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RESEARCH ARTICLE (ORIGINAL)

Relational practices of nurses with families in a cardiac intensive care unit

Práticas relacionais dos enfermeiros com a família numa unidade de cuidados intensivos cardíacos

Prácticas relacionales del personal de enfermería con la familia en una unidad de cuidados intensivos cardíacos

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Abstract
Background: Family-centered care is an approach that addresses the needs and values of each family.
Objective: To know the perceptions of nurses in the cardiac intensive care unit of a hospital center in northern Portugal about relational practices with families in an intensive care unit.
Methodology: Quantitative, descriptive, correlational, and cross-sectional study with a sample of 26 nurses, 65.4% (n = 17) female. The PREFUCI-Importance and PREFUCI-Frequency scales were used.
Results: The practice of "being available to clarify doubts to family members" was the practice most frequently rated by participants as *Totally important* and implemented *Always*. The mean PREFUCI total score, calculated by summing the scores of the 15 items in each scale, was 59.5 on the importance scale and 52.69 on the frequency scale.
Conclusion: Participants showed positive attitudes toward the importance of PREFUCI. However, the frequency of implementation is moderate, with a positive correlation between these two variables, reflecting the need to operationalize these practices.

Keywords: critical care nursing; family; humanization of assistance; interpersonal relations

Resumo
Enquadramento: O cuidado centrado na família é uma abordagem que atende às necessidades e valores de cada família.
Objetivo: Conhecer a perceção dos enfermeiros da Unidade de Cuidados Intensivos Cardíacos (UCIC) de um Centro Hospitalar da Zona Norte de Portugal (CHZNP) sobre as Práticas Relacionais dos Enfermeiros com a Família em Unidade de Cuidados Intensivos (PREFUCI).
Metodologia: Estudo quantitativo, descritivo, correlacional e transversal. Amostra constituída por 26 enfermeiros, 65,4% (n = 17) do sexo feminino. Usamos as escalas PREFUCI-Importância e PREFUCI-Frequência.
Resultados: A prática "Disponibilizar-se para esclarecer dúvidas aos familiares" foi a mais escolhida pelos participantes como *Totalmente Importante* e implementada *Sempre*. A média do *score* global da PREFUCI, obtido através da soma da pontuação dos 15 itens que compõem cada escala foi, 59,5 na escala Importância e 52,69 na escala Frequência.
Conclusão: Os participantes revelaram uma atitude positiva face à importância das PREFUCI, no entanto, a frequência com que as implementam é moderada, verificando-se uma correlação positiva entre essas duas variáveis, que reflete a necessidade de operacionalização destas práticas.

Palavras-chave: enfermagem de cuidados críticos; família; humanização da assistência; relações interpessoais

Resumen
Marco contextual: La atención centrada en la familia es un enfoque que responde a las necesidades y los valores de cada familia.
Objetivo: Conocer la percepción de los enfermeros de la Unidad de Cuidados Intensivos Cardíacos (UCIC) de un centro hospitalario de la zona norte de Portugal (CHZNP) sobre las Prácticas Relacionales de los Enfermeros y la Familia en las Unidades de Cuidados Intensivos (PREFUCI).
Metodología: Estudio cuantitativo, descriptivo, correlacional y transversal. Muestra compuesta por 26 enfermeros, el 65,4% (n = 17) del sexo femenino. Se usaron las escalas PREFUCI-Importancia y PREFUCI-Frecuencia.
Resultados: La práctica "Estar disponible para responder a las preguntas de los familiares" fue la más elegida por los participantes como *Totalmente Importante* y aplicada *Siempre*. La media de la puntuación global de la PREFUCI, obtenida a través de la suma de la puntuación de los 15 ítems que componen cada escala fue 59,5 en la escala Importancia y 52,69 en la escala Frecuencia.
Conclusión: Los participantes mostraron una actitud positiva hacia la importancia de las PREFUCI, sin embargo, la frecuencia con la que las aplican es moderada, y existe una correlación positiva entre estas dos variables, lo que refleja la necesidad de operativizar estas prácticas.

Palabras clave: enfermería de cuidados críticos; familia; humanización de la atención; relaciones interpersonales

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Introduction

Patient- and family-centered care is based on four core concepts: dignity and respect, information sharing, participation, and collaboration. It is an essential element of quality and safety of care (Institute for Patient and Family-Centered Care [IPFCC], 2017). The family members of the critically ill person develop a series of changes in their health status called Post Intensive Care Syndrome-Family (Needham et al., 2012). With this in mind, the Society of Critical Care Medicine (SCCM) has published recommendations for patient- and family-centered care in the intensive care unit (ICU) (Davidson et al., 2017). Partnerships between nurses and families have improved patient and family experiences and outcomes (Heyland et al., 2018; Kleinpell et al., 2018). Nurses are in the best position to support these families because they recognize the importance of families in caregiving (Kiwanuka et al., 2019).

The general objective of the study was to know the perceptions of nurses in the cardiac intensive care unit (CICU) of a hospital center in northern Portugal (CHZNP) about the relational practices of nurses with families in the ICU (PREFUCI). As a result of the general objective, we formulated the specific objectives: (i) to determine a CHZNP's CICU nurses' perceptions of the importance they place on PREFUCI and the frequency with which they use it; (ii) to determine a CHZNP's CICU nurses' general perceptions of the importance they place on PREFUCI and the frequency with which they use them; (iii) to analyze the relationship between the importance a CHZNP's CICU nurses place on PREFUCI and the frequency with which they use it.

Background

Family-centered care is an approach to health care that respects and responds to each family's individual needs and values. We have adopted the SCCM concept of family, in which the family is defined by the patient or, in the case of minors or persons without decision-making capacity, by their representatives, who may or may not be related to the patient (Davidson et al., 2017). The ICU is a space that brings together human and technical resources for the monitoring and treatment of critical patients (Ministério da Saúde, 2013); in the case of CICU, critically ill cardiac patients.

Interventions to promote the application of SCCM recommendations for patient- and family-centered care are grouped into four categories: developing caring relationships, communication, presence and engagement, and decision-making (Davidson & Zisook, 2017). Similarly, the PREFUCI represent interventions that nurses should implement in their daily interactions with family members in critical care (Carvalhido, 2014).

The nurse, the critically ill patient, the family, the professional practice environment, and the resources available for family care have characteristics that can inhibit or facilitate family involvement (Hetland et al., 2018). Initiatives to promote family involvement have been implemented around the world. However, the level of implementation is not uniform. The most common practices relate to providing information to families. Less common is flexibility and openness for family members to be present during the patient's medical visit or resuscitation and invasive procedures (Kleinpell et al., 2018).

Research questions

How do nurses in the CICU of a CHZNP rate the importance they place on PREFUCI and the frequency with which they use them?; Is the importance that nurses in the CICU of a CHZNP place on PREFUCI related to the frequency with which they use them?

Methodology

We developed a quantitative, descriptive, correlational, and cross-sectional study. The study's target population was all nurses, 27 nurses from the CICU of a CHZNP. Inclusion criteria were working in the CICU at the time of the study, and exclusion criteria were not completing the questionnaire fully. The convenience sample consisted of 26 nurses.

Data were collected using the self-completion PREFUCI questionnaire, validated by Carvalhido (2014) for the Portuguese population. It consists of two parts. The first part refers to the characterization of the working conditions of the participants, and the second part consists of the scales that evaluate the PREFUCI: frequency (PREFUCI-F) and importance (PREFUCI-I). The five-point Likert scales comprise 15 items that are the same in both scales. On the right side, the participant answers on the importance scale, and on the left, the frequency scale. The items of the scales were grouped into three factors: Factor 1 - Welcoming and Information Practices, Factor 2 - Integration Practices in Technical Procedures and Decision Making, and Factor 3 - Visit Management Practices. The sum of the scores for each item gives the total score for each scale, which ranges from 15 to 75. Higher scores indicate attitudes that promote positive interactions with family members of ICU patients, and lower scores indicate inhibitory attitudes (Carvalhido, 2014).

The PREFUCI questionnaire was validated on a convenience sample of 239 nurses working in different ICUs and showed satisfactory psychometric properties (Carvalhido, 2014). In this study, Cronbach's alpha was calculated, and values of 0.901 for PREFUCI-F and 0.927 for PREFUCI-I were obtained, which are acceptable (Field et al., 2012).

The hospital center ethics committee approved the study with registration number 45/2021- CA, and informed consent was obtained from the clinical director and nurse manager. Permission to use the scale was also obtained from the author.

Data collection took place in the CICU in February 2021. After the consent form was completed, the principal

investigator gave the questionnaire to the participants along with an envelope in which they were to place the completed questionnaire, which was then stored in a sealed urn in the nurse manager's office, accessible only to the principal investigator.

This study defined the following research variables: the PREFUCI-I items, the PREFUCI-F items, the PREFUCI-I global score, and the PREFUCI-F global score. IBM SPSS® version 27.0 was used for data processing with descriptive and inferential statistics. Nonparametric tests were used for inference because they do not require a normal distribution, and our sample size is small (Field et al., 2012).

Results

The sample consisted of 26 nurses, most female (65.4%; *n* = 17) and aged 51-60 (53.8%; *n* = 14). Regarding work experience, 34.6% (*n* = 9) had between 31-40 years. The majority (80.8%, *n* = 21) had a bachelor's degree, the rest had a master's degree, and 76.9% (*n* = 20) had no specialization.

Regarding the characterization of the work environment, we found the following: the relationship dynamics between the participants and the critical patient's family members were rated as excellent by 23.1% (*n* = 6), good by 50% (*n* = 13), and adequate by 26.9% (*n* = 7). Regarding the physical conditions in the CICU, 80.8% (*n* = 21) of the participants felt that they facilitated their work, and 19.2% (*n* = 5) felt that they did not hinder their work. Regarding the influence that the relationship with the other care team members had on their performance, 65.4% (*n* = 17) of the participants rated it as facilitating their performance, 26.9% (*n* = 7) indicated that it did not hinder their performance, and 7.7% (*n* = 2) considered it to hinder their work.

In the area of nurses' perceptions of the importance they place on PREFUCI and the frequency with which they use it, the analysis of Factor 1 revealed that the practice of "Informing family members about end-of-life situations" was rated as *Totally important* by 53.8% (*n* = 14) of participants, as was the practice of "Being available to clarify doubts to family members" by 65.4% (*n* = 17), and "Allowing the care service to be contacted 24/7 by family members to clarify questions or provide information" by 38.5% (*n* = 10). The practices of "Identifying and introducing oneself (name and professional group)", "Listening to the family members' opinion about the quality of care provided during the ICU stay" and "Establishing a relationship of trust with the family members" were rated as *Very important* by 50% (*n* = 13) of the participants. The practice of "Informing the family member about what they will see (the patient's appearance, surrounding equipment, and support and monitoring devices)" was rated as *Very important* by 46.2% (*n* = 12) of participants. The practice of "Evaluating the family's adaptation to the ICU hospitalization" was equally rated as *Very important* and *Totally important* by 34.6% (*n* = 9), and the practice of "Listening to the family members' opinions about the environment of the rooms designated for them" was rated as *Important* by 42.3% (*n* = 11).

Regarding Factor 2, the practice of "Encouraging family members' presence during noninvasive procedures (hygiene care, repositioning, changing clothes)" was rated as *Little important* by 30.8% (*n* = 8) and *Very important* by the same percentage. The practice of "Encouraging family members to participate in noninvasive interventions" was rated as *Important* by 34.6% (*n* = 9). The practices of "Facilitating shared decision-making with the patient's family regarding procedures" and "Facilitating shared decision-making with the patient's family regarding therapeutic attitudes" were rated as *Very important* by 42.3% (*n* = 11).

Concerning Factor 3, the practice of "Managing visiting hours" was considered *Very important* by 53.8% (*n* = 14), and "Managing the number of visitors according to the needs of the patient/family" by 57.7% (*n* = 15). All these results are shown in Table 1.

Table 1

Frequency Distribution of PREFUCI-Importance

Variable / Scale	1 Not Important (%)	2 Litle Important (%)	3 Important (%)	4 Very Important (%)	5 Totally Important (%)
Factor 1					
Identifying and introducing oneself (name and professional group).	-	3.8 (*n* = 1)	11.5 (*n* = 3)	50 (*n* = 13)	34.6 (*n* = 9)
Informing the family member about what they will see (the patient's appearance, surrounding equipment, and support and monitoring devices).	-	3.8 (*n* = 1)	15.4 (*n* = 4)	46.2 (*n* = 12)	34.6 (*n* = 9)
Informing family members about end-of-life situations.	-	3.8 (*n* = 1)	7.7 (*n* = 2)	34.6 (*n* = 9)	53.8 (*n* = 14)
Being available to clarify doubts to family members.	-	-	3.8 (*n* = 1)	30.8 (*n* = 8)	65.4 (*n* = 17)
Allowing the care service to be contacted 24/7 by family members to clarify questions or provide information.	-	3.8 (*n* = 1)	30.8 (*n* = 8)	26.9 (*n* = 7)	38.5 (*n* = 10)
Listening to the family members' opinions about the quality of care provided during the ICU stay.	-	-	19.2 (*n* = 5)	50 (*n* = 13)	30.8 (*n* = 8)
Listening to the family members' opinions about the environment of the rooms designated for them.	-	15.4 (*n* = 4)	42.3 (*n* = 11)	23.1 (*n* = 6)	19.2 (*n* = 5)
Evaluating the family's adaptation to the ICU hospitalization.	-	7.7 (*n* = 2)	23.1 (*n* = 6)	34.6 (*n* = 9)	34.6 (*n* = 9)
Establishing a relationship of trust with the family members.	-	-	3.8 (*n* = 1)	50 (*n* = 13)	46.2 (*n* = 12)
Factor 2					
Encouraging family members' presence during noninvasive procedures (hygiene care, repositioning, changing clothes)	-	30.8 (*n* = 8)	26.9 (*n* = 7)	30.8 (*n* = 8)	11.5 (*n* = 3)
Encouraging family members to participate in noninvasive interventions.	-	23.1 (*n* = 6)	34.6 (*n* = 9)	23.1 (*n* = 6)	19.2 (*n* = 5)
Facilitating shared decision-making with the patient's family regarding procedures	3.8 (*n* = 1)	3.8 (*n* = 1)	23.1 (*n* = 6)	42.3 (*n* = 11)	26.9 (*n* = 7)
Facilitating shared decision-making with the patient's family regarding therapeutic attitudes	-	11.5 (*n* = 3)	19.2 (*n* = 5)	42.3 (*n* = 11)	26.9 (*n* = 7)
Factor 3					
Managing visiting hours.	-	7.7 (*n* = 2)	15.4 (*n* = 4)	53.8 (*n* = 14)	23.1 (*n* = 6)
Managing the number of visitors according to the needs of the patient/family.	-	7.7 (*n* = 2)	7.7 (*n* = 2)	57.7 (*n* = 15)	26.9 (*n* = 7)

Note. % = Relative frequency.

Regarding the frequency of implementation of PREFUCI, concerning Factor 1, the practices of "Being available to clarify doubts to family members" and "Allowing the care service to be contacted 24/7 by family members to clarify questions or provide information" were considered to be *Always* implemented by 61.5% (*n* = 16) and 34.6% (*n* = 9) of the participants, respectively. The practice of "Identifying and introducing yourself (name and professional group)" was considered as *Often* implemented by 53.8% (*n* = 14) of the participants, as well as "Informing what the family member will see (patient's appearance, surrounding equipment, and support and monitoring devices)" by 57.7% (*n* = 15), "Listening to the family members' opinions about the quality of care provided during the ICU stay" by 42.3% (*n* = 11), "Evaluating the family's adaptation to the ICU hospitalization" by 38.5% (*n* = 10) and "Establishing a relationship of trust with family members" by 53.8% (*n* = 14). The practice of "Informing family members about end-of-life situations" was considered to be implemented *Often* and *Sometimes* by the same number of participants (30.8%; *n* = 8), and the practice of "Listening to the family members' opinions about the environment of the rooms designated for them" was considered by 38.5% (*n* = 10) as *Rarely* implemented.

Regarding Factor 2, the practice of "Encouraging family members' presence during noninvasive procedures (hygiene care, repositioning, changing clothes)" and the practice of "Encouraging family members to participate in noninvasive interventions." were considered *Rarely* implemented by 46.2% (*n* = 12) and 42.3% (*n* = 11) of the participants, respectively. The practice of "Facilitating shared decision-making with the patient's family regarding procedures" gathered an equal number of *Often* and *Sometimes* responses (30.8%; *n* = 8). The practice of "Facilitating shared decision-making with the patient's family regarding therapeutic attitudes" was considered by 46.2% (*n* = 12) of the participants to be implemented *Sometimes*.

Regarding Factor 3, 46.2% (*n* = 12) of the participants considered the practice of "Managing visiting hours" to be implemented *Often*. The practice of "Managing the number of visitors according to the needs of the patient/family" gathered an equal number of *Often* and *Always* responses (34.6%; *n* = 9). All these results can be observed in Table 2.

Table 2

Frequency distribution of PREFUCI-frequency

Scale / Variable	1 Never (%)	2 Rarely (%)	3 Sometimes (%)	4 Often (%)	5 Always (%)
Factor 1					
Identifying and introducing oneself (name and professional group).	-	-	11.5 (*n* = 3)	53.8 (*n* = 14)	34.6 (*n* = 9)
Informing the family member about what they will see (the patient's appearance, surrounding equipment, and support and monitoring devices).	-	3.8 (*n* = 1)	30.8 (*n* = 8)	57.7 (*n* = 15)	7.7 (*n* = 2)
Informing family members about end-of-life situations.	-	11.5 (*n* = 3)	30.8 (*n* = 8)	30.8 (*n* = 8)	26.9 (*n* = 7)
Being available to clarify doubts to family members.	-	-	-	38.5 (*n* = 10)	61.5 (*n* = 16)
Allowing the care service to be contacted 24/7 by family members to clarify questions or provide information.	7.7 (*n* = 2)	15.4 (*n* = 4)	15.4 (*n* = 4)	26.9 (*n* = 7)	34.6 (*n* = 9)
Listening to the family members' opinions about the quality of care provided during the ICU stay.	3.8 (*n* = 1)	3.8 (*n* = 1)	30.8 (*n* = 8)	42.3 (*n* = 11)	19.2 (*n* = 5)
Listening to the family members' opinions about the environment of the rooms designated for them.	3.8 (*n* = 1)	38.5 (*n* = 10)	30.8 (*n* = 8)	15.4 (*n* = 4)	11.5 (*n* = 3)
Evaluating the family's adaptation to the ICU hospitalization.	-	15.4 (*n* = 4)	34.6 (*n* = 9)	38.5 (*n* = 10)	11.5 (*n* = 3)
Establishing a relationship of trust with the family members.	-	-	15,.4 (*n* = 4)	53.8 (*n* = 14)	30.8 (*n* = 8)
Factor 2					
Encouraging family members' presence during noninvasive procedures (hygiene care, repositioning, changing clothes)	26.9 (*n* = 7)	46.2 (*n* = 12)	15.4 (*n* = 4)	7.7 (*n* = 2)	3.8 (*n* = 1)
Encouraging family members to participate in noninvasive interventions.	23.1 (*n* = 6)	42.3 (*n* = 11)	26.9 (*n* = 7)	3.8 (*n* = 1)	3.8 (*n* = 1)
Facilitating shared decision-making with the patient's family regarding procedures	3.8 (*n* = 1)	23.1 (*n* = 6)	30.8 (*n* = 8)	30.8 (*n* = 8)	11.5 (*n* = 3)
Facilitating shared decision-making with the patient's family regarding therapeutic attitudes	7.7 (*n* = 2)	15.4 (*n* = 4)	46.2 (*n* = 12)	15.4 (*n* = 4)	15.4 (*n* = 4)
Factor 3					
Managing visiting hours.	3.8 (*n* = 1)	7.7 (*n* = 2)	19.2 (*n* = 5)	46.2 (*n* = 12)	23.1 (*n* = 6)
Managing the number of visitors according to the needs of the patient/family.	-	3.8 (*n* = 1)	26.9 (*n* = 7)	34.6 (*n* = 9)	34.6 (*n* = 9)

Note. % = Relative frequency.

Regarding nurses' overall perceptions of the importance they place on PREFUCI and the frequency with which they use them, the mean score for the PREFUCI-I global score was 59.5, as shown in Table 3. For the PREFUCI-F global score, the mean score was 52.692.

Table 3

Statistics of the variables global score of the scales PREFUCI: Importance and Frequency

	PREFUCI-I global score	PREFUCI-F global score
Mean	59.500	52.692
Standard deviation	9.079	9.085
Minimum	40	41
Maximum	75	73

Note. PREFUCI-I = Nurses' Relational Practices with Families in an Intensive Care Unit-Importance; PREFUCI-F = Nurses' Relational Practices with Families in an Intensive Care Unit -Frequency.

In examining the relationship between the PREFUCI-I global score and the PREFUCI-F global score, we used a nonparametric test, Spearman correlation (rho), given the small sample size. As shown in Table 4, we obtained a value of 0.587 (p = 0.002) and concluded that the variables had a moderate positive correlation (Field et al., 2012).

Table 4

Spearman's Rho correlation between the variables global score of the scales PREFUCI: Importance and Frequency

Variables	Spearman's *Rho*	*P*
PREFUCI-I global score and PREFUCI-F global score	0.587	0.002

Note. PREFUCI-I = Nurses' Relational Practices with Families in an Intensive Care Unit-Importance; PREFUCI-F = Nurses' Relational Practices with Families in an Intensive Care Unit -Frequency.

Discussion

Similar to other studies, we found that participants perceived the CICU environment as a positive work environment that contributed to family involvement in the CICU (Hetland et al., 2018; Wei et al., 2018).

Regarding nurses' perceptions of the importance they place on PREFUCI and the frequency with which they use them, participants in our study rated most of the items in Factor 1 as *Very important* or *Totally important*. They indicated that they use them *Often* or *Always*.

Velasco Bueno et al. (2018) study showed that family members felt that most of their questions could be answered by either the physician or the nurse. However, there are several barriers that nurses encounter in fulfilling this role. These include legal issues, organization of the service, professional training and competence, and professional interests (Velasco Bueno et al., 2018). In contrast to these facts, we found that the practice of "Being available to clarify doubts to family members" received the highest percentage of positive responses among all PREFUCI. Although the practice of "Informing family members about end-of-life situations" was rated as *Totally important* by most participants, only a small percentage reported *Always* implementing it. Nurses and family members tend to believe that communicating topics such as prognosis or palliative care with the family is not their responsibility (Velasco Bueno et al., 2018).

McAndrew et al. (2020) showed that families want to be more involved in healthcare processes and that nurses play an essential role. Factor 2 practices had the highest percentage of *Never* and *Rarely* responses. In addition, the practices of "Encouraging family members' presence during noninvasive procedures (hygiene care, repositioning, changing clothes)" and "Encouraging family members' participation in noninvasive procedures" were the most often considered *Little important* of all PREFUCI. These data show that the full involvement of family members in technical procedures and decision-making processes can be compromised. The study by Kleinpell et al. (2018) showed that informing the family was implemented more frequently than encouraging the family's presence in the ICU.

In this regard, Wong et al. (2020) found that approximately one-third of family members wanted to participate in direct patient care. The same authors state that the reluctance of family members to participate in the direct care of the critical patient can be explained by several factors, including the nature of the family member's relationship with the patient, fear of disconnecting equipment, emotional lability, and witnessing procedures that are painful for the patient. These factors also relate to nurses' willingness to encourage and facilitate family participation in patient care. The belief that family members may not feel comfortable performing such activities may inhibit these practices. Families must be able to choose the activities they wish to participate in (Wong et al., 2020). The need to spend more time on these activities may explain the lower percentages of positive responses in the importance and frequency scales of Factor 2. In the study by Imanipour and Kiwanuka (2020), 36% of nurses reported having no time for family care due, in part, to the

high workload of ICU nurses and the insufficient number of nurses per shift (Imanipour & Kiwanuka, 2020). In addition, the family's presence during nursing care implies direct observation and consequent evaluation of the nurse's performance by family members, which may also inhibit these practices (Chaves et al., 2017).

Family-centered care guidelines recommend flexible ICU visits (Davidson et al., 2017). Items in Factor 3 were rated by most participants as *Very important* and implemented *Often*. These results contradict data from other studies that revealed that family access to patients is not always a priority for ICU professionals (Davidson et al., 2017; Hetland et al., 2018). Participants were willing to work around institutional barriers to flexible visiting in the CICU.

Regarding the nurses' global perception of the importance they place on PREFUCI and the frequency with which they use them, similar to other studies such as those by Chaves et al. (2017), Hetland et al. (2018), Imanipour and Kiwanuka (2020), participants revealed an attitude promoting positive interaction with family members of critical patients. Similar to the study by Imanipour and Kiwanuka (2020), this study found that participants tend to implement PREFUCI with a lower frequency than the level of importance they place on them, revealing the need to invest in operationalizing these practices. Several factors may be at the root of these differences that were not explored in this study.

Lusquiños et al. (2019) state that studies on operationalizing family-centered care in ICUs are still scarce, and adopting policies that support this philosophy of care requires time to implement them.

Several barriers to family involvement in the ICU have been identified, such as ICU culture, staff resistance, lack of space and time, professionals who are uncomfortable with family presence, doubt about its benefits, lack of policies and guidelines, lack of interprofessional support, and inadequate nursing leadership (Hetland et al., 2018; Kleinpell et al., 2018).

The study of the relationship between the importance placed on PREFUCI and the frequency of their implementation, similar to the studies by Carvalhido (2014) and Imanipour and Kiwanuka (2020), revealed that higher values of the importance of PREFUCI are associated with higher values of frequency.

Nurses require special knowledge, training, and resources to implement family-focused interventions (Hetland et al., 2018).

This study has some limitations. Participants' interactions with the critical patient's family were assessed through self-report, reflecting the nurses' perceptions, and may reflect some influence of social desirability. The instrument was validated in a different region of Portugal and an ICU setting. The study was conducted when visits to the CICU were suspended due to the COVID-19 pandemic.

Conclusion

The results show that most participants have a positive attitude toward the importance of PREFUCI. However, the frequency with which they use them in their daily practice is moderate. Data analysis revealed a positive correlation between the importance attributed to PREFUCI and the frequency of its implementation. This underscores the importance of training in this area and optimistic prospects for improving nursing practice with families. In light of current scientific evidence, these findings reflect an evolution in nurses' attitudes toward PREFUCI.

We believe that this study contributes to reflecting on CICU nurses' interactions with critical patients' family members and serves as a basis for restructuring practice. Future studies should use direct observation methods and include family members' perspectives.

Family care in the CICU should be incorporated into nursing curricula and state and hospital policies.

Author Contributions

Conceptualization: Machado, A. R., Antunes, C., Imaginário, C. M.

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