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Is it beneficial to allow the patient's family to attend cardiac resuscitation: Different cultural perspectives? A scoping review

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ABSTRACT

Background: Family presence during resuscitation (FPDR) is a controversial issue that remains unresolved in contemporary practice. Although there are many research studies on FPDR and several published statements and guidelines supporting FPDR by international organizations, no conclusive position guides clinicians in making a decision. A scoping review was conducted to discuss the different healthcare professionals (HCPs) and cultural perspectives toward family presence during CPR is conducted.

Methods: Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) guidelines, we screened 797 studies published between 2000 and 2022 from the databases including Springer Link, MEDLINE, Pro-Quest Central, CINAHL Plus, and Google Scholar. All articles were filtered using inclusion criteria to eliminate redundant, irrelevant, and unnecessary content.

Results: A total of 34 studies that fulfill the eligibility criteria reported that there are multiple perspectives from HCPs and families about FPDR. HCPs felt that their performance had improved during resuscitation and received family support in breaking the bad news of death. Family relatives who attended cardiopulmonary resuscitation (CPR) had less stress, less anxiety, more positive grieving behavior, and enhanced family members' decision-making. Contrastingly, some HCPs were against FPDR because they were concerned about the family's misinterpretation of resuscitation activities, psychological trauma to the family members, increased stress levels among staff, and worry about an unexpected response from the distressed family.

Conclusions: It is important to consider the culture and awareness of families when deciding on FPDR. It is the responsibility of HCPs to assess family members' willingness and the benefits they attain from attending CPR. The decision should be based on the given situation, cultural context and beliefs, and current policy to guide practice.

Introduction

Cardiopulmonary resuscitation (CPR) can be a distressing issue for cardiac arrest patients and their families, and both healthcare professionals (HCPs) and patients' families have to deal with all of the distress.[1] During these stressful moments, HCPs must decide whether to let the patient's family remain and observe the frantic activity or ask them to leave the working area immediately.[2] This debate remains unsolved in contemporary practice.

Despite the plethora of literature about CPR and family presence, the practice of family presence during resuscitation (FPDR) varies among HCPs, patients' and families' preferences, and across cultures.[3] Therefore, this study aims to put forward the available evidence regarding FPDR as introduced by patients', families', and HCPs' experiences considering different

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cultural perspectives and to come up with a more favorable decision based on the current literature about this dilemma.

HCPs vary in their experiences and viewpoints toward FPDR. Despite the vast recurrence of resuscitative care experiences, FPDR is not routine.[4] A cross-sectional survey of 124 critical care professionals revealed that 23 % had never experienced FPDR, and only 17 % had experienced it more than five times. Furthermore, 48 % had never invited FPDR, and 45 % had invited it only one to five times.[5] Some HCPs recognize that being present in the room where CPR is performed may help family members perceive that everything possible to sustain life has been done. According to the Institute of Medicine, only 24 % of cardiac arrest patients survived.[6] Since survival rates are low, FPDR becomes important for family members to accept death and say goodbye. On the contrary, many HCPs (physicians especially) are less supportive of FPDR performed in the intensive care unit (ICU), Emergency Department (ED), and general wards.[7] In a grounded theory approach, Giles, de Lacey, and Muir-Cochrane[7] found that in acute care settings, HCPs' decisions regarding FPDR were based on personal preferences, values, and expectations rather than research evidence and clinical standards. Due to varying support from HCPs regarding FPDR, we review the current evidence.

Family members desire to be there while CPR is performed. The majority of patients surveyed in a recent FPDR study desired their loved ones to be present during resuscitation, and the majority of family members wished to attend CPR and would have welcomed the invitation of family presence.[8] Family members' requests to remain with their patients are frequently refused when performing CPR.[9]

In general, patients and families are more supportive of FPDR than HCPs, though this varies by geographic region and culture.[10] Cultural differences between HCPs and families can also decrease comfort with FPDR.[11–13] The purpose of the current scoping review was to discuss the available evidence about FPDR as introduced by patients' families and HCPs' experiences, considering different cultural influences and perspectives, and to come up with a more favorable decision based on the current literature about this issue. This scoping review also has specific aims as follows: (1) to assess the quantity and quality of literature on HCPs and cultural perspectives toward FPDR; (2) to identify the available evidence-based practices that support or oppose FPDR; and (3) to provide an overview of the study's outcomes, including effects on the right decision in FPDR.

Methods

Protocol and registration

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) protocol guidelines were followed in the development of this scoping review.[14] The protocol for this study was registered with the Open Science Framework (OSF) on 2024 August 26 (https://doi.org/10.17605/OSF.IO/3HF8P).

Search strategy and information source

The literature was searched using the following databases: Springer Link, MEDLINE, Pro-Quest Central, CINAHL Plus, and Google Scholar. The following keywords were used in different combinations: "family presence during resuscitation," "family witnessed resuscitation", "cultural perspectives," "cardiopulmonary resuscitation," "CPR," "family presence in arrest," and "dying patients." The Boolean operators "AND" and "OR" were used to combine different search parameters, which refined the search. On 2022 October 20, the first literature search was conducted, and the last search was conducted on 2023 March 10.

Eligibility criteria

All articles were filtered using inclusion criteria to eliminate redundant, irrelevant, and unnecessary content. Inclusion criteria were studies that (1) were released between 2000 and 2022 due to the review's specific goals and objectives; (2) were published in English; (2) focused on HCPs, including nurses and physicians involved in caring for patients in CPR, and patients' families; (3) had the presence of families during CPR; and (4) had quantitative, qualitative, and mixed-methods designs.

Study selection

Figure 1 illustrates the PRISMA flowchart of the selected articles. The findings of the chosen databases identified 797 articles. Microsoft Word was used to enter data into a standardized data chart. Information such as author(s), publication year, title of the article, purpose of the study, place of conducting a study, design, and results were registered. Some records were removed before screening due to duplication (n=397), ineligibility by automation tools (n=62), and others for other reasons (n=24). After that, 314 abstracts of the articles were critically screened and read by three reviewers. Additionally, 171 articles were excluded. Then, 143 reports were sought for retrieval, but 84 reports were not retrieved. Then, 59 reports were assessed for eligibility, but 25 reports were excluded for not meeting inclusion criteria. Finally, 34 studies were included in the review.

Data charting process and data items

The authors assessed each and every article using the Johns' Hopkins Nursing Evidence-Based Practice Appraisal Tool.[15] This tool helped the authors determine whether the evidence was qualitative or quantitative and how to use it to support the eligibility and objectives of the study. Disagreements over the study's eligibility were resolved through discussions with the authors. The authors have assessed their data and made deductions.

Critical appraisal of individual studies

The author assessed the methodological quality of the included papers using the Effective Public Health Practice Project's Quality Assessment Tool checklist.[16,17] The quality evaluation tool checklist has six categories, including selection bias, research design, blinding, data collection methods, control for confounders, and withdrawals and dropouts. Each criterion is rated as 1 (strong), 2 (moderate), 3 (weak), or not applicable (NA). Higher scores are indicative of stronger and more persuasive evidence.

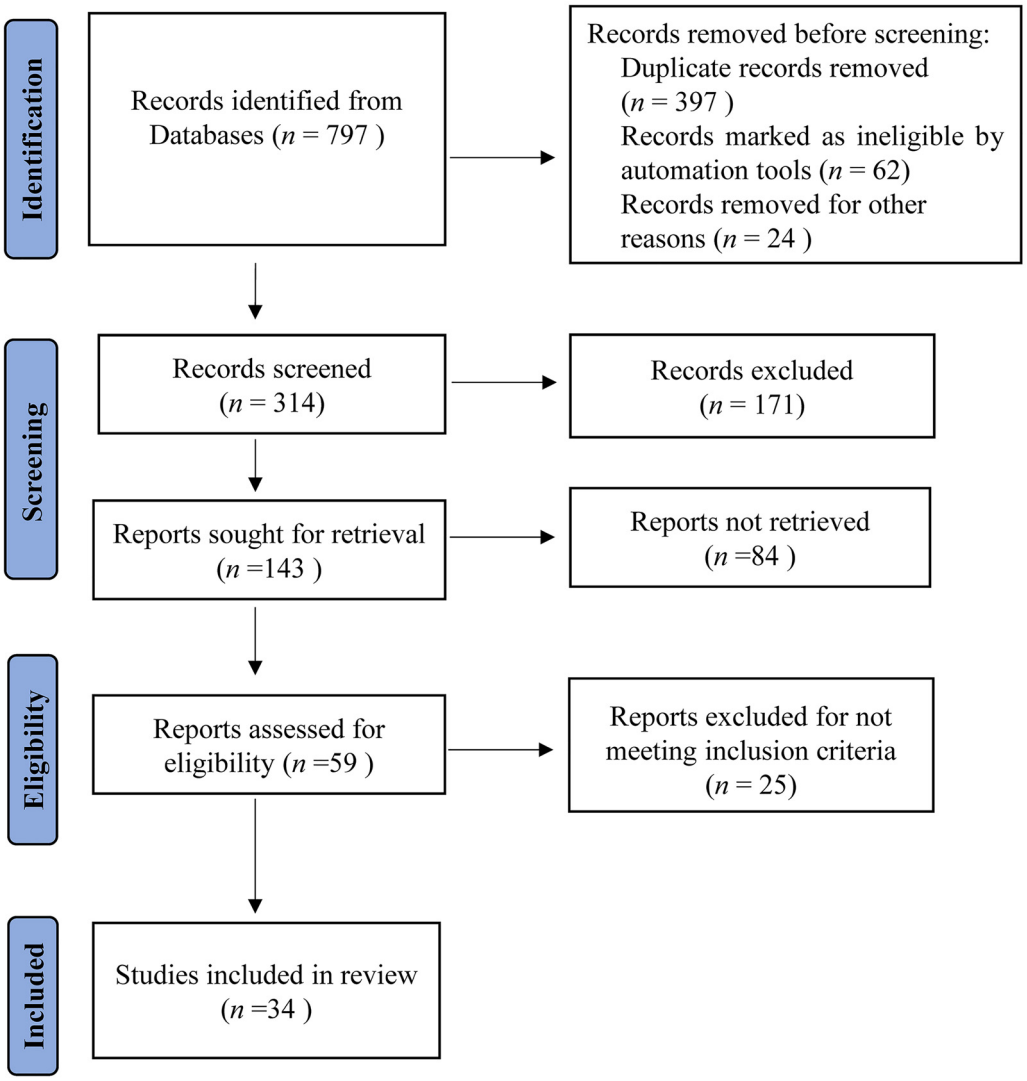

Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses flowchart.

Synthesis of results

To confirm that the results aligned with the study's stated purpose, the authors retrieved, assessed, and summarized data from the included studies and combined them in Supplementary Table S1. Study names, author names, publication year, sample size, study design, study country, and the main result are all listed in Supplementary Table S1.

Results

Study selection and characteristics

The data were extracted to respond to the review question. The extracted data were synthesized based on the aim of the review as a guide to formulate codes for the included reports, in which the reports with the same codes were kept together to develop subcategories. Finally, the same subcategories were integrated to construct categories that create the basis for a narrative synthesis.

Out of the 34 studies, 30 were quantitative (6 cross-sectional, 15 survey, 4 intervention, 5 descriptive), and 4 qualitative studies. Twelve of these studies were performed in the United States, four each from Iran, Turkey, and Jordan, two each from Saudi Arabia and Australia, and one each from Canada, the United Kingdom, France, Poland, Germany, and Bahrain, as explained in Supplementary Table S1.

Critical appraisal within studies

The chosen studies were evaluated for quality using the Effective Public Health Practice Project-Quality Assessment Tool checklist.[16] For each of the six categories, all studies received high-quality ratings. Additionally, the studies included satisfied the current study's purposes.

Assess the quantity and quality of literature on HCPs and cultural perspectives toward FPDR

HCPs' perspectives toward FPDR

In the current situation, the reported percentage of healthcare staff in favor of FPDR has varied from 1.6 % to 97 %.[18–20] The bulk of studies on healthcare staff that favor FPDR

fall within 30 %. Physicians showed less positive attitudes than other HCPs toward FPDR indicating an interdisciplinary variation.[8,21] Additionally, most of the HCPs (73 %–95 %) reported that their healthcare facilities lacked a written policy for presenting the option of FPDR,[5,22] and almost only 38 % had ever received education on FPDR.[18]

Cultural perspectives of FPDR

Cultural differences and variations can positively or negatively influence FPDR.[3] The death of a family member is a critical turn in the life of a significant other. For that reason, there is a strong need to understand and consider the variations in cultural influences on the lives of the family members of a dying patient. An example of the cultural influence on FPDR and the possible positions is that of Arab culture. Culturally, among Arabs, the family ties of extended families are strongly identified by close emotional bonds that may become even stronger in times of stress. This close bond may make it more difficult for HCPs to accept the presence of the patient's loved ones during CPR.[23] In the Arab region, with a majority of Muslims, the family is an important pillar of the social structure that is highly valued. Within the cultural context, family members support each other during difficulties and hard times. This compassion is considered a source of serenity and peace for the whole family. In Islam, visiting sick people is a religious obligation and is considered a personal and community responsibility.[24]

Othman et al.[23] reported that the responsibility of significant others is even greater as they attend to a family member who is dying. In such critical moments, a close, significant person should be at the bedside to remind the dying person to recount the "Shahadah" by saying "La Ilaha Illa'llah" (no God but Allah). A family is urged to stay close to their dying patient to recite some verses from the Holy Qur'an or to play recorded audio of the Qur'an for the patient. Furthermore, the invocation to God "dua" is a wholehearted belief in Allah's power to help the dying patient, and thus presenting with their patient is a relief for their souls and a religious obligation to offer to their dying family member. At the time of CPR, these rituals might enhance a family's acceptance of what is happening and give them the comfort and satisfaction that they were there and offered their patient the spiritual care needed before dying.

Cultural variations in local, regional, and international healthcare systems may account for differences in staff opinions regarding attending CPR.[25] To illustrate this variation, in Saudi Arabia, the majority of HCPs came from different countries with different cultural backgrounds. In a recent descriptive study conducted in Saudi Arabia from two major hospitals, including ICUs, EDs, and medical wards, the majority of HCPs had negative attitudes toward FPDR: 78 % of them stated that FPDR would not be beneficial to family members, and 92 % stated that it would not be beneficial to patients.[26]

In another Middle Eastern study, Turkish critical care HCPs revealed that most of them did not realize that it was an option for family members to be with their patients and did not want family members to be in the resuscitation room. Most of the staff were concerned about the violation of patient confidentiality and that witnessing resuscitation would cause long-lasting adverse emotional effects on the family members.[27] The same study recommended that it is necessary to develop a culturally accepted policy regarding FPDR.

A descriptive study in Iran that explored the attitudes toward FPDR of 178 HCPs and 136 family members showed that family members felt that it was their right to experience FPDR, while the majority of HCPs had negative attitudes toward it. HCPs felt that FPDR would make it difficult for them to stop resuscitation. Another significant finding was that HCPs who had received prior education and training on FPDR were more likely to support FPDR in ICUs, EDs, and medical and surgical wards.[28]

In the United States of America (USA), researchers pointed out that around 75 % of HCPs agreed with FPDR, and around 50 % indicated that FPDR was allowed in their units (n=3000).[25] In contrast, another study conducted in the USA indicated that only 13.2 % of emergency medical service (EMS) professionals and 15.4 % of EMS professionals preferred FPDR in urban and suburban settings, respectively.[29] Fortunately, family members who attended CPR felt that they gained a better understanding of their patient's condition and felt that they served their patients by being beside them. However, there was no statistical difference in the level of uncertainty, anxiety, and well-being between family members who attended CPRs and those who did not.

Studies from other countries regarding FPDR were also reviewed. Rzońca et al.[30] conducted a study in Poland to explore the perception of FPDR among HCPs. The study utilized a relatively large sample of 529 HCPs. Two-thirds of them had never asked patients' families to attend CPR. Likewise, Tíscar-González et al.[31] conducted a study in the Basque country to investigate the perceptions of HCPs and family members or relatives about being present during CPR in primary healthcare settings, hospitals, and EDs. The findings showed that CPR is a social construct influenced by the values of different sociocultural contexts. They added that allowing or forbidding family members to attend CPR is a complex issue and depends on specific cases and different contexts. They stated that family members should participate in making such decisions. In Canada, family attendance in CPR seems to be a choice that is allowed in hospitals.[5] However, a policy is needed to provide explicit guidance for such a choice.[13]

Identify the available evidence-based practices that support or oppose FPDR

Evidence-based practices that support FPDR

Our literature review shows that the majority of studies support FPDR and suggest that FPDR is one way to help families accept death. The position is supported by the work of Leske et al.[11] who found that relatives who attended CPR had less stress, and by the Kentish-Barnes et al.[12] study, which reported that relatives who attended CPR had less anxiety and more positive grieving behavior. It was also reported that family members who attend CPR maintain their psychological wellness and the ability to understand the consequences.[13]

Attending CPR by family members improves communication with HCPs, enhances their decision-making, and promotes their emotional needs.[32,33] In addition to these, previous studies have also found that the frequency of post-traumatic stress disorder-related symptoms was significantly lower in family members who attended CPR in prehospital EMS units.[34] Furthermore, De Stefano et al.[9] found that being present during

resuscitation that took place at home enhanced the family's coping with the situation by feeling that they helped their relative.

Regarding HCPs' viewpoints on FPDR, a considerable number of HCPs stated that with the family presence, they performed better during resuscitation in ICUs and EDs; they felt that it was a humane action rather than a catastrophic cardiac event.[35] In the same line, a study compared HCPs' performance during a simulated cardiac arrest with three different family witnesses: (1) no family witness; (2) a nonobstructive "quiet" family witness; and (3) a family witness displaying an overt grief reaction. The results showed that the three groups were similar with respect to the mean number of minutes to initiate CPR, attempt to intubate the patient, and pronounce the death of the patient.[36] This result may inform HCPs to minimize their concerns regarding the negative impact of FPDR on staff performance.

Many HCPs reported that FPDR did not cause distress for them or affect resuscitation performance because HCPs can understand families' worries and concerns and assist them in conveying them correctly, rather than having hurtful discussions with them that cause suffering or impact resuscitation performance.[36] Nevertheless, it enhanced quick history-taking and communication between family and staff and improved family members coping with the situation.[37] Fallis et al.[38] found that 92 % and 76 % of Canadian and American HCPs, respectively, supported FPDR. Moreover, a prospective clinical trial compared pediatric trauma resuscitations with and without family presence and evaluated the effect of family presence on arrival, CT scan time, and resuscitation time. While results showed that arrival to CT scan and resuscitation times were similar with and without family present, this may imply that family presence did not negatively affect the time efficiency of pediatric trauma resuscitation.[39]

In line with this assertion toward FPDR, several international organizations have published statements and guidelines espousing FPDR.[8] In addition, many leading associations, such as the Emergency Nurses Association, have developed clinical practice guidelines through conducting reviews and critical analyses of the literature. The findings of these reviews and analyses strongly recommend modifying institutional policies to promote FPDR during CPR and invasive procedures, especially with the rise of the family centered care approach.[40]

Evidence-based practices that oppose FPDR

In contrast, according to Christakis and Allison,[41] many hospitals prohibit the practice of FPDR, claiming that it may predispose family members to psychological and emotional suffering. HCPs with a contrasting stance on FPDR expressed feelings of apprehension regarding family misinterpretation of the resuscitation activities and experienced performance anxiety associated with being watched by family members.[42] Lacking protocols and policies in hospitals is the first reason claimed by HCPs for their disapproval of families witnessing CPR. In addition, HCPs' concern about the unpredictable reactions of the distressed family members is another main reason for them to invite family members to the resuscitation room.[27]

Additional reasons for opposing FPDR were reported in the literature, including the increased risk of family members and HCPs for psychological trauma and high stress levels,[12,43] distraction caused by relatives, and worry about possible litigation.[44] Furthermore, the threat of facing verbal or physical abuse from family members is another essential reason that led HCPs to oppose FPDR.[45,46] To overcome the above issues, Al-Mutair et al.[26] reported and strongly recommended the need for the development of written policies offering families the option to remain with patients during resuscitation and recommended the development of education programs for staff, which means that the HCPs needed institutional support and training.

Provide an overview of the study's outcomes, including effects on the right decision in FPDR

A total of 34 studies were analyzed, demonstrating both support and opposition to FPDR during CPR. This means that HCPs and families have different perspectives on FPDR. For instance, Duran et al.[20] reported broad support for FPDR, despite physicians frequently voicing concerns about safety, performance, and the emotional responses of family members. They also reported that nurses had higher positive attitudes toward family presence than doctors, and families and patients both reported favorable opinions on family presence. However, Abuzeyad et al.[47] reported that most healthcare providers (HPs) were in support of FPDR and promoted it, while doctors were more supportive of it than nurses. Meyers et al.[35] reported that although 88 % of our healthcare personnel believed that FPDR should continue at the institution, the results showed that nurses had a substantially higher acceptance rate for FPDR than residents did (98 % *vs.* 50 %, respectively; P <0.001). Other studies found that the ability of doctors to carry out crucial tasks during CPR may be significantly impacted by the presence of a family witness. They felt nervous and believed that there was more risk than benefit.[36,48]

In another study, it was reported that out of 200 HCPs, 77 % were against family witnessed resuscitation (FWR) because of fear of psychological harm to family members, potential meddling with patient care and decision-making, and a perceived increase in staff stress, which were the most often cited arguments against family participation.[19] Bashayreh et al.[49] revealed that HCPs opposed family observed resuscitation, and they expressed several worries about possible verbal and physical abuse if they permitted family members to observe resuscitation. The other studies revealed that the majority of the nurses disapproved of the use of FPDR by adults because FPDR has many drawbacks, such as family members getting upset and interacting with the patient, which could make the resuscitation attempt take longer.[28,46] Güneş and Zaybak[50] reported that the majority of nurses did not think that family members should be given the option to remain with the patient when they undergo CPR at all times because of the greater risk of lawsuit, performance anxiety, and fear of psychologically harming family members. Alhaidary et al.[51] reported that there is no difference in the presence or absence of the family during resuscitation because nurses still have mixed feelings about the responses because they do not know enough. According to Al-Mutair et al.[26] nurses had negative views about family participation during resuscitation, with 77.2 % agreeing that it causes stress for family members. Allowing family members to be present during a loved one's resuscitation was regarded advantageous by 92.3 % of participants, while 78 % disagreed that it would aid families. Notably, 65 % of interviewees believed that having rela-

tives present would make the resuscitation team perform poorly. Another four studies revealed that EMSs and HCPs feel uneasy about being family present during resuscitation because they frequently need to offer support to families, and they reported that the presence of family members would be too upsetting for them.[29,30,52,53]

The other study reported that nurses who had completed Advanced Cardiac Life Support training had performed ten or more resuscitations, held a specialized certification, or belonged to nursing organizations, and exhibited notably higher levels of self-confidence (P <0.001) during FPDR, but they had some concerns, such as fear of the patient's family interfering, a lack of space, a lack of support for the family, the possibility of family trauma, and performance anxiety that were all obstacles to family attendance.[18] Another study found that Jordanian nurses' attitudes toward FPDR and health beliefs were positive and should be used to increase their confidence.[54] Further studies found that the majority of nurses were concerned that patient privacy would be violated and that family members who were not trained in CPR would not understand the procedures, find them offensive, and consequently disagree with the resuscitation team.[27,42,46,55] Hosseini Marznaki et al.[56] revealed that emergency nurses' mean attitudes toward family presence during CPR were much lower.

According to Powers and Candela,[5] although critical care nurses receive significant training in resuscitative treatment, FPDR is not a standard procedure. Just 17 % had seen FPDR more than five times, while 23 % were unfamiliar with it. Furthermore, 45 % only invited FPDR one to five times, while 48 % never invited it at all. On the contrary, they reported a notable absence of FPDR policy, with 73 % of respondents stating that their institution or unit either had no policy in place or did not know if it had. Only 38 % have ever attended FPDR training. Hayajneh[57] showed that 91.9 % of nurses reported lacking any experience, protocol, or policy document regarding family presence during CPR, while 97.7 % of nurses said they had never invited a family member to assist with CPR. The results of the study also revealed that Jordanian nurses had negative attitudes regarding family members being present during adult CPR. An additional study found that 65 % of Canadian nurses have either brought a family member to the bedside during CPR or would do so if given the opportunity, even though fewer Canadian nurses (18.5 %) had been asked to do so by family members. Only 8 % of Canadian participants reported that their institution has documented FPDR policies or guidelines.[38] Although most respondents have done so, would like it to be allowed, and are faced with requests from family members to attend, MacLean et al.[25] found that almost all do not have formal policies addressing family attendance.

The other study revealed how helpful pediatric nurses are to parents present during CPR. The majority of nurses were opposed to assigning a dedicated nurse to care for the parents during CPR, and only a few minority of nurses reported that their unit had a protocol in place regarding parental attendance during CPR.[58] Another study revealed that HCPs need to evaluate the family members' views, expectations, values, and beliefs about performing CPR. To comfort them, offer support, and enable those who are willing to attend, one staff member should remain with the family. Allowing a family member to see CPR is an excellent way to notify other family members about the situation.[23] Leske et al.[11] found that using the FPDR option improved well-being, reduced stress, and decreased anxiety. As a result, the findings indicate that FPDR has a positive impact on the relatives of patients. An additional study indicated that family presence may reduce the distress of dying by providing the patient with the feeling that they were a part of this major event and had helped to support them as they transitioned from life into death.[9]

According to Holzhauser and Finucane,[59] there are more advantages than disadvantages to having family members present during resuscitation. These included the speed at which a history could be quickly obtained (23 %), the patient's sense of relief from having family members present (14.9 %), the relatives' benefiting from the presence of family members (25.7 %), and the belief that handling family members was easier when they were present (9.9 %). In the other two studies, organized training on FPDR appears to improve pediatric intensive care unit nurses' knowledge of the benefits of family presence over the risks and increase their confidence in helping families.[39,60]

Discussion

In light of the supporting and opposing positions on the presence of family members during CPR, the following are a few thoughts that should be considered when taking certain positions. The foremost issue is to consider the wishes of the patient, his or her family, and the benefits or risks of FPDR to them. HCPs should realize that forbidding family members from attending CPR should be justified and based on evidence rather than on personal worries or subjective feelings. Nowadays, healthcare institutions should consider meeting patients' and families' needs while providing a safe work environment for staff.[23,33] This can be facilitated through an adequate assessment of patient and family preferences and maintaining reciprocal communication.

When making the decision regarding FPDR, a cultural perspective is detrimental to either of the two positions. In cases where CPR is most likely to be initiated, the healthcare team should assess the emotions, needs, perceptions, and beliefs of the family members regarding their presence during CPR. In addition, HCPs should allow and even encourage religious practices that do not conflict with healthcare practices and policies.[61] Permitting a family member to attend the resuscitation may provide a successful means of communication with other members of the family.[8] Adding to the above benefits, in the case of a patient's survival after CPR, the memory of the heroic efforts performed by the healthcare provider is relayed to the patient who survived as well as to his family. Witnessing CPR enhances a trusting relationship between family and healthcare team, increases society's respect, and emphasizes the importance of health professionals' roles in saving patients' lives.[26]

From another perspective, the views of HCPs are also essential in making the appropriate decision for the sake of patients' and families' safety, as well as which follows the best evidence-based decision. The report showed that around three-fourths of HCPs are in favor of written policies and guidelines regarding how to integrate FPDR.[62] This entails the formation of a multidisciplinary committee to examine the possibilities of FPDR application within context and to ensure a successful implementation while being culturally sensitive.[3,63]

Moreover, maintaining joint communication between the committee and the involved staff enhances the distribution of information to staff members, which alleviates worries and concerns.

It is also suggested that healthcare institutions initiate specialized training for staff members who are willing to facilitate FPDR.[64] It is recommended to assess the cultural attitude and beliefs of HCPs before training them on facilitating FPDR. Furthermore, institutions are encouraged to train HCPs to assess emotional readiness and help family members understand what they will do. The training should consider possible variations in the cultural perspectives of FPDR. Moreover, it is recommended that the institutions provide the needed emotional support and counseling to the HCPs who are engaged in FPDR discussions.

The implementation of FPDR in clinical settings can be enhanced by using designed strategies based on the assessment of the unique situation in each facility. The following areas need to be addressed before implementing FPDR: contacting family, improving the environment of privacy and communication,[65] assessing patient's preferences for FPDR, assessing the cultural-religious values and beliefs of the patient and family members before offering the choice of FPDR,[66] educating HCPs about FPDR, and collaborating with other disciplines.[67]

Study implications for practice, education, and administration

As family presence becomes more widely accepted, HCPs will need to make adaptations for patients' families at the bedside and eliminate any barriers to it. This is because family presence benefits patients, their families, and HCPs. Governmental and nongovernmental hospitals must sufficiently empower FPDR by offering extensive programs and training on hospital CPR. To improve the practice of family attendance, legislators and the hospital's top executives are also essential in developing and enforcing policies and assigning a team member to tend to the patient's family during resuscitation. On the contrary, the results of this study could be used to enhance future teaching by including this subject in nursing curricula as resuscitation training, which will assist in dispelling any doubts and concerns raised by practitioners.

Limitations of the study

The study's limitations were a lack of randomized therapy trials, long-term follow-up, and other methodological issues. As a result, we recommend conducting additional research on this issue. Furthermore, multiple studies discovered that HCPs, patients, and their families were misinformed about family presence during CPR due to a lack of necessary training and understanding.

Conclusion

Healthcare workers (HCWs) should consider the wishes of the patient and their family. Either refusing FPDR or actively discouraging FPDR should be based on evidence rather than subjective feelings. This means, where possible, that exploring patient and family preferences and encouraging dialogue. This might include facilitating religious or secular practices. When family members do attend resuscitations, they can be used as a portal for communication with other family members, to confirm the efforts of the HCWs and how much they cared. Witnessing resuscitation could, thereby, increase trust between families and HCWs and increase societal cohesion.

To standardize FPDR, protocols are likely to be required. In so doing, HCW worries can be addressed, cultural accommodations can be made, training can occur, and emotional support can be offered. We should also address how we contact families, ensure privacy, communicate empathically, assess preferences, incorporate values, and collaborate with other disciplines.

CRediT Authorship Contribution Statement

Hasan Abualruz: Data curation, Formal analysis, Investigation, Methodology, Project administration, Validation, Writing – original draft. **Mohammad A. Abu Sabra:** Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. **Elham H. Othman:** Investigation, Project administration, Resources, Software, Supervision, Validation, Writing – original draft. **Reema R. Safadi:** Formal analysis, Methodology, Validation, Writing – original draft, Writing – review & editing. **Salah M. AbuRuz:** Conceptualization, Data curation, Investigation, Methodology, Visualization, Writing – review & editing. **Khaled Suleiman:** Formal analysis, Methodology, Resources, Software, Supervision, Writing – review & editing.

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Ethics Statement

Not applicable.

Conflict of Interest

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

Data Availability

The data sets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Supplementary Materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jointm.2024.11.002.

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