Comfort of the child in intensive pediatric therapy: perception of nursing professionals

Conforto da criança na terapia intensiva pediátrica: percepção dos profissionais de enfermagem

El bienestar del niño en la terapia intensiva pediátrica: percepción de los profesionales de enfermería

ABSTRACT

Objectives: to analyze the concept of comfort in a Pediatric Intensive Care Unit from the perspective of nursing professionals. Methods: descriptive research, with qualitative-quantitative approach, conducted in an Intensive Care Unit. Data collection occurred between January and May 2017; 40 nursing professionals participated in the study. The textual data obtained in the semi-structured interviews was processed in the Iramuteq 7.2 software. The Descending Hierarchical Classification and Bardin analysis were used for the discussion. Katharine Kolcaba’s concepts were used as theoretical framework. Results: three categories emerged: the environment that promotes (dis)comfort; feasible actions to promote comfort; uncomfortable actions in care. Considerations: it was possible to identify that comfort is offered by providing measures that favor the well-being, warmth, safety and tranquility of hospitalized children. The study brings a reflection about the nursing care provided to severely ill hospitalized children.

RESUMO


RESUMEN

Objetivos: analizar el concepto de comodidad en Unidad de Terapia Intensiva Pediátrica, en la perspectiva de los profesionales de enfermería. Métodos: investigación descriptiva, con enfoque cuantitativo, desarrollada en una Unidad de Terapia Intensiva. La recolección ocurrió entre enero a mayo de 2017; participaron del estudio 40 profesionales de enfermería. A partir de los datos textuales originados por la entrevista semiestructurada, se realizó el procesamiento de los datos. Resultados: emergieron tres categorías, siendo el ambiente que promueve (des)comodidad; acciones viables para la promoción del confort; acciones desconfortantes en la prestación de la asistencia. Consideraciones Finales: fue posible identificar que el confort es ofrecido, al proporcionar medidas que favorezcan bienestar, acogimiento, seguridad e tranquilidad del niño hospitalizado. El estudio trae una reflexión en cuanto a los cuidados de enfermería que se prestan al niño gravemente hospitalizado.
INTRODUCTION

The hospitalization of a child in the Pediatric Intensive Care Unit (PICU) is, in most cases, a traumatic process, because the PICU is seen as a space of pain and suffering. During hospitalization, the children and their families endure intense suffering, caused by the child’s health condition, which opens up the possibility of permanent loss, and by the relationships they experience with the environment and with the professionals who work there, which evoke a feeling of vulnerability\(^1\). Caring and providing comfort for hospitalized children is a complex practice, since the hospitalization of this group is seen as a situation of crisis for the family and for the child\(^2\). These situations have emotional repercussions for all those involved. One study pointed out that offering support and comfort to the children and their relatives provides relief, facilitates the care practice and is associated with the quality of care\(^3\).

The environment of the Intensive Care Unit has several electromedical devices, whose use has been constantly increasing since the beginning of these units, since patients need continuous care and monitoring of vital parameters. This highly technological environment, the demands of aggressive procedures and the uncertainty of the prognosis also weaken the professionals\(^4-6\).

During the different situations experienced in intensive care, the child is subjected to various procedures that cause discomfort and pain. The practice of promoting comfort is part of the nursing profession and is often essential for a humane care. However, these measures are often under negative influence from the technologies present in complex environments\(^6\).

It is noteworthy that patients in this environment endure pain, cold, thirst, difficulty resting due to excessive noise and lighting, limited mobility and difficulty of communication. Thus, some studies address the need to adopt measures to improve comfort throughout the care process of children in serious conditions, providing them with well-being\(^7\)-\(^8\).

In view of this context, Katharine Kolcaba’s definition of comfort was adopted. It considers comfort as a condition experienced by people who receive comfort measures, which, in turn, are defined as nursing interventions designed to address specific needs\(^9\).

In this sense, the present study is relevant to identify the knowledge of nursing professionals regarding the care provided to hospitalized children and to discuss the care that can cause (dis) comfort, providing reflections on the construction of a concept of comfort from the perspective of nursing professionals working in the care of severely ill children in intensive care.

OBJECTIVES

To analyze the concept of comfort in a Pediatric Intensive Care Unit from the perspective of nursing professionals.

METHODS

Ethical aspects

The research followed the ethical and legal principles governing research involving human beings, as recommended by Resolution No. 466/2012 of the National Health Council. It was approved by the Research Ethics Committee of the Federal University of the State of Rio de Janeiro, protocol no. 1,762,914, and by the hospital committee regarding the study setting, protocol No. 1,845,188. Participation was voluntary and all participants signed the Informed Consent Term. The secrecy of data and the anonymity of the participants were ensured.

Type of study, study setting and period

Descriptive research, with qualitative-quantitative approach, developed in a Pediatric Intensive Care Unit of a university hospital in the city of Rio de Janeiro, which is a benchmark for assistance, teaching and research of the child. The Intensive Care Unit has capacity for 11 beds, of which 6 are pediatric beds, 1 is a respiratory isolation bed and 4 are neonatal surgical beds, and it receives children with various pathologies. Data was collected from January to May 2017.

Data source and inclusion and exclusion criteria

A total of 40 nursing professionals, including nurses and nursing technicians, participated in the study. During data collection, the staff consisted of one head nurse, 14 nursing assistants on a 12x60 scale, one routine nurse in the morning, one routine nurse in the afternoon, one nursing resident and 28 nursing technicians.

The participants met the inclusion criterion: all nursing professionals in the intensive care staff who accepted to participate in the study. As exclusion criterion, the nursing professionals who were on medical leave during the collection period were excluded.

Data collection and organization

Data was collected through a semi-structured interview, with questions that assessed the profile of the participants, such as gender, age, marital status, duration of professional training and professional experience. Other questions were formulated to assess the understanding of the nursing team about the comfort provided to children hospitalized in the Intensive Care Unit, namely: Which words are related to the idea of comfort? What do you understand by comfort? What are the most uncomfortable nursing interventions? Is it possible to provide comfort for children hospitalized in the Intensive Care Unit? What would you do to provide comfort to the child? The participants were invited and received guidance on the objectives of the study. The questionnaire was delivered to the participants and was answered in the presence or not of the interviewer, ensuring that the participants freely expressed their opinions on the topic.

The text corpus was generated from the questions answered by the professionals in the research form. The interviews were transcribed in the Notepad; the file was saved as a text document using UTF-8 character encoding (8-bit Unicode Transformation Format). To maintain anonymity, the participants were identified by the word subject, followed by the number referring to their interview order.

Data analysis

The data obtained in the interviews were stored and analyzed in the Iramuteq software. Iramuteq (Interface for Multidimensional
Analysis of Texts and Questionnaires is a free and open source software developed by Pierre Ratinaud in 2009. It was initially developed in French and started to be used in Brazil in 2013. It provides statistical analysis on text corpus and tables composed by individuals/words\(^{(10)}\). The Descending Hierarchical Classification (DHC) was used; it clusters words into groups in which the text segments are classified according to their respective vocabularies\(^{(11)}\). The data were analyzed according to the steps proposed by the thematic content analysis technique. The pre-analysis of the material was performed during the transcription of the interviews. In the second stage, the exploration of material was carried out, looking for themes; the third step was the interpretation of the results, carried out to better understand the categories of analysis \(^{(13)}\). The categories were elaborated based on the contents of the interviews and on the DHC generated in Iramuteq. Thus, three categories of analysis were established.

**RESULTS**

The sample was composed of 40 nursing professionals, of which 16 (40%) were nurses and 24 (60%) were nursing technicians. The profile analysis showed that 4 (10%) professionals were male and 36 (90%) were female. Regarding the age group, the participants were between 23 and 61 years old. Regarding civil status, 19 (47.5%) participants were married, 19 (47.5%) were single and 2 (5%) were divorced.

Regarding time of experience, 24 (60%) nursing professionals had less than 10 years of experience in Nursing; 15 (37.5%) professionals had 10 to 20 years of experience; and only 1 (2.5%) had more than 30 years of experience. Regarding the experience of professionals in pediatric intensive care, 22 (55%) have more than 5 years of experience and 18 (45%) have less than 5 years of experience.

The analysis performed in the Iramuteq showed 3954 word occurrences in the content analysis, with 778 distinct forms. The corpus had 39 text units, with 120 (80%) text segments in the Descending Hierarchical Classification (DHC) (Figure 1). The DHC divided the corpus into 5 classes.

After the organization and analysis of the data and content of the interviews, the categories revealed were: the environment that promotes (dis)comfort; feasible actions to promote comfort; uncomfortable actions in care. It is important to emphasize that each category was constructed based on the frequency of words listed by professionals according to the DHC.

The environment that promotes (dis)comfort

It refers to the importance of the physical environment and of the experience to the provision of comfort, from the perspective of professionals. The words that emerged have a strong relation with the environment in which nursing care is offered and the team shows interest in providing a pleasant and humane environment. In addition, these subjects recognize the influence of the external environment on the patients. This cluster is related to the words listed in class 1.

There are several measures that can be adopted to promote comfort, for example: reducing noise and lighting whenever possible. (Subject 2)

<table>
<thead>
<tr>
<th>Class 1</th>
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<td>15.6 %</td>
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Figure 1 – DHC dendrogram of the text corpus of Nursing professionals, Rio de Janeiro, Brazil, 2018

Reduction of noise, because there are several professionals working in the hospital environment and they often speak too loud. (Subject 16)

Provide an environment with adequate lighting, low level of noise, adequate ventilation. (Subject 25)

Feasible actions to promote comfort

It is revealed that there is a desire among the team to provide comfort to the hospitalized child, either through pain relief measures, less traumatic actions and interventions for comfort, or with actions aimed at conveying tranquility, safety, affection and well-being.

For me, to provide comfort is to create strategies so that the other feels as comfortable as possible in an environment that is not theirs, minimizing situations of unnecessary stress. (Subject 1)

Comfort is the sensation we have when we feel well, welcome, quiet, without pain, not too cold not too hot, it’s when we feel good in a certain environment, position or situation. (Subject 40)

Class 5 of the DHC shows the frequency of words which convey the idea of strategies used to minimize the state of discomfort. These professionals show how important it is to provide nursing care with the purpose of offering comfort for the children under their care:

The patients need medication, but they also need respect, affection and dignity. We can minimize their state through warmth, encouragement and faith. (Subject 6)

To provide comfort with the use of pain relief measures, association of interventions, change of position, cushions, hygiene, body hydration, pharmacological and non-pharmacological pain relief measures during invasive procedures. (Subject 26)

The professionals interviewed are concerned with providing well-being to the child, seeking to relieve feelings of pain, suffering and traumatic sensations through behaviors and actions that lead to a state of relief and tranquility.
As shown in the results generated in Iramuteq, when asked about what is comfort, the professionals mentioned the words: “Well-being”, “Cosiness”, “Safety” and “Tranquility”. This way, it can be said that the concept of comfort, in the perspective of the interviewees, is related to the promotion of well-being to the hospitalized children, with the intention of providing cosiness, safety and tranquility. It is important to highlight, in some interviews, the definition of comfort for some interviewees:

- **Actions that reduce pain and favor the child’s physical and emotional well-being.** (Subject 2)
- **Trust, safety and well-being are words that bring up the memory of comfort.** (Subject 4)
- **Providing moments of tranquility to the child during hospitalization.** (Subject 8)
- **Comfort of trying to show safety to the patient.** (Subject 12)
- **Well-being, protection, silence, cosiness.** (Subject 13).

For these professionals, in the intensive therapy setting, achieving well-being becomes a concern and a challenge in the sense of seeking the relief of the feelings that are experienced during hospitalization, thus, there is the intention to convey security, warmth and satisfaction during care in order to reach comfort.

### Uncomfortable actions in care

It is related to the words listed in classes 3, 4 and 5 of the DHC and refers to the nursing techniques and procedures necessary to assist the critically ill patient. These techniques and procedures are considered as painful and uncomfortable situations, as identified in the speeches:

- **Venous puncture and bladder catheterization, both are very invasive. I would not like to go through this, I imagine that the child does not like it either.** (Subject 8)
- **The most uncomfortable nursing interventions are those that cause pain: venipuncture, blood collection, nasal aspiration, endotracheal tube and tracheostomy, dressing change.** (Subject 25)
- **Dressings, cleaning in exposed areas causes discomfort. Bathing in the bed, I consider the bath in the bed uncomfortable, because besides the issue of body exposure and touch, it also causes discomfort related to temperature (abrupt change).** (Subject 40)

### DISCUSSION

The study evidenced the perception of nursing professionals about the comfort offered to children hospitalized in the Pediatric Intensive Care Unit.

It was possible to identify, in this study, the experience of the interviewees with this environment, since the professionals express concern with the fact that the intensive therapy setting leads the child to experience suffering, pain, tension and discomfort, reducing the possibility of comfort. This is in line with other studies that address this intensive care setting.

The environment is any aspect of the patient, family or institution that can be manipulated by nurses to improve comfort. Environmental influences are related to lighting, noise, temperature, colors, furniture, among other aspects that may offer relief, ease and transcendence to those who experience a hospitalization.

This environment is regarded as a stigmatized space equipped with non-human technology, where sometimes it is difficult to favor care. In this sense, nursing professionals need to use care to provide a supportive environment, promoting well-being, minimizing the negative effects of hospitalization and involving the patient as a whole person, according to their individual and real needs.

Nurses devise interventions for comfort in their care and, as an immediate result, seek to improve the level of comfort of their patients. It is emphasized that the team should implement interventions for comfort in order to meet the needs of the sick child, satisfying their basic human needs. In this study, the professionals interviewed emphasized some measures to alleviate discomfort, such as grouping interventions in a single moment, changing position, using cushions for better positioning, body hydration, pharmacological and non-pharmacological measures, among others.

In this context, professionals are concerned with providing humane care and reinforce that the child needs not only medication, but also respect, affection, and dignity. Literature corroborates these findings, pointing out that nurses need to strive to provide a pleasant environment with pain relief measures and must be able to offer comfort options. Professionals should rethink their actions, ensuring that care goes beyond technique.

This environment must be welcoming and must also fulfill the technical needs. As for human needs, it must be a humane environment. In this study, it is highlighted that professionals consider this environment as uncomfortable; however, they mention that it is possible to minimize aspects of (dis)comfort.

A study conducted in Canada found that professionals become fragile when they witness the child’s suffering in this technological environment. The literature shows that the team should be concerned with issues that go beyond the physical aspects of the unit. They must understand the pathology and the treatment, be acquainted with the family and establish communication and active listening to propose interventions.

Professionals recognize the need to include the children in decision-making. Children understand that nursing professionals need to be careful when approaching them and believe that the information they receive during the course of a procedure is important to minimize pain, since even simple procedures end up generating pain. Therefore, a greater attention and sensitivity of the professional is essential.

We can emphasize in this study that professionals recognize that it is possible to offer nursing care in a more pleasant way, with a set of techniques and measures that favor a state of ease and comfort for the child and his family. Literature corroborates these findings, showing that even with all the technological devices, it is important that the team does not fail to provide humane care. It is worth emphasizing that this care can be more pleasant if the professional uses strategies such as playing, touching, speaking with affection, providing guidance and explanation, all in order to minimize this discomfort.

Alleviating this physical discomfort is paramount for the recovery of the child’s health and for establishing a relationship of trust.
protection and safety between the triad (child-family-team). When properly performed, this care assists in the attainment of comfort.

In the hospital context, children are submitted to various procedures. Therefore, the team must be prepared, with a therapeutic plan to prevent and evaluate the procedures that will be performed, providing a comfortable and more pleasant environment\(^2\).\(^3\).\(^4\)

When performing nursing care, the team can evaluate the discomfort caused and, from then on, use technical and scientific knowledge to provide conditions that favor comfort, despite of the fact that, in order to reach comfort, the child most of the times goes through the state of (dis)comfort. Other studies found that children believe that hospital care is restricted to performing painful procedures, but they understand that these procedures are necessary to recover their health and, consequently, to hospital discharge\(^2\).\(^3\).

Through the interviews, it was possible to observe the team's concern with the physical discomfort that these procedures cause and with the physical well-being of the child. Procedures and techniques are necessary and, most of the time, are inevitable for the recovery of the hospitalized child. The physical context is related to bodily sensations and homeostatic mechanisms. Then, when these techniques are applied, relief occurs as the desired type of comfort and as the goal to be reached\(^6\); either when prescribing a pain relief medication, when suctioning mucus, when changing the child's position to relieve pressure injuries, among others.

In this study, it was possible to identify that the nursing team defines comfort as the promotion of well-being with the intention of providing warmth, safety and tranquility within this complex environment and given all technology, noise and flow of people. These results are in agreement with other studies, since the way Nursing interacts with the children and the families contributes to the sense of well-being\(^5\).\(^7\).

In this context, the professionals pointed out the reduction of noise and lighting, the reduction in the number of manipulations, the use of pharmacological measures, among other alternatives, corroborating with other articles\(^2\).\(^4\).

**Limitation of the study**

A limitation of the present study was the fact that the data was collected in a single setting, therefore, there was only one data source, the interviews with the nursing professionals, which prevents the generalization of the findings. The development of other studies in other pediatric intensive care institutions is recommended in order to understand the reality of professionals in other institutions.

**Contributions to the area of health**

The study reveals that it is possible, within the environment of the Intensive Care Unit, to establish strategies that favor a more humane nursing care, minimizing the discomfort caused in this hostile environment. Conveying safety, warmth, relief of pain and suffering, tranquility and well-being, provides comfort and allows a reflection on the professional practice of each member of the health team, supporting the care of the child and their family and minimizing the impact of hospitalization.

**FINAL CONSIDERATIONS**

The findings of this study made it possible to identify, from the perspective of nursing professionals, the concept of comfort within the Pediatric Intensive Care Unit.

Three categories were established to discuss the data, namely: the environment that promotes (dis)comfort; feasible actions to promote comfort; uncomfortable actions in care.

It was possible to identify in the professionals' discourses that comfort is offered by providing measures that favor the child's well-being, warmth, safety and tranquility, with the intention of minimizing the feelings and discomfort experienced during hospitalization. From this perspective, nursing professionals must establish a relationship of trust with the children and their family, providing a holistic and sensitive care and making the hospital environment as pleasant as possible.

Therefore, given the results obtained, this study brings a reflection about the nursing care provided to severely ill hospitalized children, because addressing comfort in the face of all the technology, the multi-professional team, the environment, the structure, among others, has implications for a humane care. In addition, through the results, it was possible to realize that it is essential to implement actions and behaviors to offer comfort to the child in the Pediatric Intensive Care Unit.

**REFERENCES**


