can be useful to facilitate FCC.

458

459 **5. Strengths and limitations**

460 Study participants included both caregivers and HCPs in order to gain a more comprehensive
461 understanding of parental supporters during pediatric resuscitation. Use of a qualitative
462 approach provides a deeper understanding of the phenomenon of interest. Findings provide
463 insight about HCPs' and caregivers' experiences and perceptions of providing and receiving
464 support during resuscitation, which is important for identifying strategies to help caregivers.
465 Cultural considerations emerged when examining the experiences and perceptions of HCPs
466 and caregivers from large hospitals in two major cities in Iran, and cultural findings may
467 differ in other geographic locations. More research is needed to be able to develop formal
468 role guidance in various contexts.

This study, like other qualitative studies, has limitations. One limitation is selection bias, and those who had strong views about parental support may have opted to participate. As with all qualitative studies, generalizability and transferability of the findings is another limitation. Additionally, the children of the caregivers in this study were all five and half years of age or younger, and it is possible that parental support needs differ if the children are older. In Iran, older children are usually hospitalized in an adult hospital. Next, since the interview time with caregivers was 3-12 months after their child's resuscitation, it is possible their recall may not be as accurate as time progresses. Despite the limitations, the study findings are important to stimulate additional research aiming to determine the role of the parental supporter as the HCP participants stated no such person exists on their resuscitation teams and having this guidance would help them better support caregivers.

6. Conclusion

Study findings highlight the need for a parental supporter during pediatric resuscitation, and also shed light on the characteristics that this individual should have and the duties they can perform for caregivers during and immediatly after their child’s resuscitation. The results of this study support the need to require a person from the pediatric resuscitation team to have a defined role in supporting the caregivers. The most important duties of the parental supporter were identified as informing caregivers to decrease stress, providing reassurance, and preparing for bad news. Other essential parental supporter duties identified were: Provide emotional support based on the needs, culture, values, beliefs, and religions of caregivers and promote a parent-child relationship during resuscitation and afterward. The most important

491 characteristics of the parental supporter were highlighted: An experienced member of the
492 resuscitation team, familiar with the native culture and language, and a compassionate and
493 supportive personality who can empathize and be able to put themself in the caregivers'
494 shoes. Yet, the results of this study indicate that HCPs choose whether to provide parental
495 support according to their preferences, leaving some caregivers without adequate support.
496 This suggests that the parental supporter should be a required and defined role that is enacted
497 during pediatric resuscitation. More research on the parental supporter role is needed so
498 effective policies and protocols can be developed. Future studies should also examine the
499 parental supporter role in different contexts and cultures. Experimental sudies may be also
500 useful to examine outcomes of having a parental supprter during pediatric resuscitation. More
501 evidence on this vital role is essential to enhance family presence during resuscitation and
502 FCC practices in pediatric settings.

503

504 **Supplementary materials**

505 Supplementary material associated with this article was sent, in a separate files.

506 **Funding**

507 This research did not receive any specific grant from funding agencies in the public,
508 commercial, or not-for-profit sectors.

509 **Declaration of Competing Interest**

510 The authors declare that they have no known competing financial interests or personal
511 relationships that could have appeared to influence the work reported in this paper.

References

[1] Stewart SA. Parents' experience during a child's resuscitation: Getting through it. J Pediatr Nurs. 2019;47:58–67. https://doi.org/10.1016/j.pedn.2019.04.019.

[2] Wolfe HA, Sutton RM, Topjian A, Nishisaki A, Niles DE, Meaney PA, et al. Reporting in Pediatric Resuscitation : Get with the Guidelines-Resuscitation Registry. Pediatr Congenit Card Care. 2015;2:145–51. https://doi.org/10.1007/978-1-4471-6566-8_10.

[3] Shimoda-Sakano TM, Schvartsman C, Reis AG. Epidemiology of pediatric cardiopulmonary resuscitation. J Pediatr. 2020;96(4):409–21. https://doi.org/10.1016/j.jped.2019.08.004.

[4] Tham LP, Wah W, Phillips R, Shahidah N, Ng YY, Do Shin S, et al. Epidemiology and outcome of paediatric out-of-hospital cardiac arrests: A paediatric sub-study of the Pan-Asian resuscitation outcomes study (PAROS). Resuscitation. 2018;125:111–7. http://dx.doi.org/10.1016/j.resuscitation.2018.01.040.

[5] Davidson JE, Aslakson RA, Long AC, Puntillo KA, Kross EK, Hart J, et al. Guidelines for Family-Centered Care in the Neonatal, Pediatric, and Adult ICU. Crit Care Med. 2017;45(1):103–28. https://doi.org/10.1097/CCM.0000000000002169.

[6] Doupnik SK, Hill D, Palakshappa D, Worsley D, Bae H, Shaik A, et al. Parent Coping Support Interventions During Acute Pediatric Hospitalizations: A Meta-Analysis. Pediatrics. 2017;140(3):e20164171.

http://pediatrics.aappublications.org/lookup/doi/10.1542/peds.2016-4171.

[7] O'Connell K, Fritzeen J, Cathie E, Clark AP, Lloyd C, Scott SH, et al. Family presence during trauma resuscitation: family members attitudes, behaviors, and experiences. Am J Crit Care. 2017;26(3):229–40. https://doi.org/10.4037/ajcc2017503.

[8] Henneman EA, Cardin S. Family-Centered Critical Care: A Practical Approach to Making It Happen. Crit Care Nurse. 2002;22(6):12–9. https://doi.org/10.4037/ccn2002.22.6.12.

[9] McKenna L, Shimoinaba K, Copnell B. Family-centered care and pediatric death in the emergency department: A qualitative study using framework analysis. J Pediatr Nurs. 2022;64:18–23. https://doi.org/10.1016/j.pedn.2022.01.013.

[10] Foster M, Whitehead L, Maybee P. The Parents', Hospitalized Child's, and Health Care Providers' Perceptions and Experiences of Family-Centered Care Within a Pediatric Critical Care Setting: A Synthesis of Quantitative Research. J Fam Nurs. 2016;22(1):6–73. https://doi.org/10.1177/1074840715618193.

[11] Giles T, de Lacey S, Muir-Cochrane E. Factors influencing decision-making around family presence during resuscitation: a grounded theory study. J Adv Nurs. 2016;72(11):2706–17. https://doi.org/10.1111/jan.13046.

[12] Rostami F, Hassan ST, Yaghmai F, Ismaeil SB, Suandi TB. Effects of family-centered care on the satisfaction of parents of children hospitalized in pediatric wards in a pediatric ward in Chaloos in 2012. Electron Physician. 2015;7(2):1078–84.

554 https://doi.org/10.14661%2F2015.1078-1084.

555 [13] Shelton TL, Jeppson ES, Johnson BH. Family-centered care for children with special
556 health care needs: Association for the Care of Children's Health. 1th Ed.
557 Washington: Educational Resources Information Center (ERIC); 1987.

558 [14] Topjian AA, Raymond TT, Atkins D, Chan M, Duff JP, Joyner BL, et al. Part 4:
559 Pediatric Basic and Advanced Life Support: 2020 American Heart Association
560 Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care.
561 Circulation. 2020;142(2):S469–523. https://doi.org/10.1161/CIR.0000000000000901.

562 [15] Mentzelopoulos SD, Couper K, Voorde P Van de, Druwe P, Blom M, Perkins GD, et
563 al. European Resuscitation Council Guidelines 2021: Ethics of resuscitation and end
564 of life decisions. Resuscitation. 2021;161:408–32.
565 https://doi.org/10.1016/j.resuscitation.2021.02.017.

566 [16] Pemberton C, Howarth C. Resuscitation Council UK: review of updated 2021
567 neonatal life support guideline. Arch Dis Childhood-Education Pract.
568 2023;108(1):38–42. http://dx.doi.org/10.1136/archdischild-2021-323277.

569 [17] McAlvin SS, Carew-Lyons A. Family presence during resuscitation and invasive
570 procedures in pediatric critical care: a systematic review. American Journal of
571 Critical Care. 2014;23(6):477–85. https://doi.org/10.4037/ajcc2014922.

572 [18] Moreland P. Family Presence During Invasive Procedures and Resuscitation in the
573 Emergency Department: A Review of the Literature. J Emerg Nurs. 2005;31(1):58–
574 72. https://doi.org/10.1016/j.jen.2004.07.002.

[19] Powers K, Reeve CL. Factors associated with nurses' perceptions, self-confidence, and invitations of family presence during resuscitation in the intensive care unit: A cross-sectional survey. Int J Nurs Stud. 2018;87:103–12. https://doi.org/10.1016/j.ijnurstu.2018.06.012.

[20] Bekkering H, Woodgate R. The Parental Experience of Unexpectedly Losing a Child In the Pediatric Emergency Departmen. OMEGA-Journal of Death and Dying. 2021;84(1):28–50. https://doi.org/10.1177/0030222819876477.

[21] Crowley L, Gallagher P, Price J. To stay or not to stay: children's nurses' experiences of parental presence during resuscitation. Nurs Child Young People. 2015;27(3):34–8. https://doi.org/10.7748/ncyp.27.3.34.e557.

[22] Twibell RS, Craig S, Siela D, Simmonds S, Thomas C. Being there: inpatients' perceptions of family presence during resuscitation and invasive cardiac procedures. Am J Crit Care. 2015;24(6):e108-116. https://doi.org/10.4037/ajcc2015470.

[23] Harvey ME, Pattison HM. The impact of a father's presence during newborn resuscitation: a qualitative interview study with healthcare professionals. BMJ Open. 2013;3(3):e002547. http://dx.doi.org/10.1136/bmjopen-2013-002547.

[24] Powers K, Duncan JM, Renee Twibell K. Family support person role during resuscitation: A qualitative exploration. J Clin Nurs. 2022;1–13. https://doi.org/10.1111/jocn.16248.

[25] Tong A, Sainbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Heal care.

2007;19(6):349–57. https://doi.org/10.1093/intqhc/mzm042.

[26] Curtis JR, Treece PD, Nielsen EL, Gold J, Ciechanowski PS, Shannon SE, et al. Randomized trial of communication facilitators to reduce family distress and intensity of end-of-life care. Am J Respir Crit Care Med. 2016;193(2):154–62. https://doi.org/10.1164/rccm.201505-0900OC.

[27] Saunders B, Sim J, Kingstone T, Baker S, Waterfiel J, Bartlam B, et al. Saturation in qualitative research : exploring its conceptualization and operationalization. Qual Quant. 2018;52(4):1893–907. https://doi.org/10.1007%2Fs11135-017-0574-8.

[28] Braun V, Clarke V. Using thematic analysis in psychology. Appl Qual Res Psychol. 2006;3(2):77–101. https://doi.org/10.1191/1478088706qp063oa.

[29] Hays DG, Wood C, Dahl H, Kirk-Jenkins A. Methodological Rigor in Journal of Counseling & Development Qualitative Research Articles: A 15-Year Review. J Couns Dev. 2016;94(2):172–83. https://psycnet.apa.org/doi/10.1002/jcad.12074.

[30] Cypress BS. Rigor or Reliability and Validity in Qualitative Research : Perspectives , Strategies , Reconceptualization , and Recommendations. Dimens Crit Care Nurs. 2017;36(4):253–63. https://doi.org/10.1097/dcc.0000000000000253.

[31] Nowell B, Albrecht K. A Reviewer's Guide to Qualitative Rigor. J Public Adm Res Theory. 2019;29(2):348–63. https://doi.org/10.1093/jopart/muy052.

[32] Michelson KN, Patel R, Haber-Barker N, Emanuel L, Frader J. End-of-life care decisions in the PICU: Roles professionals play. Pediatr Crit Care Med. 2013;14(1):e34. https://doi.org/10.1097%2FPCC.0b013e31826e7408.

[33] Dennis C, Baxter P, Ploeg J, Blatz S. Models of Partnership Within Family Centered Care in the Acute Pediatric Setting: A Discussion Paper. J Adv Nurs. 2017;73(2):361–74. https://doi.org/10.1111/jan.13178.

[34] Hill C, Knafl KA, Santacroce SJ. Family-Centered Care From the Perspective of Parents of Children Cared for in a Pediatric Intensive Care Unit: An Integrative Review. J Pediatr Nurs. 2018;41:22–33. https://doi.org/10.1016/j.pedn.2017.11.007.

[35] Eichhorn DJ, Meyers TA, Guzzetta CE, Clark AP, Klein JD, Taliaferro E, et al. Family presence during invasive procedures and resuscitation: hearing the voice of the patient. Am J Crit Care. 2001;101(5):48–55. https://doi.org/10.1097/00000446-200105000-00020.

[36] Cummings BM, Mercurio MR, Paris JJ. A review of approaches for resolving disputes between physicians and families on end-of-life care for newborns. J Perinatol. 2020;40:1441–5. https://doi.org/10.1038/s41372-020-0675-4.

[37] Manguy AM, Oakley E, Gordon R, Joubert L. Acute psychosocial care of families in paediatric resuscitation settings: Variables associated with parent emotional response. Australas Emerg Care. 2021;24(3):224–9.

[38] Hodkinson P, Price J, Croxson C, Wallis L, Ward A, Argent A, et al. “She’s gone now.” A mixed methods analysis of the experiences and perceptions around the deaths of children who died unexpectedly in health care facilities in Cape Town, South Africa. PLoS One. 2019;14(3):1–18. https://doi.org/10.1371/journal.pone.0213455.

[39] Leemann T, Bergstraesser E, Cignacco E, Zimmermann K. Differing needs of mothers and fathers during their child's end-of-life care: Secondary analysis of the "paediatric end-of-life care needs" (PELICAN) study. BMC Palliat Care. 2020 Aug 4;19(1):1–9. https://doi.org/10.1186%2Fs12904-020-00621-1.

[40] Porter JE. Family presence during resuscitation (FPDR): A qualitative descriptive study exploring the experiences of emergency personnel post resuscitation. Hear Lung. 2019;48(4):268–72. https://doi.org/10.1016/j.hrtlng.2018.09.016.

[41] Janzen L, Cadell S, Westhues A. From Death Notification Through the Funeral: Bereaved Parents' Experiences and Their Advice to Professionals. OMEGA (United States). 2004;48(2):149–64. https://doi.org/10.2190/6XUW-4PYD-H88Q-RQ08.

[42] Meert KL, Thurston CS, Briller SH. The spiritual needs of parents at the time of their child's death in the pediatric intensive care unit and during bereavement: A qualitative study. Pediatr Crit Care Med. 2005;6(4):420–6. https://doi.org/10.1097/01.pcc.0000163679.87749.ca.

[43] Nibert L, Ondrejka D. Family presence during pediatric resuscitation: An integrative review for evidence-based practice. J Pediatr Nurs. 2005;20(2):145–7. https://doi.org/10.1016/j.pedn.2004.05.017.

[44] Dainty KN, Atkins DL, Breckwoldt J, Maconochie I, Schexnayder SM, Skrifvars MB, et al. Family presence during resuscitation in paediatric and neonatal cardiac arrest : A systematic review. Resuscitation. 2021;162:20–34. https://doi.org/10.1016/j.resuscitation.2021.01.017.

[45] Kim S, Savage TA, Song M-K, Vincent C, Park CG, Ferrans CE, et al. Nurses' roles and challenges in providing end-of-life care in neonatal intensive care units in South Korea. Appl Nurs Res. 2019;1(50):151204. https://doi.org/10.1016/j.apnr.2019.151204.

[46] Kavanaugh K, Moro TT, Abstract TAS. How nurses assist parents regarding life support decisions for extremely premature infants. Journal of Obstetric. Gynecol Neonatal Nurs. 2010;39(2):147–58. https://doi.org/10.1111/j.1552-6909.2010.01105.x.

[47] Ghavi A, Hassankhani H, Powers K, Arshadi-bostanabad M, Namdar-Areshtanab H, Heidarzadeh M. Parental support needs during pediatric resuscitation : A systematic review. Int Emerg Nurs. 2022;63:101173. https://doi.org/10.1016/j.ienj.2022.101173.

673 **Table 1.** Participants' demographic characteristics.

Caregivers	**n**	**Healthcare Professionals**	**n**
- Relation to child		- Field of practice	
Father	7	Pediatric nurse	8
Mother	9	Pediatric physician	5
Grandmother	1	- Gender	
- Education level		Female	9
Academic	6	Male	4
Non-academic	11	- Years of healthcare experience	
- Location		< 10	3
Town	11	≥ 10	10
Village	6	- Marital status	
- Number of times experienced		Married	9
their child's resuscitation		Single	4
Once	12	- Parent status	
Twice or more	5	Having own child(ren)	9
- Ethnicity		No children	4
Persian	10	- Ethnicity	
Turkish	7	Persian	6
		Turkish	7

674

675

676

677 **Table 2.** Supportive quotes for Requirement for the presence of a parental supporter

Subthemes	Illustrative quote
Need parental supporter	"I was very worried at that time (during resuscitation of his child) and I needed someone to tell me what had happened to my son and what his condition was" [F7, age of child: 8 months]. "I have seen many times that when a child is resuscitated, parents and family cry and shout behind the resuscitation room door. But no one sees them or does anything for them. In my opinion, they should not be abandoned" [N1].
Support based on healthcare professionals' preference	A head nurse explained: "Nurses do the work of the patient and have nothing to do with the parents. Some people try to support the parents in different ways based on their life experiences. Of course, there is no duty for nurses in the hospital system to support parents in this regard, and nothing is asked of us in this regard" [N6]. "When a neonate or child needs CPR in the emergency room, I always pay attention to her mom…I talk with her, bring her to sit in a corner, and try to calm her down." [N4 with experienced the death of her own 5-year-old child].

678 F= Father, N=Nurse

679

680 **Table 3.** Supportive quotes for Expectations of the parental supporter

Subthemes	**Illustrative quote**
Provide information during resuscitation	"We had very much stress. Nobody said what they were doing to my child. All of the staff came, surrounding my child suddenly and connected various devices to her. The guard also was trying to get us out of the room. My wife fell on the ground due to stress. Really, we needed someone to explain to us what happened and what they were doing for my child. Why did we have to wait behind the door and finally be given a yes or no answer..." [F3, age of child: 1.5 months]. "A woman in the ICU behaved very well. When my child was becoming resuscitated and I was looking at my child with concern behind the glass, she came to me and explained everything" [M8, age of child: 8 months]. "One of the nurses who is not responsible for resuscitation of the child should speak with the parents at this time. She/He can explain the condition, the work and actions done, and the equipment used for them. This makes the memories that remain in their minds better..." [D8]. "If parents are educated and know about the hospital procedures, we can explain scientifically that we have intubated him/her now, we have performed CPR, now we have injected this medicine, this is his/her heart condition and this is his/her saturation condition..." [D8]. "Parents who know the background of their child's illness, have seen the course of the child's illness, and have seen what actions

	have been taken for their child…these parents can be better justified than parents who suddenly bring their child to the emergency room due to acute illness and they think that their child does not have any specific problem" [D9]. "A neonate was suffocated due to falling asleep with the mother's breast on the baby's mouth and nose during the night. I tried not to make the mother feel guilty and not to think that she was the only one who had this happen" [N1].
Assurance to caregivers	"I think the things (CPR) they did for my child were very violent..." [F7, age of child: 8 months]. "A mother witnessed her child being resuscitated. After resuscitation, she said, 'My child died because you (HCPs) put a tube in my baby's mouth.' This caused her to have a bad view of hospital, doctor and nurse" [N5] "We were resuscitating a child who, I think, had temporarily regained his heartbeat with the effect of epinephrine. I asked a nurse to bring a cotton pad so that I could put it in the corner of the baby's mouth so that it (endotracheal tube) would not injure his mouth. She did not find the pad in room and went to get it from another place and returned late. At the same time, the child cardiac arrested again and died after the resuscitation. The parents thought that their child died because the equipment was not available, while it had nothing to do with this issue" [D11]. "At that time (the time of the child's resuscitation), a nurse came to me and took my hand and said, 'Do not worry, God willing, she will be fine.' Do not worry, here are all the doctors and nurses who

	do their job and do their best, do not worry" [M6, age of child: 5years].
Physical-emotional support	"They (HCPs) took my unconscious child from my arms. While I was alone there (in the hospital), it seemed no one thought that this painful accident has happened to me. I wish there was at least one person beside me to console me. But no one was beside me" [M9: age of child: 1 year]. "During the resuscitation of my child, there was a woman (a nurse) who was very good and comforted me. Most nurses came immediately (after the unsuccessful resuscitation) and expressed their condolences to me, but then everyone went to do their job. It would be great if one of the staff was beside me and talking to me" [M15, age of child: 3.5 years]. "After the death of my child, I did not want anyone around me and I did not want anyone to console me or try to calm me down. I wanted to be alone with myself. In any hospital, it is much better if there is a private place at this time (after the unsucssesfull resuscitation of the child) so that the parents can release their emotions" [F1, age of child: 2 years]. "Mother (his wife) was taken away from her child. No one paid attention to the mother who had fallen to the ground. The hospital staff came after my child died and looked at her (his wife) and then left" [F14, age of child: 2 years]. "It's better to have a space next to the CPR room where parents can sit and have a cold drink. But unfortunately, when we close the CPR room door on the parents, the parents sit on the ground in

	front of the room and hit themselves and cry. But there is no one to help and support them" [N7].
Promote a parent-child relationship	"We were behind the door (outside the CPR room)…they took away our child from us. We wanted to be beside our child or at least be able to see our child" [M10, F11, age of child: 4 years] "It would have been so much better if I had been with her (during her baby's resuscitation). If I held her hands in my hand, she could bear much better" [M12, age of child: 1 year]. "I told them (nurses) that do you give me my baby? (The mother continued with crying), but they did not give me my baby to embrace him. They took my baby inside the ward and said 'What do you want to embrace? Your baby is good'" [M5, age of child: 1 month]. "I went to the morgue and saw my baby and embraced her for the last time and said goodbye to her" [M17, age of child: 2 years]. "We had a child with leukemia who was bleeding from the nose and mouth during resuscitation, so that all the child's bedding and clothes were covered in blood. After the resuscitation ended and the child died, the resuscitation team physician said that before arranging the child's appearance, the parents should come in and see their child so that they understand how ill their child was. As soon as the mother saw the bloody state of her child, she screamed loudly and fell to the ground and became very upset. I think we should have arranged the appearance of the child so that the mother would not see their bloody condition. Because this is the last image that parents have of their child" [N3].

	"I do not forget her (her deceased child) for all of my lifetime…I kept her photos, mixed them, and put a song on them" [M6: age of child: 5 years]. "They did not even give me the things I had put on my child's bed. I had put a comb on her bed and brushed her hair with it. They did not give me the same to keep her hair strands for myself. At least they gave me a bottle of milk that I had left there. I liked to keep these things to myself. I wish they gave them to me. My child touched them, I wanted to keep them for myself" [M9, age of child: 1 year].

M= Mother, F= Father, D= Doctor, N=Nurse

683 **Table 4.** Supportive quotes for Characteristics of the parental supporter

Subthemes	**Illustrative quote**
An experienced member of the resuscitation team	"While we were resusciting a child, the secretary of the ward apparently was telling the parents, 'Do not worry, now your child will become fine.' The child died, and this misinformation that she had given to the parents had caused the parents to be waiting to hear that their child was well. As a result, the parents became aggressive and angry" [D13]. "When parents become very agitated, they should be given that right. This is the worst thing that happened to them in their life. In this time, there should be someone who has a psychology education. I myself do not know how I can calm the person down at this time" [D8]. "While we were waiting in the back of resuscitation room door, I think a doctor or nurse who is familiar with psychological basics could be very beneficial for calming the parents down at the time" [F16, age of child: 5.5 years]. "How can I support my parents during resuscitation while I have to take care of the child? After resuscitation, I have to write and complete the patient record and do all the other paperwork, and also be aware of the other patients whom I am responsible" [N2].
Familiar with the native culture and language	"We need to use words that are close to the parents' culture to make them feel that we are close to them (parent)" [N7]. "Parents' beliefs and culture should be considered, and someone who is more familiar with the parents' ethnic culture and beliefs should speak to the parents. I once told a father, who was worried

	behind the door of the CPR room, to trust God, whatever God wills will happen. He became angry, 'What is the God willing? You have to do your job right" [N1]. "While we were waiting in the back of the CPR room, one person told me to repeat the holy phrase. But I did not believe repeating the holy phrase can save my child's life" [F3, age of child: 1.5 months]. "When my child's status got very ill, I wanted them (HCPs) to put a green cloth on my child. That cloth was from the shrine of Imam Reza (a holy place), maybe my child would be healed and stay alive" [M15, age of child: 3.5 years].
Compassionate and supportive personality	"In the emergency room, a child was brought in who was in a state of shock due to severe diarrhea. Our efforts were not effective and the child died. The father came forward angrily, grabbed my collar and slapped me. I said in a calm tone that I was sorry, we did our best. The father of the child did not continue his aggression and left the room" [D12]. "A nurse who has spritual and family problems or is forced to work in several places due to financial problems or has many shifts in a row, is so tired and irritable that she/he does not have the patience and is not able to support crisis parents" [N6]. "When I was crying behind the door of the resuscitation room and I was not feeling well at all, a nurse came beside me and took my hand and said, 'I am a mother and you are a mother. I understand you.' I wish everyone was like her" [M8, age of child: 8 months].

	"The person (parental supporter) must also be a mother so that she understands what is happening to this mother" [F11, age of child: 4 years]. "In order to empathize and support the parents, it is better for the supporter to be the same sex as the parent. In one case, I noticed that a father was very nervous and aggressive at this time (resuscitation of his child). A male servant could better calm him down by talking with him" [N10].

684 M= Mother, F= Father, D= Doctor, N=Nurse

685