



## Research article

# Preferences of patients' family regarding family-witnessed cardiopulmonary resuscitation: A qualitative perspective of intensive care patients' family members



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## ABSTRACT

**Objectives:** To describe preferences of intensive care patients' family members regarding the idea of an inpatient family-witnessed cardiopulmonary resuscitation.

**Research methodology/design:** A descriptive qualitative design was used in this study. Twelve family members of intensive care patients took part in individual semi-structured interviews. Data were analysed using thematic analysis.

**Setting:** A population of Finnish and Polish former intensive care adult patients' relatives.

**Findings:** The thematic analysis resulted in two main themes with four subthemes each: (Theme 1) Being more involved and engaged in patient's care in case of cardiopulmonary resuscitation, with subthemes: (a) Having an option to decide, (b) Being in physical proximity to the patient, (c) Feeling like having more control and impact and (d) Having a better idea about the situation. (Theme 2) Being cared for and treated respectfully during possible cardiopulmonary resuscitation, with subthemes: (a) Need for more support and understanding from the staff, (b) Uniqueness of the family – patient relationship, (c) Need for staff to be more humane and less mechanical and (d) Professional and highly qualified staff.

**Conclusion:** Results of this study suggest a possible gap in family-centred care delivery in intensive care settings. System changes are necessary in order to increase nurses' awareness of patients' families' preferences, and successfully implement recommended family-witnessed cardiopulmonary resuscitation.

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## Implications for Clinical Practice

- There are a number of preferences which family members of critical care patients hold regarding their expectations towards family-witnessed resuscitation.
- Patients' relatives desire to be more involved in patients' care during possible in-hospital cardiopulmonary resuscitation of their loved-one, generally receive more support and be better treated by the intensive and critical care staff.
- Taking into account patients' relatives' voices can help the intensive and critical care nurses to understand families' experiences and improve care delivered to them.
- Mapping out or/and updating local family-centred care guidelines can initiate addressing local organisational change in intensive and critical care wards and enable desired implementation of family-witnessed resuscitation.

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## Introduction

Thirty years ago, Doyle et al. (1987) conducted a study exploring the effect of family presence during cardiopulmonary resuscitation (CPR). After interviewing families of cardiac arrest victims, who voiced their regret of not being able to be in the CPR room, they decided to study this topic more in depth. Based on their results indicating positive impact of family-witnessed resuscitation (FWR) on families, rationality of the common practice of excluding patients' relatives from the CPR started being questioned.

Over the years, there have been more studies conducted, suggesting positive influence of FWR on patients, staff and family members (Sak-Dankosky et al., 2014), what inspired many nursing and medical organisations to officially approve this idea and recommend its implementation into clinical practice (American Association of Critical Care Nurses, 2016; Australian and New Zealand Committee on Resuscitation, 2016; Bussaert et al., 2015; Davidson et al., 2016; Oczkowski et al., 2015).

FWR, which has been defined as offering a choice to families to be present in a location that affords visual contact with the patient during CPR (Emergency Nurses Association, 2007) is consistent with the principles of family-centred approach to care (FCC) (Millenson et al., 2016), which emphasises the importance of recognising a significant role of family members in patients' health care experience. A paradigm shift, from strictly paternalistic, to more patient- and family-centred, which allows including the recipients of care in the care team decisions, has enforced from health care settings to incorporate FCC principles into practice (Gasparini et al., 2015; Kushner, 2016).

Despite evidence of FWR benefits, this practice and its implementation remain highly controversial among health care professionals (HCPs). One of the staffs' biggest concerns is that FWR would have a negative impact on the family members (Monks and Flynn, 2014; Sak-Dankosky et al., 2017). A few recent studies exploring FWR influence on patients' relatives failed to confirm this concern (Jabre et al., 2014). Results of a randomised control trial investigating the effect of FWR on posttraumatic stress disorder symptoms show that family presence is associated with more positive psychological outcomes in families, and does not interfere with staffs' CPR efforts, or results in conflicts between staff and family members (Jabre et al., 2013). Moreover, there is evidence suggesting that families often desire to stay by the bedside during CPR of their loved-one (Bradley et al., 2017; Chew et al., 2014; Dwyer, 2015; Leske et al., 2013; Masa'Deh et al., 2013; Twibell et al., 2015; Zali et al., 2017).

There is a lack of recent studies exploring specifically intensive care unit (ICU) patients' families' preferences in places where this practice is not yet implemented. Based on our previous work, it appears that FWR is not commonly practised in Polish and Finnish hospitals, and staff in these two countries have rather negative attitudes towards FWR (Sak-Dankosky et al., 2015). Exploring families' perspective would allow validating these concerns, and contribute to a better understanding of what patients' relatives expect during possible CPR of their loved ones, especially in light of emphasised recommendations of FWR and evidence that it is not widely implemented.

## Study aim

The aim of this study was to describe ICU patients' family members' preferences regarding the idea of an inpatient FWR.

## Methods

### Design

A descriptive qualitative design based on a phenomenological approach with hermeneutic inquiry guided this study. The need

to explore the way families may experience family-witnessed CPR and what meaning they give to this practice resulted in selecting this particular approach (Matua, 2015). The aim of choosing this design was to describe the essential structure of a phenomenon, which in this study was having particular preferences regarding FWR after being a family member of a former ICU patient (Gadamer, 1989). The study was performed in compliance with the principles outlined in the Declaration of Helsinki (2013), and was approved by the University of Eastern Finland Committee on Research Ethics (Statement No. 7/2015).

### Data collection

Data were collected between July 2015 and June 2016, using a purposive sampling method to assure information-rich cases. Potential participants were found among adult family members of adult patients who in the last two years were patients of ICUs in Poland or Finland, and were not currently admitted to the hospital. It was a great challenge to obtain a sample based on persons who actually experienced being present during CPR, as FWR is hardly ever practised neither in Poland nor in Finland. In order to meet the study aim, we found the most suitable to include family members of patients admitted to ICU and therefore were in direct risk for in-hospital CPR. Participants were recruited using variety of techniques including study flyers distribution in university hospitals in Finland and Poland, e-mails sent to the members of patients' support groups and via social media.

A total of 12 family members responded to the call and agreed to take part in the study. Semi-structured in-depth interviews, based on a thematic interview guide, were conducted individually with each person in a location appointed by the participant (ten in person and two over the phone). The interview guide consisted of questions structured by the comprehensive literature review conducted prior to the empirical phase of the study, and were pilot tested during trial interviews in both countries.

Prior to the interviews, investigators made sure that the participants understood the purpose of the study, study procedure, and the main concepts. Next, participants were asked to sign an informed consent and give the permission to record the interview. The informed consent form included information that the participation in the study was confidential and anonymous, and that the participants could withdraw from it at any point without giving a reason. In case of the phone interviews, the consent was signed, scanned and sent to the researchers prior to the interview. Investigators, who had both clinical nursing experience, started with intentionally broad questions about the time when the patient was admitted to the ICU and were followed by the questions related to participants' opinions about FWR. Additional questions were asked to clarify some aspects, validate the answers and prompt to more in-depth discussion. All interviews were audio recorded and lasted ranging from 16 to 86 minutes (median of 35 minutes).

### Data analysis

The verbatim transcripts of 12 interviews covered 105 A4 pages with 1.5-line spacing. Finnish and Polish transcripts were translated into English by investigators familiar with the qualitative research methodology. The interviewers reviewed the translations and discussed possible meaning incompatibilities. To ensure a full accuracy of the translated text, fluid translations of meaning were used over fixed, one-word translations (van Nes et al., 2010). Once the understanding of the overall text was obtained, an inductive thematic analysis was performed by the principal investigator. Based on the hermeneutic approach, the aim was to interpret the family members' intentions and perspectives and their interrela-

tionship between the whole and individual parts of the content (Elo and Kyngs, 2008). Analysis was divided into three phases: (1) preparation, (2) organising, and (3) reporting. First, the meaning units were identified and codes were created. To avoid fragmentation, meaning units, consisting more than a word, were identified. Next, the data were organised, what included open coding, grouping, and categorisation. Finally, a thread of underlying meaning was identified through codes and categories, and the themes were generated (Table 2). Data abstraction continued as far as it was reasonable and possible and resulted in generation of two main themes with four subthemes each, which corresponded to the study aim (Table 3). During the analysis the investigators took all necessary measures to avoid their previous nursing experience and empathy to influence the interpretation of the data (Asselin, 2003). Data saturation was reached by examining transcripts until no new themes emerged, suggesting an adequate sample size (Kerr et al., 2010). Preliminary categories and themes were discussed until the consensus was reached among all investigators. Peer debriefing, and maintenance of an audit trail with a reflexive notebook were used to ensure reflexivity, trustworthiness, quality and rigour in data collection and analysis. This paper follows the Enhancing the Quality and Transparency of health Research (EQUADOR) network recommended guidelines:

Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014).

## Results

A total of 12 adult family members took part in the study (Table 1). After discussing in-hospital FWR with the ICU patients' family members, two main themes regarding the families' preferences were identified: (1) *Being more involved and engaged in patients' care in case of CPR*, and (2) *Being cared for and treated respectfully during possible CPR* (Table 3).

### *Being more involved and engaged in patients' care in case of cardiopulmonary resuscitation*

*Being more involved and engaged in patient's care in case of CPR* was described as an importance of being able to make autonomous decisions about FWR; a desire and need to be close to their loved one in that critical moment; feeling that they have more control of and impact on what is being done to their relative, and an importance of getting true and comprehensive information about the patient condition from the staff. This theme consisted of four subthemes: (1) *Having an option to decide*, (2) *Being in physical prox-*

**Table 1**  
Characteristics of the participating family members.

Family member	Age	Sex	Country	Relationship to the patient	Reason for ICU admission	ICU stay survival? <sup>a</sup>
A	28	Female	Poland	Granddaughter	Cerebral haemorrhage	Yes
B	61	Female	Finland	Wife	Myocardial infraction	Yes
C	57	Female	Poland	Daughter	Cerebral infraction	Yes
D	27	Male	Poland	Brother	Multiple trauma	Yes
E	35	Female	Finland	Granddaughter	Post-seizure attack complications	No
F	65	Male	Finland	Husband	Post-operative haemorrhage	Yes
G	56	Female	Poland	Daughter	Complicated pneumonia	No
H	32	Female	Poland	Daughter	Cancer-related complications	No
I	49	Female	Finland	Sister	Raptured aortic aneurism	No
J	29	Female	Poland	Granddaughter	Complicated pneumonia	No
K	28	Female	Poland	Daughter	Cancer-related complications	No
L	30	Female	Poland	Daughter	By-pass surgery complications	Yes

<sup>a</sup> Information whether the patient survived the ICU stay.

**Table 2**  
Example of meaning units, units and codes and subcategories.

Meaning unit	Condensed meaning unit	Code	Category
"Nobody explained to us that CPR may actually occur." "...and nobody told us that it is normal and this can happen after the surgery. They would not explain it to us."	Nobody explained CPR may occur Nobody explained what to expect	Lack of explanation	Importance of explanation
"When we got my dog's blood test results, she [the veterinary] explained to us everything in detail... everything about what she would do next, why things were not working, and what the next treatment plan was. And this is what didn't get from the physicians when my dad was dying..."	Even veterinary physician gave comprehensive explanation about the treatment, whereas the father's physician did not		
"Additionally, it would be good if somebody would explain to desperate families what was going on."	It would be good if families got more explanation about the process	Need for explanation	
"I would like somebody to come to me and explain me everything." "Everything should be explained before. Of course that would be traumatic and we [the families] could not understand this, but if we had more explanation, everything would be much better"	I would like somebody to explain everything to me It would be much better if everything was explained before		
"...and he [the doctor] explained to me that they already overdosed her, that they can't do anything more about it and that this is how she [the patient] will be from now on. He said this is how this disease works. And even though I didn't like this physician so much, he helped me a lot by simply saying it. It was the first time when someone would explain to me how this works."	Doctor helped by explaining the way the disease worked	Helpful power of explanation	
"They [nurses] took my daughter and started explaining everything to her. They spent 10 min doing it... just explaining how the X-ray machine works. After that, she [the daughter] agreed to have the X-ray picture taken. All it took was explaining. It was her first time [stay in an X-ray lab] so try to understand that this 3 year old kid was simply afraid of the unknown. And after that she was smiling and laughing."	It only took explaining how X-ray works to make my daughter go from being afraid to laughing and smiling		

**Table 3**  
Analysis themes, subthemes, and categories.

Themes	Subthemes	Categories
Being more involved and engaged in patient's care in case of CPR	Having an option to decide	Importance to have a choice to decide about FWR on my own Having FWR option offered by staff Importance of family preferences Importance of staff knowing what family FWR decision is Disbelief that staff would inform about CPR
	Being in physical proximity to the patient	Need to be next to the love one Desire to see everything with own eyes Importance of self-confirmation Importance of having more room for the family Family presence helpful for the patient
	Feeling like having more control and impact	Importance of staff being more cooperative Disagreement that staff should have a power over family Importance of being able to say something about the treatment Fear from giving away the responsibility to someone else Need for improvement of staff – family relations Unwillingness to feel helpless
	Having better idea about the situation	Importance of explanation Desire for comprehensive information Importance of straight forward and true information Lack of honesty
Being cared for and treated respectfully during possible CPR	Need for more support and understanding from the staff	Not getting enough attention Fear of being alone with it Wanting help to deal with it Misunderstanding family intentions Lack common sense and empathy in staff Lack of understanding family burden and behaviours
	Uniqueness of the family – patient relationship	Lack of staff awareness of family role in patient's life Patient – family intimacy not respected Importance of staff seeing the bigger picture of the patient context Lack of acknowledging an intimacy of patient – family relations
	Need for staff to be more humane and less mechanical	Being more humane Showing emotions as a sign of professionalism Being too mechanical
	Professional and highly qualified staff	Importance for staff knowing their mission Demand for more training for staff Importance of teaching staff how to deal with stress Letting staff decompress due to stressful work Demand for more staff

imity to the patient, (3) *Feeling like having more control and impact* and (4) *Having a better idea about the situation*.

*Having an option to decide* meant to the participants that in case of CPR the family members wanted to have the FWR offered to them, and they wanted themselves to be able to make the decision on participating in it:

*“Personally, I think that even if I was too afraid to see it [CPR]... still it is all about being able to have this choice”* (Participant K – PK).

Despite being aware of the brutality of CPR, they still reported that it would be important for them to make this decision on their own. They did, however, voiced a disbelief that in case of CPR, the staff would approach them or even inform about the situation:

*“I think it's our right to have this option offered, but I'm almost sure that staff would fail to inform me even if I was in the hospital when that happened”* (PC).

Being in physical proximity with the patient family members described as simply ‘being there’:

*“In such situation, it's about every little moment to be together, simply being there with him [the patient]”* (PD).

Families believed their presence would have a positive influence on the patient and it would enable them to see everything with their own eyes and allow them to gain a self-confirmation that everything has been done for their loved one:

*“If something would not work out, I would know they [the staff] did everything they could”* (PG).

In case of the negative outcome of CPR, being close to the patient would give them a chance to say goodbye:

*“I would like to be close to him [the patient] when it happens. It would allow me to get that closure I would desperately need”* (PG).

While describing the need for being physically close to the patient, our participants stressed out the necessity of organising space around the patient in a way that would enable them to stay close in case of an emergency:

*“But if there [by the patient] is not enough space for us to stay, then the rooms should be organised in a different way”* (PL).

*Feeling like having more control and impact* was described as families' desire to be able to have something to say in the carrying process. Emphasising understanding of the staff's professional authority and trusting in their competences, our participants still thought they should be taken more into account in the decision making process:

*“It is terrible that nurses and physicians behave like they have powerful positions regarding us and our loved ones”* (PK).

They believed physicians and nurses should be more cooperative towards the family and should discuss more aspects with them:

*“When we got the discharge papers it turned out that he [the patient] coded three times! And nobody even bothered mentioning it to us.” (PH).*

In general, family members thought staff should be able to see them more as partners than as enemies. Families explained their reasoning as being related to their unwillingness to feel helpless, their desire to know ‘they could do something’, and their fear of ‘giving away the loved one to someone else’/‘giving away responsibility to strangers’:

*“Being present gives a feeling of engagement in the situation, and some sort of fake feeling like we have an influence. Without it, you just feel that you give away your loved one to some strange people, and what will happen is completely up to them” (PA).*

Finally, family members voiced their desire of *having general better idea about the situation*. It was related to the often-voiced complaint on the lack of information about CPR procedures and treatment prognoses. The information, which families got from the staff, in participants’ opinion, should be fully comprehensive and true:

*“Nobody ever said straight forward that he [the patient] might die, even though it was clearly the case.” (PD).*

Family members often complained that the staff was hiding important facts from them, while all they needed was straightforward information, which would help them to get a full picture and thus better cope with the situation:

*“It is horrific for me, as a family that I don’t know what is going on. I’d liked to know everything, even the worst news.” (PA).*

In family members’ opinion, the given information should not only be comprehensive and true, but also well explained:

*“I would definitely like somebody to approach me after and tell me exactly what happened. Everything... what they did, what went wrong and why” (PF).*

Having better information about the patient and the treatment process would help the family to deal with their ‘fear of the unknown’, which was one of the biggest concerns related to having a loved one in a critical condition.

#### *Being cared for and treated respectfully during possible cardiopulmonary resuscitation*

*Being cared for and treated respectfully during possible CPR* was described by the family members as a need for being understood and seen as someone important to the patient, and generally receiving more support from highly qualified staff who treats families and patients in more humane way.’ This theme consisted of four subthemes: (1) *Need for more support and understanding from the staff*, (2) *Uniqueness of the family – patient relationship*, (3) *Need for staff to be more humane and less mechanical* and (4) *Professional and highly qualified staff*.

*Need for more support and understanding from the staff* was related to the families’ opinion that ICU staff often lacked empathy what could negatively influenced their awareness and understanding of family needs, emotions, and difficult behaviours during possible CPR:

*“They [the staff] have been working with people for so many years, they should know more about our impulsive reactions after six years of medical school, than they actually do” (PD).*

Moreover, families often felt that their difficult but human reactions were misunderstood by the staff:

*“I needed to be close to him [the patient] because I simply wanted to help. Physicians completely misunderstood my intentions. They thought I was intentionally trying to disturb their work.” (PG).*

At the same time, participants voiced a great need for support and understanding. In their opinion, simple things such as hug or a nice word would make their experience much easier:

*“She [the nurse] was the first person who told me to remember to take care of myself too. And when you hear something like this, you feel incredible” (PC).*

They believed that besides taking care of the patient, staff should not forget about the family, who is often left to deal with the consequences of the patients’ critical condition by themselves. Expressing above needs, participants admitted they could understand some of the reasons for the staff’s distance, such as work and stress overload. They believed that staff might be avoiding contact with the family in order to protect themselves from having more work, and from the critique and judgement they could receive:

*“I still think they [the staff] exclude us because it’s easier for them. It keeps them comfortable and safe.” (PG).*

According to the participants, FWR could make the staff feel insecure because of lack of knowledge on how to deal with patients’ families. Moreover, families often saw themselves as a burden to the staff. They did, however, think that this should not be the reason they had been denied the attention:

*“I understand that they [the staff] are busy and all, but you would hope they would find a second to think to the family as well. At the end we sort of are their patients as well” (PD).*

*Acknowledging and understanding the uniqueness of the family – patient relationship* was an important aspect of receiving needed care from the staff. In family members’ opinion, HCPs did not see the patient in a bigger picture, in the context of his or her family:

*“I think that family presence during CPR should be natural. Like in life, when we are surrounded by people we love” (PC).*

Very often they felt that their significant role in patients’ life, was not respected enough by nurses and physicians:

*“How can you disrespect family as a whole? This is the most intimate system for human beings. My mom gave birth to me... and why would they [the staff] have to decide if I can see her dying or not?” (PK).*

Moreover, the participants voiced their need for maintaining intimacy with the patients. Family members believed that HCPs should be aware of the importance of the family – patient relationship in regard to staff – patients relationship when it comes to dealing with life – death situations. That, in their opinion, should not affect the professional aspect of CPR and the staff’s professional obligation to do everything to save the patient.

*Need for staff to be more humane and less mechanical* also described the problem of not seeing the patients in the context of their families, what in participants’ opinion, was interrelated with dehumanising the patient. In families’ view, ICU staff was often cold and mechanical in their approach to families:

*“In such situation [CPR], every moment is about being together with the patient. But staff does not treat us like we have feelings, and it’s not important for them, as if they didn’t have any emotions themselves” (PD).*

The participants believed, that the staff despite their work routine, should not forget that their job is to help and serve people in their most difficult moments:

*“When you know that he [the physician] has hundreds of patients, he might not feel emotional anymore, but he should at least be aware of the emotions someone else can have”* (PG).

The participants voiced their strong belief that due to the significance of experiencing a family member dying, CPR should be much more humane, and that FWR would help to achieve that:

*“Inviting family would make it more humane. Staff would know there is family next to them, not that they only save the machine, but deal with an actual human being.”* (PG).

At the same time families noted that being more humane, what staff probably often sees as unprofessional, is actually the opposite of that. They were of the opinion that showing human emotions by the staff and establishing better relationship with the family is in fact more professional than the distance usually shown by the staff:

*“If I saw a nurse or a physician crying, I would never think they are unprofessional. I would think they are human”* (PH).

*Professional and highly qualified staff* subtheme represented family members' belief that in order to have their caring needs met, there should be enough of highly qualified and professional staff available in ICU and during CPR. Relatives claimed, that additional training would help nurses and physicians to learn how to approach families during critical situations. Furthermore, they assumed the staff did not get enough education regarding family issues, which in their opinion was disappointing, considering the nature of nurses and physicians' professions:

*“I think the staff should know how to deal with patients' families before they go out there and start carrying out their important mission”* (PL).

The participants believed that nurses and physicians, in addition to their strictly nursing and medical skills, should also have some psychological knowledge that would enable them to work holistically with patients and families, instead of just treating the disease:

*“If we only got more attention, we would immediately feel better.”* (PC).

Being aware of the shortage of HCPs, family claimed that there should be more staff in order to make it possible for them to devote enough time to the families. Family members also voiced their concerns about whether the staffs' need for necessary support and ability to decompress their stress and negative emotions after work is satisfied. Taking care of staffs' mental health would ensure staffs' higher efficiency and contribute to better family – staff relations:

*“I think it all comes to the problem that staff doesn't have emotional support, and therefore makes us – the families, not having it either”* (PH).

## Discussion

This first FWR study conducted on the population of Finnish and Polish ICU patients' relatives revealed important aspects related to the families' preferences regarding in-hospital FWR. The most prominent results were that the family members of critically ill patients would like to be more engaged in patients' care, and that they wish to be treated more subjectively, rather than objectively in case of a CPR of their loved-one.

Family members in our study explained that despite their decision regarding FWR, they would like to have this option presented to them in case of CPR. This is consistent with other study in which families stated that FWR is their right and should be offered to them by the staff (Pasquale et al., 2010). HCPs, however, very often oppose this practice, emphasising its possible negative impact on

family members' wellbeing and the CPR outcome (Hassankhani et al., 2017; Sak-Dankosky et al., 2017). Most of those concerns have not been supported by the results of studies reflecting on FWR impact on the patients' relatives (Compton et al., 2011; Leske et al., 2017; Pasquale et al., 2010). In fact, those family members who witnessed CPR did not regret the decision and would do it again (Albarran et al., 2009). Moreover, they were grateful to have this possibility offered, stated that it helped them to deal with the loss of their loved one (Leske et al., 2013), and reported lower symptoms of anxiety and posttraumatic stress disorder in comparison to those who did not witness CPR (Jabre et al., 2013, 2014).

Dwyer (2015) in his study examining predictions of public support for FWR, suggested that the main reason why family is not present during CPR is the fact that they are not being approached by the staff. They claimed that knowing the benefits of FWR, physicians have moral obligation to inform patients' relatives about FWR and support their decision regarding it. Given our results revealing need of patients' relatives to have FWR option offered, together with other existing evidence on lack of the negative impact of this practice, it is important to consider implementing FWR in Polish and Finnish hospitals.

Patients' relatives in our study described their need to be close to the patient in case of CPR. These findings are consistent with other studies, in which participants agreed that FWR would be beneficial to the patient, would help them to understand that staff did everything possible and would make believe they had some impact on patients' wellbeing (Giles et al., 2016; Pasquale et al., 2010). Khalaila (2013) reported that proximity to the patient was ranked the most important need for families, which supports our results that participants' desire to remain in close to the patient during CPR. Moreover, there is evidence that patients' outcomes, such as physical activity levels, are better when the family is involved in care (Prakash et al., 2016). HCPs, however, often disbelieve that FWR could be beneficial for an unconscious patient (Sak-Dankosky et al., 2015), which can explain why our participants were excluded from patients' care by the staff. Yet recent findings suggest, that patients undergoing CPR do maintain some level of awareness at the beginning of the code (Parnia et al., 2014).

Another substantial concern of family relatives described in our study was that they felt like they were not informed enough about the treatment process. This finding is consistent with other study in which family members felt they were uninformed during treatment process (Masa'Deh et al., 2013). Our participants stated they prefer even most painful truth to the lack of information, what was also supported by the results of Gaeni et al. (2014) study. Uninformed family members might try to seek information themselves what might lead to misunderstandings and conflicts between families and staff. FWR can help to assure a transparency of situation, especially when often relatives think that excluding them from CPR means something is being hidden from them (Masa'Deh et al., 2013). Moreover, clear communication between staff and families during critical situations can provide better understanding of the situation and thus contribute to better satisfaction with the end-of-life care.

In this study, participants consequently reported a lack of support and understanding from the staff. They believed that without it, it is practically impossible to successfully implement FWR, what was supported by another study by Masa'Deh et al. (2013). In Leske et al. (2013) study, in contrast, none of the family members stated their needed more care from the staff, what might be related to the successful promotion and implementation of the FCC in American hospitals.

In our study, participants believed that during CPR, staff should not be concentrated on the technical aspects only and should respect the importance of patient – family relationship. They often claimed that they felt the staff forgot that the patient “belonged to

their family". The participants expressed strong disappointment that they could not feel more involved in the patient's care as someone emotionally much closer to the patient than the staff. While respecting professional authority of nurses and physicians, HCPs should also acknowledge unique bonds which patients share with their loved-ones and seek to include them more in the caring process, given the evidence of positive impact of family involvement in care of critically ill patient. Being more empathetic and attentive in meeting individual needs of family members during CPR, would help to remind the staff about their clients' personhood, and make the CPR look more humane and less mechanical.

Finally, participants in our study claimed that staff should have more training on how to work with families. Consequently, staff should be better trained during their pre-licensure education, and regularly educated during their clinical careers. Findings of previous studies exploring communication-based competencies of critical care staff support this opinion (Schram et al., 2016). There is a belief that staff avoids contact with the families because of the lack of knowledge on how to approach the family in this difficult time (Pasquale et al., 2010). Additional training regarding FCC was found to improve staff's attitudes towards FWR and resulted in increased cooperation between the staff and families (Yanturali et al., 2005). In light of these findings, professional curricula should be revised to educate staff on how to meet the needs of ICU patients' relatives. Additionally, in order to be able to provide FCC, shortage of staff should be addressed. Without a proper number of ICU HCPs, successful implementation of FWR would be challenging. Any organisational changes, however, require prior development of evidence-based policies and guidelines respecting local culture and resources availability.

### Limitations

There are a few limitations, which need to be addressed when interpreting the results of this study. The first one is small sample consisting of mostly female and Polish participants. Having a difficulty in acquiring more subjects (presumably due to the possible distressing nature of the research topic), we recognise that the number of participants is too small to make general inference in both countries. The goal of this study, however, was not to generalise results but to provide a richer understanding of families' viewpoint regarding FWR. Our findings provide an initial insight seen by some Polish and Finish families and provide a direction for further, ethnographic research that will be based on bigger, more gender diverse purposive sampling, and explore country-specific issues related to FWR. Another limitation was related to using a single interview approach, which is associated with a risk of forsaking a systematic approach to the problem. Also, because of the lack of recent studies reflecting on specifically ICU populations, the discussion of the results was at times challenging and limited. Finally, by translating Finnish and Polish transcripts into English, the risk was to lose some of the meaning in the translation process. Several strategies, however, were used to assure the best possible representation and understanding of the interpreted preferences of our participants.

### Conclusion

The study suggests new aspects of families' preferences regarding in-hospital family-witnessed CPR option, in which patients' relatives voice their desire to be more involved and engaged in patient care during CPR and to be better treated and cared for during this difficult moment, what contributes to richer understanding of families' experiences when having a loved-one admitted to ICU. These results support the international recommendations

Emphasising the need to improve FCC during CPR and give a direction for further research that should aim at evaluating local health care situation. It would help to estimate possibility of FWR implementation, and consequently better support critically ill patients' relatives to meet their needs, and improve family-related outcomes in critical care.

### Conflict of interest Statement

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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### Author's contributions

1. Study conception and design, acquisition of data, analysis and interpretation of data, drafting manuscript, and final approval of the version to be submitted.
2. Study conception and design, acquisition of data, analysis and interpretation of data, critical revision, and final approval of the version to be submitted.
3. Study conception and design, analysis and interpretation of data, critical revision, and final approval of the version to be submitted.
4. Study conception and design, acquisition of data, analysis and interpretation of data, critical revision, and final approval of the version to be submitted.

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### Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.iccn.2018.04.001>.

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