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Family presence in pediatric resuscitation

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ABSTRACT

Resuscitation refers to medical interventions and practices performed in emergency situations such as cardiac arrest or respiratory arrest in order to restore the individual's life findings with physiological, pharmacological and mechanical methods. Pediatric resuscitation is a process that is different from adults due to anatomical and physiological differences in pediatric patients and includes specific protocols, as well as a critical process that includes both physical and emotional dimensions for both healthcare personnel and patient relatives. The physical participation of family members or relatives in this process is a very important, multifaceted and highly controversial issue both ethically and psychologically. Patients and their relatives often expect to be actively involved in treatment and health care decisions. Similarly, even during resuscitation and critical care, patients want their relatives to be with them and family members/relatives may also want to be present. Family presence enables family members to participate in or witness the resuscitation process when the child's life is in danger. The physical presence of parents for children and relatives for adult patients in the resuscitation room, as well as their involvement in decision-making processes, are essential components of family presence. Family presence during resuscitation is a tripartite relationship that affects health professionals, family members and the care of the child. All needs must be balanced in the context of effective resuscitation in family presence, as actions involving all three groups can affect the others.

Keywords: Cardiac arrest, family presence, health professionals, pediatric resuscitation

INTRODUCTION

The issue of family presence in resuscitation is still a controversial issue today. Resuscitation refers to medical interventions and practices performed in emergency situations such as cardiac arrest or respiratory arrest in order to restore the life findings of the individual with physiological, pharmacological and mechanical methods. Pediatric resuscitation is a critical process that includes both physical and emotional dimensions for both healthcare personnel and patient relatives, as well as being a process that includes specific protocols different from adults due to the anatomical and physiological differences of pediatric patients. With the right information and support, the active involvement of families in the care of the child can facilitate the healing process for both the child and the family.[1] Many healthcare institutions offer various educational programs to ensure the active participation of family members in the treatment process of their children, especially in pediatric care. Families' presence with the child during critical processes such as emergencies and resuscitation, and being informed about the process, can lead to a less traumatic experience of resuscitation and a healthier grieving process.[2]

FAMILY PRESENCE IN RESUSCITATION

Resuscitation includes medical interventions such as basic life support and advanced life support. The physical participation of family members or patient relatives during these interventions is a very important, multifaceted and highly controversial issue, both ethically and psychologically. The concept of resuscitation in the presence of family members was first reported to have emerged in 1982 at Foote Hospital in Michigan, USA, after two incidents in which family members refused to leave the room during resuscitation of their loved one, and this led to the initiation of a program in which the issue of the presence of family members in resuscitation was discussed, allowing family members to participate in resuscitation in a planned manner.[3] In 1992, Hanson and Strawser conducted a nine-year study on family presence during resuscitation and developed procedures and policies to standardize family presence practices in resuscitation. Many organizations universally support family presence during resuscitation.[4] In 1993, the emergency nurses association (ENA) was the first organization to endorse family presence during resuscitation. At the same time, ENA has published interdisciplinary guidelines and training

manuals on the practice of family presence during invasive procedures and resuscitation. ENA's 1995 training program emphasized the importance of family members being with the patient during resuscitation.[5] In 2010, ENA made the striking statement, "Without written policies for the family, emergency department staff may be compromising practice and depriving patients/families of the emotional support they need".[6] The American heart association (AHA) advocated for family presence resuscitation in 2000. It has also published guidelines recommending that family members be allowed to be present during resuscitation attempts.[7] Both the AHA and the ENA have emphasized that current evidence supports resuscitation in the presence of the family and that this practice is beneficial.[8,9] The World Health Organization (WHO) (2003) has argued that the family should be involved in the process for approval of invasive procedures in resuscitation, and therefore cultural factors should be considered during communication with the family. Similarly, additional policies on neonatal resuscitation were developed by the WHO in 2012 and 2016, but remarkably did not recommend family presence in neonatal resuscitation.[10,11]

The European resuscitation council (ERC) guideline reported that many families desire to be with both the resuscitated relative and other family members during the resuscitation period, while the ERC supported giving relatives the option to attempt resuscitation in a manner sensitive to cultural and social differences.[12,13]

The ERC published guidelines on this issue in 2005;[14]

- Considering family presence as an option during pediatric procedures and resuscitation attempts,
- Informing the patient's relatives that the environment during resuscitation may have a negative impact on the family,
- If the family does not wish to be present during resuscitation, a written form must be completed,
- That the safety of the resuscitation team is always considered,
- Identifying procedures and reviewing hospital policies related to family witnessed resuscitation practice in hospitals,
- He recommended the organization of training programs for personnel who will perform family witnessed resuscitation.[12,15]

Family presence enables family members to participate in or witness the resuscitation process when the child's life is in danger. The physical presence of parents for children and relatives for adult patients in the resuscitation room, as well as their involvement in decision-making processes, are essential components of family presence. During pediatric resuscitation, the presence of parents in the intervention room reduces the child's level of stress and anxiety and provides families with the opportunity to learn about their child's treatment process and make decisions.[1]

The applicable aspects of family presence in pediatric resuscitation in health care settings can be presented under the following headings:

Physical participation: Presence of family members in the intervention room/resuscitation room while the child is being resuscitated

Psycho-emotional support: Family members provide moral support and emotional support to the child

Communication and information: Transparently informing family members about resuscitation room dynamics and medical interventions

Participation in decision-making processes: Families play an active role in medical decision-making for critical decisions in resuscitation, such as termination of life support.[1,2,16]

FAMILY CENTERED CARE

In the field of health, pediatric patients were isolated from their parents until the 1960s with the idea that nurses would provide better care to the sick child than their parents.[17,18] After 1961-1978, parents started to be supported in caring for their children and evidence-based studies were needed to put family-centered care into practice.[19,20] Research in the field of psychology and psychopathology by Robertson, Spitz, Bowlby, Harlow, Ainsworth emphasized the importance of the mother and parent in the care of the child, and it was determined that maternal deprivation delays recovery and affects the child's personality and mental health in later life, thus demonstrating the need for a family-centered care model.[21] Family-centered care is a health care approach that shapes the daily interaction between health policies, management of health institutions, patients, families, and members of health disciplines (doctors, nurses, paramedics, physiotherapists, dieticians, etc.).[22] It has been described as a family-centered care, i.e. a partnership approach to health decision-making.[19] The aim of family-centered care is to preserve the bonds between the child and the family, to ensure the family's participation in the care of the child, to ensure that the child feels safe in the hospital environment, and to prevent the negative effects of hospitalization on the child and the family.[23,24]

The active participation of the family in care positively affects the child's physical, psychological and emotional health, and the presence of parents increases the child's sense of security by reducing separation anxiety. In a study conducted by Byers et al.[25] on 114 preterm infants and their parents, it was found that preterm infants in the group receiving family-centered care had less crying behavior and stress levels and required less analgesics. Melnyk and Feinstein[26] found that negative behavioral changes were significantly reduced in children whose family members participated in health care.

In 2015, O'Brien et al.[27] conducted a study by providing training to the families of babies in the neonatal unit and found that there was an increase in the feeding rate and

weight gain of babies and that the anxiety levels of family members who actively participated in the care of the baby decreased. With the increasing importance of family-centered care in health care delivery, the participation of families in health care decisions has increased, and some policies and procedures supporting the absence of the family during resuscitation have started to be changed.[6,28]

THE ROLE OF FAMILY IN PEDIATRIC RESUSCITATION

Pediatric resuscitation is a critical situation that requires taking into account the emotional and psychological vulnerabilities of children. The family's presence in the pediatric resuscitation process plays an important role in meeting the emotional needs of the child. Children need to be supported psychologically as well as physically in emergency situations. Having parents by their child's side can be critical to reassure them and help them cope with stressful situations.[29]

Being with people they love and trust can reduce anxiety and increase emotional resilience. Parents are a strong source of support for their children, even if they have to deal with their own fears and anxieties during the resuscitation process. Giving parents the opportunity to connect emotionally when faced with the risk of their child's death provides a healthy start to the grieving process.[30]

The presence of this emotional bond is one of the most important factors preventing family members who witnessed the death of their child from becoming emotionally closed in the post-mortem process.[31] Family presence in pediatric resuscitation provides both the child and family members with the opportunity to support each other, reduces feelings of helplessness, fear and hopelessness, and allows parents to share their feelings with their children who are in the last moment of life. However, the involvement of families in the resuscitation process reduces the sense of isolation of adult and pediatric patients and contributes psychologically to the healing process.[2] The family's presence in this process is critical to meet the emotional needs of the child, as well as to contribute to the psychological recovery of parents and other family members. This is because resuscitation not only targets the physiological recovery of the child, but also affects the emotional and psychological state of the family, and parents can experience great psychological stress as they watch their child being treated in an emergency.[31]

Many professional organizations have identified a number of potential benefits for relatives regarding family presence in resuscitation. It can be traumatic for family members to witness the resuscitation process of a loved one. However, some research has suggested that family witnessing the resuscitation process can help families recover emotionally and reduce the likelihood of suffering from post-traumatic stress disorder (PTSD).[2-16] Family presence during resuscitation can positively affect the crisis management of family members and allow for a healthier grieving process. Therefore, proper support of family members during resuscitation is essential.

HEALTH PROFESSIONALS AND FAMILY PRESENCE

Family presence during resuscitation was first raised in the United States in the 1980s. Twibell et al. [32] emphasized that "family presence" is a right for families to see the interventions and practices performed on the patient during the resuscitation process. Family presence is an issue that needs to be taken into consideration by health professionals who have become more dominant and specialized especially in resuscitative procedures. Accordingly, family presence during resuscitation is a practice that is currently being discussed in many countries.[13] Family presence raises various ethical issues. For example, the trauma experienced by family members while watching resuscitative interventions may influence the decision-making of health professionals. However, in some cultures, the relationship between patients and their family members may influence the decision to resuscitate and lead to an ethical problem. Therefore, healthcare professionals should carefully consider how family members will be involved in the resuscitation process and, when appropriate, family members should be offered the opportunity to participate in resuscitation.[32] In 2010 the American Association of Critical Care Nurses (AACN) emphasized that "family members of patients undergoing resuscitation and invasive intervention procedures should be given the opportunity to be present in the room". Family presence during resuscitation is the most natural right for all patients. Although family presence during resuscitation is an increasingly widespread health practice, it is highly debated by health professionals in terms of its risks and benefits.[15,33,34] Health care professionals are concerned about the possibility of family members interfering with the resuscitation process in the presence of family members in resuscitation, the possibility of interruption of care and treatment, the difficulty of terminating cardiopulmonary resuscitation (CPR), etc., resulting in long and unnecessary interventions that the patient will not benefit from. The concerns and worries of health care professionals on this issue affect the advocacy of family presence in resuscitation.[5,33] In addition to these barriers, it has also been reported that the lack of ergonomically suitable areas for family positioning in emergency and intensive care units, which are the units where resuscitation procedures are most frequently performed, is an obstacle to the practice of family presence in resuscitation.[12] Despite this, it has been reported that health care professionals generally perceive family presence in resuscitation as risky for the patient and themselves, but they find family presence beneficial for the patient's relatives and the quality of resuscitation is not affected by family presence.[13] Healthcare professionals should always advocate for family presence in resuscitation, recognizing the benefits of family presence during resuscitation practice.[6] When the literature is reviewed, it is reported that practices regarding family presence in resuscitation differ from country to country. The practice of family presence resuscitation has been significantly accepted in the United States,[35] the United Kingdom,[36] Canada[37] and Australia.[38] However, in Germany,[39] Turkiye,[40] Iran,[41] Jordan,[42] Spain[43] and Singapore[44] family presence in resuscitation remains a controversial topic that

is not clinically accepted due to potential physical risks to healthcare professionals. International resuscitation councils and associations emphasize family presence in resuscitation and the need to support families in this regard.[6,33]

RESEARCH RESULTS ON FAMILY PRESENCE IN RESUSCITATION

Different opinions and results have been reported in studies on family presence in resuscitation. In a 2017 study by Alshaer et al.[45] investigating the perceptions of Saudi families regarding resuscitation in adult intensive care, it was reported that 60.9% of the individuals stated that they wanted to be present during the resuscitation of their relatives, while it was determined that they similarly wanted their relatives to be present during resuscitation if they were resuscitated themselves. In a study conducted with 15 patients and 570 relatives of patients who underwent CPR in the prehospital area, it was found that resuscitation efficiency, CPR duration, drug selection and survival rate were not affected by the presence of family in resuscitation.[46] Doyle et al.[3] reported that 72% of families preferred to be in the resuscitation room and 71% of health care professionals supported the practice of resuscitation in the presence of the family in a study in which 55 family members and 21 health care professionals participated in the emergency department of Foote Hospital in 1985. In a study conducted by Kocaaslan et al.[47] with 487 nursing students, 61.4% of the student nurses thought that the family should not be present during the procedure, 55.6% thought that the presence of the family during the procedure would cause distress, 91.4% thought that the family should not be present during the procedure due to the risk of emotional reaction, and 63.7% stated that they would want to be present if one of their family members was being resuscitated. In the same study, it was reported that only 13.3% of students approved the presence of family in pediatric resuscitation[47] and in a study conducted by Düzkaya et al.[48] in pediatric clinics, 73.8% of healthcare professionals thought that the presence of family in resuscitation would create problems and negatively affect working conditions. In another study conducted by Lederman et al.[49] similarly, it was found that the majority of healthcare workers (71.6%) thought that family presence should not be allowed in resuscitation.

In Finland, the family members of 12 patients whose relatives were hospitalized in the intensive care unit were asked for their opinions on family presence during resuscitation, and it was found that the family members of most patients stated that they wanted to be present if their patients were resuscitated.[50] Afzali et al.[51] presented some evidence that relatives who witnessed the resuscitation of their loved ones, whether successful or not, experienced less anxiety and PTSD. Meyers[52] reported that violent behaviors of family members present in the room during resuscitation may prevent the resuscitation process when they lose emotional control, and this situation may also cause health professionals to focus on family members rather than the patient. Badır and Sepit[53] found that the presence of family in resuscitation prevents the motivation of the resuscitation team and accordingly, the stress level of resuscitation team members increases and their performance decreases. In the literature review, studies conducted to determine the risks related to family presence in resuscitation were also found.[50,51] As a result of a study, five main themes were identified regarding the risks of family presence in resuscitation: increased stress and anxiety levels of health professionals, the possibility of lawsuits against health professionals by family members, the risk of family members interfering with resuscitation, traumatic experiences, and the possibility of family members distracting health personnel.[51] It has been reported that healthcare professionals, especially family members, make inappropriate comments during resuscitation, seek errors in medical diagnosis, care and treatment processes, and therefore, the possibility and risk of suing healthcare professionals is high. Another important theme is that relatives of patients may tend to show violence against healthcare professionals and may harm healthcare personnel performing resuscitation.[49,51] Some research shows that having family members, especially parents, together in the final moments of their child's life helps to make the bereavement process less traumatic. Having family members together after the death of their child helps the family to heal emotionally and supports and strengthens the emotional bond between family members. Moreover, as parents grieve the loss of their child after the death of their child, sharing the child's life and final moments together can help to come to terms with the loss.[52]

CONCLUSION

Family presence during resuscitation is a tripartite relationship that affects health professionals, family members and the care of the child. All needs must be balanced in the context of effective resuscitation in family presence, as actions involving all three groups can affect the others. Family presence during resuscitation can have important psychological, ethical and clinical implications for the patient, family members and healthcare professionals. During pediatric resuscitation, family presence plays a vital role in psychological recovery. When family members have the opportunity to support each other, emotional bonds are strengthened and coping mechanisms are developed. Family presence always requires a balance. Health professionals should aim to achieve the best outcomes by carefully balancing the emotional needs of family members with clinical requirements. It can be argued that children and family members will benefit from family presence during resuscitation in cardiac arrest and other life-threatening situations. Although family presence during resuscitation is considered to be a right that all patients and their families should have, it is thought that this situation will increase the satisfaction levels of both care providers and care recipients, ensure that the family is an active part of the care and improve the quality of health care provided to the healthy/patient individual.

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Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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