



## Childhood prolonged hospitalization and its psychological impacts

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### ABSTRACT

#### OBJECTIVE

To identify the main psychological impacts on children aged between 6 and 10 years who have been hospitalized for a long period in the ward of a general hospital in the city of São Paulo/SP.

#### METHOD

This is an observational, cross-sectional, prospective and descriptive clinical study with a qualitative approach. We interviewed 10 children, of both sexes, with pathologies related to acute or chronic conditions, in the ward of a general hospital. The data collected was analyzed and interpreted using Lawrence Bardin's content analysis method.

#### RESULTS

The results showed four main categories of psychological impact: fear and anxiety, sadness, stress and secondary gains. The category "Play" emerged as a significant coping resource in this context. The psychological impacts identified were intense and had the potential to be permanent, especially given the prolonged duration of hospitalization.

#### CONCLUSION

These findings highlight the importance of early identification and the implementation of interventions while still in the hospital environment, with the aim of minimizing or even preventing the development of psychological and/or behavioral disorders..

#### KEYWORDS

Child hospitalization; Psychological disorders; Anxiety; Fear; Qualitative research.

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**INTRODUCTION**

Child hospitalization, despite being a unique experience, is constantly experienced with great anguish and physical and psychological suffering by children and their families.

Being ill is part of any human being's life, but for a child, aspects such as family and social distancing, changes in routine, invasive procedures, among others, can have negative consequences, triggering various impacts that directly affect the biopsychosocial aspects of the developing child. Pavan, <sup>1:35</sup> states:

Hospitalization can cause these children to momentarily lose their autonomy due to the imposition of hospital rules, daily routines that are different from their home or school environment, and a decrease in independence in daily activities due to their clinical condition, physical limitations and/or restriction to bed.

Chiattonne, quoted by Rossato, <sup>2:146</sup> "Some of the psychological impacts most evident in children's hospitalization are: Denial of the illness, regression, revolt, guilt, a sense of punishment, anxiety, depression, fear of abandonment, among others."

These impacts can be further aggravated by the length of stay in hospital. Children with chronic or acute illnesses who spend prolonged periods in hospital are vulnerable to developing behavioral and/or psychological disorders<sup>3</sup>. This vulnerability can be extended to family members, who remain with the child.

However, although the hospital environment is highly aversive, the response to hospitalization can be influenced positively or negatively, depending on a number of factors, such as: information received, the conduct of the healthcare team,

the child's age, the length of hospitalization and the parents' attitude during hospitalization:

The results of coping - its positive or negative adaptive outcome - refer to the consequences for the individual's physical and mental health in the medium and long term. Thus, some behaviors are associated with adaptive strategies (self-confidence, support-seeking, problem-solving, information-seeking, accommodation and negotiation) and maladaptive strategies (delegation, isolation, helplessness, escape, submission and opposition), the latter of which can result in damage to health.<sup>4:7</sup>

Thus, for these authors, adaptive and maladaptive strategies are perceived in this context, and should be considered singularly by everyone, family members and health staff, in order to better cope with prolonged hospitalization in childhood.

**Child development and hospitalization**

Developmental scientists study the three main domains, or aspects, of the self: physical, cognitive and psychosocial. Body and brain growth, sensory capacities, motor skills and health are all part of physical development. Learning, attention, memory, language, thinking, reasoning and creativity make up cognitive development. Emotions, personality and social relationships are aspects of psychosocial development.<sup>5</sup> These aspects are divided into age groups according to the milestones of human development.

Children between the ages of 6 and 10, which is the age group considered for this research, are in full self-regulatory and social development. Figure 1 shows in more detail the physical, cognitive and psychosocial domains of early childhood:

Figure 1 - Main typical developments in early childhood

Age group	Physical Development	Cognitive Development	Psychosocial Development
Third Childhood (6 to 11 years)	Growth becomes slower.	Decreases egocentrism.	Self-concept becomes more complex, affecting self-esteem.
	Physical strength and athletic skills increase.	Children begin to think logically, but concretely.	Coregulation reflects a shift of gradual control from the parents to the child.
	Respiratory diseases are common, but in general, health is better than in any other stage of the life cycle.	Memory and language skills increase.	Peers take over fundamental importance.

Source: Adapted from Papalia, Mortorell.<sup>5</sup>

The information in figure 1 clearly shows some of the aspects of human development in early childhood, and helps us to understand and highlight the being in search of adaptation and functionality for everyday tasks. Remembering that this process is universal, but has variations related to the individuality and culture in which the child is inserted.

In this context, because they are still full development, children, unlike adults, are at increased risk of the negative psychological impacts of prolonged hospitalization.

Licamele, quoted by Baptista, <sup>3:160</sup> states that "the factors associated with the child's reaction to illness and hospitalization depend on the degree of understanding they have of their reality". Other aspects are taken into account, such as emotions, personality, ability to adapt, family relationships and experience of previous and current hospitalizations. In this context, we will now look at the importance of family support and the care team in this process of prolonged hospitalization.

**The importance of the family during hospitalization**

Faced with a strange environment, unfamiliar people, an inability to understand the situation, fear and insecurity, the absence of a family member can have a direct impact on the child's clinical and psychological condition. It makes it difficult to carry out procedures, to relate to the care team and, above all, it can generate a feeling of abandonment.

"The feeling of abandonment, when the role of caregiver is not performed by any of the people who surround the child on a daily basis, can contribute to maladaptive behavior".<sup>3</sup> Such as omissions, isolation and opposition, as already mentioned.

In Brazil, Law No. 8.069, of July 13, 1990, establishes that one of the parents or guardians must remain with the child for the entire period of hospitalization. As stated in the Statute of the Child and Adolescent:<sup>6:18-19</sup>

Art. 12 - Health care establishments, including neonatal, intensive care and intermediate care units, must provide conditions for the full-time stay of a parent or guardian, in cases of hospitalization of a child or adolescent. (Edited by Law No. 13.257, of 2016).

In this context, family support is essential for the child, and can help them adapt well to hospitalization, and alleviate possible psychological impacts or even prevent them from occurring, through emotional family support.

### The role of the psychologist and the care team

The pediatric hospital psychologist works to minimize the psychological suffering of children and their families:

In this context, the psychologist works to make hospitalization and the illness situation better understood by the child and their family, as well as to avoid difficult and traumatic situations. By "playing" and "talking" with the psychologist, the children express their fears, doubts and anxieties, thus relieving their suffering and leading to a faster recovery.<sup>7:18</sup>

The care team also has an influence on the experience lived in hospital by the child and their family/guardians. Positive aspects of this experience, if well managed and worked on by care teams, can be of great value to the emotional development of patients and families as a whole, promoting mental health for everyone.<sup>8</sup>

Therefore, children who spend long periods in hospital "take ownership of the physical and relational environment of the hospital. In this context, the healthcare team and companions are the main mediators, both in the hospitalization universe and in the world around them".<sup>9:33</sup>

In short, this research sought to gain a better understanding of the possible psychological impacts that prolonged hospitalization can have on children.

In order to answer this question, the aim of this study is to identify the main psychological impacts on children aged between 6 and 10 who have undergone prolonged hospitalization in the ward of a general hospital.

In addition, it seeks to suggest more targeted interventions for this stage of childhood, focusing on the main psychological and/or behavioral disorders that can be identified from the research. Finally, it intends to contribute to the advancement of theoretical and practical knowledge, offering support to professionals interested in the subject.

## METHODS

This observational study was based on field research with a qualitative approach. It was cross-sectional, prospective and descriptive, and was conducted by the researcher, a second-year psychology resident. The aim was to identify the psychological impacts on 10 children, aged between 6 and 10, of both sexes, hospitalized between June and August 2024, in the ward of a general hospital located in the city of São Paulo/SP.

The study included lucid and oriented patients from the 2nd hospitalization onwards, with prolonged hospitalization considered from the 3rd day onwards, and pathologies related to acute or chronic conditions. Patients with motor, cerebral or visual impairment, parents/guardians under 18 years of age, and patients or parents/guardians who refused to participate were excluded.

### Data collection

The children were selected from the daily hospital census of inpatients. Data was collected by means of a semi-structured, face-to-face interview in a pediatric ward. Initially, the interview was conducted with the family member/guardian, to invite them to participate in the study, obtain their consent and obtain their signature on the Free and Informed Consent Form (FICF). The interview script confirmed some of the information obtained from the medical records, such as the child's diagnosis, socio-economic data and family history, in order to better understand the context in which the child was living.

The children were invited to take part, in the presence of the family member/guardian, and the Free and Informed Consent Form (FICF) was read out, explained and signed. In cases where the patient was unable to initial the form be-

cause they were not literate and/or had venous access, the Informed Consent Form (ICF) signed by the relative/guardian was used.

The interview with the patient was carried out in the hospital's psychology department, individually and playfully, using free drawings for better interaction and bonding. The interview script used was based on hospital psychology literature, and included five guiding questions: Do you know why you are in hospital? What is it like for you to be here? How are you feeling? Was there anything you liked? Was there anything you didn't like?

The scripts used in the interviews were reproduced in the *Microsoft Office Word* program and printed out with spaces for manual description of the interviewees' subjective responses. The data collected was digitally transcribed into the *Microsoft Office Excel* program.

The direct observation technique was also applied to the interview. It was possible to obtain elements that could not be captured through speech or writing, such as non-verbal and behavioral language. As a support tool for this technique, blank sheets of paper were used for handwritten notes.

### Data analysis

To analyze the data obtained from the interviews, we used the method proposed by Bardin, which consists of the thematic content analysis technique. It is carried out in three phases: (1) Pre-analysis: consists of preparing the material in an operational and systematized way, through floating reading, choosing the document, formulating hypotheses and objectives, and drawing up indicators; (2) Exploring the material: this is characterized by coding, by cutting out the text, using phrases, and grouping them by theme, making it possible to create categories; (3) Treatment of the results, inference and interpretation: this involves the analysis of the data, including on-site observations, based on the theoretical findings, in support of the proposed objective.<sup>10</sup>The following categories were established: Fear and Anxiety, Sadness, Stress, Secondary Gains, and the Coping Resource "Play".

This research was conducted with the approval of the Human Research Ethics Committee under CAAE number 80149324.9.0000.0081. The anonymity and confidentiality of the participants was maintained, and the statements were identified as P1 to P10, according to the order in which the interviews were carried out, and the age of the participants.

## RESULTS AND DISCUSSION

The analysis of the results obtained in the interviews with the 10 patients made it possible to identify the psychological impacts of prolonged hospitalization for children, presented in 4 main categories: Fear and Anxiety, Sadness, Stress, Secondary Gains, and the category Coping Resource "Play".

### Category 1: Fear and Anxiety

Fear and anxiety were the most prominent themes in the patients' statements. These overlapping emotions are common in the hospital environment. However, they were observed in an exacerbated form in most of the participants.

Fear and anxiety are inherent to human beings, with "fear being an emotional response to an imminent real or perceived threat, and anxiety being the anticipation of a future threat."<sup>11:215</sup> Below are some excerpts that express both emotions:

"I don't know what's going to happen, I'm scared" (P2, 9 years old).

"I don't know why I'm here, I wonder why I live here now" (P5, 6 years old).

"They hurt me, look at them" (P7, 6 years old).

"I want my father, will I never see him again" (P9, 6 years old).

In the light of the statements and observations made, it was possible to determine that the main influence on exacerbating the participants' fear and anxiety was the child's lack of understanding of the disease, the procedures to be carried out, and even the fear of abandonment, as observed in the speech of participant P9. There was also evidence of

a possible failure or lack of information passed on by health professionals and parents/guardians to the child.

According to Oliveira<sup>12:38</sup> "the fear of something unknown results in an exacerbation of fantasy. Therefore, reducing the elements of ignorance for the child results in less fear". Thus, it is essential that the patient has knowledge about what is happening and what could happen in the hospital environment, resulting in a better understanding and, consequently, a minimally aversive hospital experience.

The influence of parents/guardians, with sometimes unintentional distortions of information, was also noticed in this context. This demonstrates the importance of checking the information understood by the patient and accompanying person.

Finally, fear and exacerbated anxiety were the most frequently observed impacts, largely as a result of the lack of clarity or even omission of information provided to the child, both by their parents or guardians and by the health-care team. These impacts can be minimized through more playful and effective communication, facilitating adaptation to prolonged hospitalization. Furthermore, it is important to emphasize that access to clear and adequate information, is a right of both the child and their parents or guardians.

### Category 2. Sadness

Sadness was the second most common psychological impact observed in the participants:

"It's very bad, I want my home" (P1, 8 years old).  
 "I feel sad here, because I don't do anything here" (P10, 9 years old).  
 "I can't even walk, go to the toilet" (P2, 9 years old).

The loss of autonomy in daily activities, being away from home, school and leisure for a prolonged period of time, proved to be one of the aspects responsible for the patients' feelings of sadness.

"During the hospitalization process, the child is in a situation of crisis, sadness, stress and psychological suffering, expressing dissatisfaction and anxiety through words, behaviors and emotional reactions."<sup>13:188</sup>

Sadness is a common reaction to the situation experienced by the child. However, considering the various and constant aversive stimuli to which the child is exposed, as well as the length of hospitalization, it is essential to carry out a more in-depth investigation when this feeling manifests itself intensely, especially if it is accompanied by a lack of interest in the established routine. This condition can increase the risk of developing mental disorders, the most common of which are: regression (returning to stages that have already been overcome, such as thumb-sucking), depression, anxiety, excessive crying and fear.<sup>14</sup>

### Category 3. Stress

The identification of stress was evident in the patients' statements, and in the behavioral expressions of crying and tantrums, presented with a certain frequency in the interviews:

"I just want to leave this place" (P3, 10 years old).  
 "Will it take long to finish?" (P10, 9 years old).

Araujo<sup>15:187</sup> states that "stress is understood as a general wear and tear of the organism, caused by physical and psychological reactions that cause chemical changes in the body, fear, irritation, excitement and happiness".

Therefore, stress is a way for the organism to adapt to the environment. However, considering the aversive factors and the prolonged hospitalization of the participants, the stress identified can be considered maladaptive, as can be seen in the oppositions observed in the speeches and behaviors of the patients, as well as their companions. This has a direct impact on the clinical condition of these patients.

With regard to the caregivers, parents/guardians, based on the concept of self-regulation and co-regulation, the children's coping strategies are unique, but still influenced by the parents/guardians at the stage of development studied, contributing to maladaptation or adaptation in different si-

tuations in this context.<sup>16</sup>

Therefore, "the diagnosis of child stress helps to specify interventions by health professionals. The longer it takes to diagnose excessive stress, the greater the possibility of physical and psychological illnesses emerging".<sup>15:187</sup>

### Category 4: Secondary gain

The secondary gain was expressed in some statements, as follows:

"They look after me here" (P4, 7 years old).  
 "My father comes to see me" (P6, 8 years old).  
 "I eat a lot here, the food is good" (P5, 6 years old).

Factors such as more attention from parents, the health-care team, and even the food received, show a secondary gain, where hospitalization is perceived as something positive by these children, helping them to cope with the situation. However, the secondary gain can develop in the child a desire to remain ill, which can lead to a longer stay in hospital or even frequent hospitalizations in order to obtain the gains.

"The sick person who doesn't want to get well because they want the attention of the treatment that is given by friends, relatives, comes to compensate the existing despair by having a feeling of satisfaction, reducing their anguish or creating a desire to explore affection."<sup>16:162</sup>

In short, this category revealed psychosocial impacts prior to hospitalization, which is a snapshot of the high level of not only emotional but also economic deprivation, experienced by these children in their daily lives.

Once the secondary gains have been identified, the psychologist can intervene with specific strategies that offer benefits, in a more constructive way for the patient. Other health professionals can also help to identify and treat secondary gains, with the aim of providing a more comprehensive and effective intervention to help the patient adapt better to the hospital.

### Category 5. Coping resource "Play"

This category was created because most of the participants verbalized play as something good during hospitalization, thus demonstrating that it is a good resource for coping with the impacts found in the research:

"I only liked where there are toys" (P8, 7 years old).  
 "I liked seeing the clowns" (P4, 7 years old).  
 "Drawing and painting, with the new colored pencils" (P9, 6 years old).

Aberastury, quoted by Soares,<sup>17</sup> believes in meaningful play, in which it is possible to elaborate traumatic situations for the ego, transforming what was experienced passively into something active, as well as enabling the expression of fantasies and desires in the symbolic order. This is therapeutic play.

In this context, play in hospital helps children to understand the process of illness as protagonists, which consequently enables them to interact better with the medical team, as well as being a way of humanizing these interactions.<sup>17</sup> This contributes to a less aversive experience.

In this way, the psychological impacts found in this study were intense, with the possibility of becoming permanent, taking into account the length of hospitalization. This corroborates to the maintenance or possible development of mental disorders such as anxiety, depression, post-traumatic stress, somatic disorders, among others.

It is important to emphasize the importance of more assertive communication between patients, parents/guardians and the healthcare team. Failure to communicate is seen as one of the possible triggers for the findings of this study.

### CONCLUSION

This study allowed us to learn about some of the possible psychological impacts on children aged between 6 and 10 years, with prolonged hospitalization. It revealed negative impacts such as fear and anxiety, sadness, stress and secon-

dary gains. Play was shown to be a coping resource widely used by children as a way of minimizing organic and psychological suffering.

In general, we know that these impacts are common in the hospital environment, and sometimes pre-exist hospitalization. However, the intensity and length of exposure to these impacts must be taken into account, as they can be simultaneous, temporary and/or permanent.

Furthermore, the findings of this study are valuable for hospital practice of psychologists and other health professionals, highlighting the importance of identifying the psychological impacts on children in the hospital environment. This understanding contributes to the implementation of early and specific interventions, both with patients and their parents or guardians. We also emphasize the importance of training for the healthcare team, focusing on assertive communication, in order to prevent and minimize the psychological impacts identified in this research.

As for the limitations of the research, we highlight the complexity of the hospital context, due to the environment, with interruptions in care, the need for medical procedures, tests and medication intake. Also, it was difficult to apply other types of methods, in addition to the interviews used in the research, such as the use of standardized instruments and tests, as a form of complementary assessment. The small number of participants was another limitation of this research, which may restrict the generalization of the results. Therefore, we suggest future investigations with a more in-depth look at the proposed theme.

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