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Why is the extended visit in an adult ICU more positive on the family evaluation than that of the care staff?

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ABSTRACT

Intensive care units (ICUs) have adopted flexible visitation models as a way to favor care focused on the needs of patients and their families. **AIM:** To evaluate an extended visitation model in an adult ICU from the perspective of family members and the care staff. **METHODS:** Cross-sectional study. This study was carried out with family members of patients and care staff in a general ICU with an extended visitation model in a hospital in the south of Brazil. The evaluation of the extended visitation policy was performed through a 22-question survey. **RESULTS:** The answers of 95 accompanying family members and 95 members of the ICU care team were analyzed. Members of the nursing staff evaluated as negative the changes in attitudes at work (77.9%), believe that work is interrupted (46.3%); and consider that it contributes little to decreasing anxiety and stress in the family. The accompanying family members evaluated the following issues more positively: decreased anxiety and stress in the family (91.6% versus 58.9%; $p < 0.01$); family members get more information (86.3% versus 64.2%; $p < 0.01$). **CONCLUSION:** Both groups evaluated as positive the majority of the aspects of the extended visitation model. However, the aspects that presented the greatest divergence in the evaluations, with a more negative perception from the perspective of the ICU care team members, were the interference in the work of them, changes in attitudes at work, a lower perception

of the reduction in anxiety and stress in the family and patients, and discomfort caused by the presence of a relative.

RELEVANCE TO CLINICAL PRATICE

The nursing staff is able to improve the experience of families in the ICU environment, but they need support to overcome the barriers imposed on the implementation of a flexible visitation policy.

Key words: Intensive care units; visitors to patients; patient-centered care; nursing.

INTRODUCTION

Around the world, the visit to the intensive care unit (ICU) patient traditionally takes place at restricted times, due to the theoretical risk of increased physiological stress, damage to the organization of care of the critical patient, and the increased risk of infectious complications caused by a policy of flexible visitation (McAdam and Puntillo, 2013; Cabrera and Cunha, 2014; Ramos *et al.*, 2014). However, some ICUs are changing their restrictive visitation policy to an open or flexible visitation, in order to favor care centered on patients' needs, enhancing the satisfaction of the patients and their relatives (Vandijck *et al.*, 2010; Rosa *et al.*, 2010; Puggina *et al.*, 2014). However, some professionals show resistance and believe that the presence of a family member may lead to a greater workload of the nursing staff and greater disorganization of patient care (Ramos *et al.*, 2013; Giannini *et al.*, 2013). Knowledge of the points of convergence and divergence of professionals and family members regarding flexible visits can help to optimize a model that pleases patients, family and staff since the main interest is the recovery and the care of the patient in an extremely intensive environment (Goldfarb *et al.*, 2017; Begonã and Tricas, 2012; Gerritsen *et al.*, 2017; Cappellini *et al.*, 2017).

BACKGROUND

The hospitalization of a person in an ICU is characterized as a difficult time for the family, who can experience different feelings that involve not only the family member who is hospitalized but also his or her life perspectives, causing, in certain cases, emotional destabilization. The concept of the ICU as a place of gravity and death, coupled with the family's lack of preparation to deal with patients' hospitalization leads some family members to experience feelings of uncertainty and impotence in the face of the inevitable and the unknown (Athanasidou et al., 2014).

Previous studies have shown that rigid times for the family's stay in the hospitalization unit with limited physical space, professional unavailability to clarify the relatives' doubts, lack of compassion toward the family's situation, and dissatisfaction with emerging needs are some of the barriers encountered in the interaction with the team in a highly intensive environment (Vandijck *et al.*, 2010; Huffines *et al.*, 2013).

The structure and norms of most hospitals have not been planned for caregivers and family members, i.e., the visiting hours, limits of responsibility for care, control of sleep, bathing, temperature, food, are organized according to hospital rules, not taking into account the habits and routines of patients and their families (Fumis *et al.*, 2015). ICU visitation has traditionally been carried out in a format restricted to a number of people at pre-established times, in general, from 30 to 60 minutes during the different times of the day, morning, afternoon and night.

The visit of the relatives benefits the recovery of ICU patients. In cases where messages or responses to patient care actions are not understood by professionals, family members can assist in the interpretation and transmission of information between the patient and staff (McAdam and Puntillo, 2013; Cabrera and Cunha, 2014; Ramos *et al.*, 2014; Vandijck *et al.*, 2010).

If the family member stays in the hospital space for longer, it is necessary to implement measures that provide satisfactory and comfortable conditions for their stay in the hospital environment. Among them, we highlight the preparation of the team to receive and inform these relatives as the work routine often requires professional interaction with patients and their families. It is important to understand that the extended visitation approach is a complex process that takes into account the interests of patients and family members.

OBJECTIVE

To evaluate an extended visitation model in an adult intensive care unit from the perspective of family members and the care staff.

METHODS

Study design and participants

A cross-sectional study carried out in a 56 bed adult ICU, in a general hospital that has flexible family visiting in the southern region of Brazil, allowing up to two family members to remain at the patient's bedside for up to 12 hours during the day.

Inclusion criteria for accompanying family members were: belonging to the family of hospitalized patients of both sexes (parents, children, siblings or spouses), older than 18 years of age, having remained at the bedside for a period longer than two hours a day of a patient who had been in hospital for more than 48 hours in the sector, regardless of the reason for the hospitalization. Caregivers defined by the family member responsible for the patient were also included. Family members and caregivers with visual impairment were excluded from the study. Also included were ICU care team members (nurse staff, physiotherapists, nutritionists, psychologists and routine physicians) according to the

following criteria: they were part of the ICU's functional structure; they had been working in the sector for at least 3 months; and they were familiar with the concept of flexible visits of more than two hours a day. The questionnaires that failed to answer any of the questions were excluded from the study.

Data collection

Data collection was carried out from September to December 2016. The assessment of the flexible visitation policy with the care team was made through the open visit questionnaire (Ramos *et al.*, 2013). All the questions were answered on a Likert scale: never (1), occasionally (2), often (3), and always (4), except for questions 20, 21 and 22, which had three possible answers: yes (1), no (2), don't know (3).

The subjects who were accompanying the hospitalized relative were invited to take part in the survey, and, after accepting, signed the Informed Consent Term. The questionnaires were given to the subjects, who answered in a private place, near or inside the ICU and after left them in a reserved place in the research room. The same questionnaire was used to evaluate the flexibilized visitation policy for accompanying family members, with some questions adapted for better comprehension. Both questionnaires were self-administered and took approximately 30 minutes to complete. Sociodemographic variables were also collected from family members and caregivers.

The sample calculation for the care team members was based on a previous study, which used the evaluation tool for open visitation (Ramos *et al.*, 2013). Considering that positive evaluation responses were around 44.8% for the care team, with a 5% error and a significance of 5%, based on the contingent of professionals working in the sector, it was necessary to use 95 participants. The same number of participants was chosen for the group of relatives for comparison purposes.

Data analysis

The data was analyzed in a descriptive and analytical way, by the software Statistical Package for Social Sciences (SPSS), version 21.0. For the presentation of the results, the answers were grouped into negative (never / occasionally) and positive (frequently / always). The answers of questions Q3, Q4, Q9, Q10, Q11, Q12, Q13, Q14 and Q15 were encoded inversely. Categorical variables were presented in absolute (n) and relative (%) numbers. Continuous variables were presented as mean and standard deviation. Categorical variables were compared using the chi-square test. The comparison of the responses between the groups was performed by the Mann-Whitney test. A $p < 0.05$ was considered statistically significant.

Ethical and research approvals

The institutional review board reviewed and approved this study (CAAE nº 54454016.5.0000.5345).

RESULTS

A total of 95 family members of patients admitted to the ICU and 95 members of the ICU care team were included. In relation to the members of the team, the majority of the participants were nurse technicians 57 (60%), nurses 19 (20%), physicians 11 (11.6%) and others 8 (8.4%). The average time the care team members had worked in the area was 4.2 years (SD, 4), with a mean age of 32 ± 6 years. The majority of the attending family members were women (78=82.1%). The mean age of the accompanying family members was 51 ± 12 years. Regarding the neurological status of the patients, 63 (66.3%) were conscious / able to speak. The most affected organ systems at the time of collection were neurological 23 (24.2%), respiratory 22 (23.2%) and cardiovascular 19 (20%).

The accompanying relatives had a more positive view of visiting flexibility than the ICU care team. Table 1 shows the percentage of categorized responses in positive or

negative perception. All the answers differed significantly, except for the answers to questions 12 and 18. Among the questions that showed the greatest difference in the positive perceptions were those related to interruptions in the work of the team (Q11), changes in team attitudes (Q16), and the reduction of anxiety and stress in the family (Q5).

Table 1: Comparison of the replies of family members and the care team, Porto Alegre, Brazil, 2017.

Questions	Accompanying family members n(%)		Nursing team n(%)		p
	Negative	Positive	Negative	Positive	
Q1- Flexible visits help in patient recovery.	7(7.4)	88(92.6)	23(24.2)	72(75.8)	<0.01
Q2- Flexible visits reduce the stress and anxiety of patients.	7(7.4)	88(92.6)	35(36.8)	60(63.2)	<0.01
Q3- Flexible visits make it difficult to provide care for the patient.	11(11.6)	84(88.4)	27(28.4)	68(71.6)	<0.01
Q4- Flexible visits interfere with the patient's privacy.	5(5.3)	90(94.7)	18(18.9)	77(81.1)	<0.01
Q5- Flexible visits reduce the anxiety and stress of the family.	8(8.4)	87(91.6)	39(41.1)	56(58.9)	<0.01
Q6- Flexible visits increase family trust.	24(25.3)	71(74.7)	29(30.6)	66(69.4)	<0.01
Q7- The increase in visiting time contributes to the satisfaction of the family in relation to the team.	6(6.4)	89(93.7)	18(19)	77(81)	<0.01
Q8- Do flexible visits allow the family to have more information about the patient?	13(13.7)	82(86.3)	34(35.8)	61(64.2)	<0.01
Q9- Flexible visits force the family to remain with the patient.	6 (6.3)	89(93.7)	25(26.3)	70(73.7)	<0.01
Q10-	3(3.2)	92(96.8)	18(18.9)	77(81.1)	<0.01

Flexible visits harm the organization of the care provided for the patient.

Q11- The work of the ICU professionals suffers more interruptions with flexible visits.	6(6.3)	89(93.7)	44(46.3)	51(53.7)	<0.01
Q12- Do you think that flexible visits interfere with the priorities of the work of the ICU professionals.	16(16.8)	79(83.1)	21(22.1)	74(77.9)	0.47
Q13- Do flexible visits lead to a delay in analyzing and carrying out procedures with patients?	3(3.2)	92(96.8)	23(24.2)	72(75.8)	<0.01
Q14- Professionals feel uncomfortable when they examine the patient in the presence of the family.	2(2.2)	93(97.8)	25(26.3)	70(73.7)	<0.01
Q15- Professionals feel uncomfortable with the presence of the patient's family for longer periods.	7(7.4)	88(92.6)	14(14.8)	81(85.2)	<0.01
Q16- Flexible visits contribute to changes in attitudes at work within the ICU.	38(40)	57(60)	74(77.9)	21(22.1)	<0.01
Q17- Flexible visits help the family to feel responsible for the care of the patient.	39(41.1)	56(58.9)	55(57.9)	40(42.1)	<0.01
Q18- ICU visitation should be changed in cases of conflict or at the request of the patient.	29(30.5)	66(69.5)	21(22.1)	74(77.9)	0.35
Q19-ICU visitation should be changed in special cases, such as the end of life.	36(37.9)	59(62.1)	14(14.8)	81(85.2)	<0.01

DISCUSSION

This study has evaluated the policy of extended visitation in adult ICUs from the perspective of family members and ICU care team members, two years after they were established at a hospital in southern Brazil. Family members who accompanied patients in an adult ICU were predominantly female, professionally active, with a college or

university degree, and were mainly the children of the patients. Previous studies identified women as the most present and participatory family members as caregivers in a hospital environment (Goldfarb *et al.*, 2017; Huffines *et al.*, 2013). Even with many women now in the labor market, there are still a greater number of women in family care, a fact that may be related to the cultural conditions established by society, where women are engaged and involved in the care process when faced with the illness of a family member (Cappellini *et al.*, 2014).

In this study we observed that the majority of the family and care team members have a positive perception of the companion, whether family or caregivers, staying at the bedside as they perceive benefits to the patient's recovery, thus alleviating the family's suffering. However, the results showed that family members have a more positive perception of the extended visit when compared to the care team in several aspects, which are highlighted below.

In terms the work interruptions and delays in analyzing and carrying out procedures with the extended visiting time, the accompanying relatives believe they are not interrupting and causing delays, but the perception of the care team differs significantly. Similar data were found in a study that verified nurses' opinions of open visits, in which 75.5% of nurses believe that they make it difficult to plan nursing care, and 59.4% believe that they delay procedures with patients. However, they recognize that there are emotional benefits for family members and patients (Smithburger *et al.*, 2017). Another study evaluated the perceptions of the medical staff, nurses and physiotherapists, and the results showed that most of the professionals believe that there are delays in patient care and in the unit with the continuous presence of the family member (Gerritsen *et al.*, 2017). It is believed that the presence of certain family members may cause an increase in the workload of the professionals in the ICU and cause delays in the

performance of tasks and routines. Cases are highlighted where the family member frequently asks for information, making questions and requests to the nursing professionals, interrupts the team during procedures, circulates between the other beds, interfering with the dynamics of the unit, or indirectly contributes to the patient's restlessness. In stressful situations such as these, it is up to the care team to evaluate the case and prioritize the patient's comfort, even if it is away from the family member. Thus the approaches to visits should be individualized in each unit as they must meet the needs of patients, families and health professionals.

Most members of the ICU care team evaluate as negative the changes in attitudes at work as a result of the extended visit, as opposed to the family, that mostly evaluates them as positive. The care provided by the professionals should convey security and confidence, enabling the patient and the family to understand and accept the established procedures and make the treatment more effective (Clark *et al.*, 2016; Fumis *et al.*, 2015). The presence of the companion in the ICU alters the daily life of the unit and causes structural and organizational changes, bringing about new spaces of social interactions. This fact shows the need for more effective communication strategies between those directly involved, since the accompanying family member has greater contact with the team and more time to observe the care of the patient.

In terms of the reduction of anxiety and stress in patients and relatives, it was observed that most participants perceive the decrease in these symptoms, but more than a third of the care team believe that these symptoms can never or only occasionally be reduced in relatives and patients admitted to the ICU. It is known that the permanence of family members in very intensive environments for a longer period of time helps to reduce feelings of anxiety, stress, anxiety, delirium and depression in patients (Rosa *et al.*, 2010; Clark *et al.*, 2016). On the other hand, some professionals and services believe that the

presence of family members increases the physiological stress of the patients as the presence of a family member may represent a barrier to care and assistance, and through the fact that hospitalization will result in physical and mental exhaustion within the family (Cabrera and Cunha, 2014; Giannini *et al.*, 2013).

Regarding the discomforts caused by the presence of the family beside the patient, it was observed that this fact is more uncomfortable for the ICU care team, though the family barely perceive this. Similar data were found in a study which showed that the professionals felt uncomfortable when examining the patient in the presence of the family (Gerritsen *et al.*, 2017). Some of these discomforts reported by the team may be caused by the lack of familiarity of having the companion observing the everyday work practices of the sector and having the work dynamics changed due to possible questions from the family members about the care of the patient. With the professionals carrying out their activities in the more open ICU visitation scenario, it will become natural and even profitable in the sense of permitting the participation and interaction with the accompanying patient and family member.

In our study, both groups agree that a positive aspect of the extended visit is that the family can obtain more information about the patient. A previous study showed that the nursing team of an evaluated ICU does not know how it can transmit security, both with regard to the type of information that may be given and in the interpretation of the care provided (Ellis *et al.*, 2015). It is emphasized that the preparation of the care team to receive and inform these family members is fundamental as the daily work of the team requires the interaction of the professional with the patients and family members. Providing clear and continuous information can contribute to some decisions that the family needs to make in relation to the best patient behavior since the constant and active presence of the family can help in the decisions shared between the team and the family

regarding the best practices in terms of care and treatment. It should be noted that meetings between the multiprofessional team with the family members in the first 24-48 hours after admission is one of the possibilities of improving communication techniques, establishing combinations and clarifying doubts, setting goals to alleviate the stress and anxiety of family members, as well as establishing agreements of the rights and duties of the companions during the hospitalization period.

The context of the extended visit allows the professionals to know the reality of each family as well as the support network that each patient has, and to transmit information that brings comfort and eases the suffering experienced by the patients and their families and thus provide more humanized assistance.

LIMITATIONS

This study has limitations. Firstly, the research was conducted in a single center. Secondly, because it was self-administered, some questions may have untrustworthy answers because of the lack of understanding of the issues.

IMPLICATIONS AND RECOMMENDATIONS FOR PRACTICE

It is up to the nurses and other members of the care team responsible for care management in intensive care settings to analyze the possibilities of making patient visits more flexible. The nursing team is able to improve the experience of families in the ICU environment as they are in direct daily contact with the patients and can offer support in moments of emotional difficulty when the family members meet (Eugênio and Souza, 2017). In addition, they may involve the family in small tasks such as helping the patient to eat, as well as during hygiene and comfort procedures, showing important images,

explaining and orienting events with calm and tranquility and thus empowering the family and promoting the autonomy of part of the care.

In order to do so, teams need support to overcome the barriers imposed on the implementation of a flexible visitation policy. Knowledge of the different perceptions of professionals and family members is a way to optimize actions directed to an extended visitation model as it is possible to elaborate strategies to educate family members and train professionals to deal with the increased presence of relatives in the ICU and rediscuss the number of professionals required per patient.

CONCLUSION

Both groups evaluated as positive the majority of the aspects related to the model of extended visitation. However, those that presented the greatest divergence in the evaluations, with a more negative perception from the perspective of the team members, were the interference in the work of the team, changes in attitudes at work, the lower perception of reduction of anxiety and stress in the family and patients, and discomforts caused by the presence of a relative.

What is known about the subject

- Poor communication is a source of stress for those involved in patient care in intensive care, especially between staff and family.
- Most professionals believe that there are delays in the ICU patient care activities resulting from the continuous presence of the family member.
- The presence of the companion in the adult ICU changes the daily life of the unit and causes structural and organizational changes.

What this paper contributes

- It presents points that can be considered for the planning and implementation of flexible visitation programs or policies in a ICU environment, which can also be used in discussions by care teams on the presence of the family member at the bedside, as new spaces of social interactions.

It recommends an initial systematized approach to family and support strategies for the team to overcome barriers resulting from the implementation of an flexible or open visitation policy.

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Abbreviations

ICU: Intensive Care Unit; SPSS: Statistical Package for Social Sciences.

Authors contributions

The authors are responsible for the study design, data collection and analysis. They revised and approved the manuscript.

Conflict of interests

The authors declare that they have no conflict of interests.

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