



# NURSING CARE MANAGEMENT FOR HOSPITALIZED CHILDREN WITH RHEUMATIC HEART DISEASE: GROUNDED THEORY STUDY

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#### ABSTRACT

**Objective:** to develop a theoretical model on the nursing care management for hospitalized children with rheumatic heart disease.

**Method:** a qualitative study developed in light of the theoretical and methodological frameworks, respectively, Symbolic Interactionism and Data Grounded Theory. Nineteen nursing professionals participated in the study, divided into two sample groups. Data were collected through semi-structured interviews, and were analyzed follow the coding stages: open, axial, and integration.

**Results:** the theoretical model identifies the central category/phenomenon: nursing care management for hospitalized children with rheumatic heart disease and their families. It reveals both direct and indirect care provided to the child and family, as well as action/interaction strategies within interprofessional relationships, relationships with the child and family, and their consequences in symbolic care interactions.

**Conclusion:** the theoretical model aids in understanding nursing care management practices for hospitalized children with rheumatic heart disease, serving as an action guide for nursing professionals to enhance the quality of life for the child and family within ethical and technical professional boundaries.

**DESCRIPTORS:** Pediatric Nursing. Rheumatic heart disease. Patient care planning. Hospitalized child. Grounded theory.

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### GERÊNCIA DO CUIDADO DE ENFERMAGEM À CRIANÇA HOSPITALIZADA COM CARDIOPATIA REUMÁTICA: ESTUDO DE TEORIA FUNDAMENTADA

#### RESUMO

**Objetivo:** elaborar um modelo teórico sobre a gerência do cuidado de enfermagem à criança hospitalizada com cardiopatia reumática.

**Método:** estudo qualitativo desenvolvido à luz dos referenciais teórico e metodológico, respectivamente, Interacionismo Simbólico e Teoria Fundamentada em Dados. Participaram da pesquisa 19 profissionais de enfermagem, organizados em dois grupos amostrais. Os dados foram coletados por meio da entrevista semiestruturada e foram analisados seguindo as etapas de codificação: aberta, axial e integração.

**Resultados:** o modelo teórico apresenta como categoria/fenômeno central: gerência do cuidado de enfermagem à criança hospitalizada com cardiopatia reumática e sua família. São revelados os cuidados diretos e indiretos desenvolvidos junto à criança e seus familiares, bem como as estratégias de ação/interação no âmbito das relações interprofissionais, relações com a criança e com a família, e suas consequências nas interações simbólicas de cuidado.

**Conclusão:** o modelo teórico possibilita compreender a prática da gerência do cuidado de enfermagem à criança hospitalizada com cardiopatia reumática, conformando-se como guia de ação para que profissionais de enfermagem, nos limites éticos e técnicos de seu exercício profissional, contribuam para a promoção da qualidade de vida da criança e sua família.

**DESCRITORES:** Enfermagem pediátrica. Cardiopatia reumática. Planejamento de assistência ao paciente. Criança hospitalizada. Teoria fundamentada.

## GESTIÓN DEL CUIDADO DE ENFERMERÍA EN NIÑOS HOSPITALIZADOS CON CARDIOPATÍA REUMÁTICA: ESTUDIO DE LA TEORÍA FUNDAMENTADA

#### RESUMEN

**Objetivo:** desarrollar un modelo teórico sobre la gestión del cuidado de enfermería al niño hospitalizado con cardiopatía reumática.

**Método:** estudio cualitativo desarrollado a la luz de los referentes teóricos y metodológicos, respectivamente, el Interaccionismo Simbólico y la Teoría Basada en Datos. Participaron de la investigación 19 profesionales de enfermería, organizados en dos grupos muestreo. Los datos fueron recolectados a través de entrevistas semiestructuradas y analizados siguiendo las etapas de codificación: abierta, axial e integración.

**Resultados:** el modelo teórico presenta como categoría/fenómeno central la gestión del cuidado de enfermería al niño hospitalizado con cardiopatía reumática y su familia. Se revelan los cuidados directos e indirectos desarrollados con los niños y sus familias, así como estrategias de acción/interacción en el ámbito de las relaciones interprofesionales, las relaciones con el niño y la familia, y sus consecuencias en las interacciones simbólicas de cuidado.

**Conclusión:** el modelo teórico permite comprender la práctica de gestión del cuidado de enfermería al niño hospitalizado con cardiopatía reumática, y sirve como guía de acción para que los profesionales de enfermería, dentro de los límites éticos y técnicos de su práctica profesional, contribuyan a la promoción de calidad de vida del niño y su familia.

**DESCRIPTORES:** Enfermería pediátrica. Cardiopatía reumática. Planificación de la atención al paciente. Niño hospitalizado. Teoria fundamentada.

### INTRODUCTION

Childhood is a phase marked by numerous discoveries and unprecedented events shaping a child's life. At times, children and their families face illnesses that can affect their quality of life and well-being. Chronic diseases, being the primary cause of childhood hospitalization, are particularly notable in this context<sup>1</sup>.

In addition to the increasing number of hospital admissions and readmissions for chronic illnesses, literature highlights the vulnerability of this demographic and the need for efficient and comprehensive actions to promote continuous and longitudinal care<sup>2</sup>. Rheumatic heart disease is at the core, resulting from the chronicization of heart damage caused by rheumatic fever, an autoimmune reaction triggered by group A beta-*hemolytic streptococcus bacteria*<sup>3</sup>.

Rheumatic heart disease is prevalent in childhood, predominantly affecting low-income populations with limited access to healthcare<sup>4</sup>. A multicenter retrospective study conducted in Italy with children with rheumatic fever from two years old to adolescents under 18 identified joint damage (68%) as the most common clinical manifestation, followed by carditis (58%). Additionally, among low-risk patients, 29% presented moderate to severe mitral insufficiency<sup>5</sup>.

Brazil reports 30,000 cases of acute rheumatic fever annually, with one-third of cardiovascular surgeries performed due to rheumatic heart disease sequelae. Data from the Brazilian Hospital Information System between 1998 and 2016 showed a 42.5% increase in deaths from rheumatic heart disease, with estimated mortality rates for rheumatic fever and rheumatic heart disease being 2.68% and 8.53%, respectively, for 2019<sup>3</sup>.

These data highlight the importance of planned and systematic care for hospitalized children with rheumatic heart disease. In this context, nursing care management emerges as a necessary condition to meet the needs of the child and their family, whose demands transcend physiological issues. Thus, nursing care is essential for promoting the health and quality of life of these children.

Nursing care management, guided by the articulated vision between management and care processes, should focus not only on the work conditions or nursing staff but also on the users' needs<sup>6</sup>, particularly the hospitalized child with rheumatic heart disease. Therefore, it is assumed that nursing care management for children hospitalized with rheumatic heart disease is complex and permeated by symbolic issues involving management and care.

However, literature on the topic has predominantly focused on the diagnosis, treatment, pathophysiology, and epidemiology of the disease<sup>7-10</sup>, revealing a gap in theoretical studies addressing the practice of nursing care management for hospitalized children with rheumatic heart disease.

Given the above, this study aims to develop a theoretical model on the nursing care management for children hospitalized with rheumatic heart disease. In order to do so, the study considers the meanings nurses attribute to care and administration, as well as the meanings nursing technicians attribute to caring for hospitalized children with rheumatic heart disease. The theoretical model is expected to qualify and guide nursing care for hospitalized children with rheumatic heart disease by explaining care practices.

#### METHOD

This is a descriptive and explanatory study with a qualitative approach. Grounded Theory (GT) and Symbolic Interactionism (SI) were used as methodological and theoretical frameworks, respectively. To achieve the study's objective, GT was appropriate as it allows the construction of a theoretical model rooted in the experiences and meanings of social actors rather than existing theories<sup>11</sup>, while SI was used to interpret the symbolic nature of social relations, extracting the meanings<sup>12</sup> participants attribute to care relations with hospitalized children with rheumatic heart disease.



Data were collected in a federal public health institution in Rio de Janeiro, Brazil, specializing in cardiac care. Data were collected in the pediatric inpatient unit, which serves the target population. The pediatric inpatient unit has 19 beds occupied by children with various heart conditions, in pre and post-surgical conditions with prolonged treatment. The unit has ten nurses and 20 nursing technicians, organized in 12x60 or daily shifts.

Nurses and nursing technicians from the pediatric inpatient unit participated in the study. Inclusion criteria for all participants were: being assigned to the pediatric inpatient unit during data collection period and having a minimum of six months of experience caring for children with rheumatic heart disease. Exclusion criteria for all participants were: being away from work, on leave, or on vacation during data collection. After applying inclusion and exclusion criteria, nine nurses and ten nursing technicians participated in the study.

Participants were organized into two sample groups: the first group comprised nurses, and the second group comprised nursing technicians. This was possible through theoretical sampling<sup>11</sup>, a characteristic of GT, which aims to seek individuals who maximize the opportunity to understand the phenomenon under study.

Nurses are responsible for nursing care management, but it is known that nursing technicians are involved in this practice, especially in direct care for the hospitalized children. Based on this assertion and the dynamic and flexible nature of GT, enabled by theoretical sampling, the participation of this group in the research was possible in order to understand how care is developed and how they relate to nurses in this process. The inclusion of the second sample group occurred after data collection, and analysis from nurses was crucial for achieving the theoretical density of conceptual categories, namely: working in a team and direct care for children with rheumatic heart disease.

Semi-structured interviews were used to collect data. Interviews were recorded using a smartphone and conducted between March and July 2023. Meetings with participants were held individually, providing all necessary privacy and confidentiality. Interviews lasted between 20 and 50 minutes. Nurse interviews were guided by the following questions: how do you manage the care for children hospitalized with rheumatic heart disease? What does this mean to you? Nursing technician interviews were guided by the following questions: What is it like for you to care for children hospitalized with rheumatic heart disease? What care do you provide?

Data collection ended when theoretical saturation<sup>11</sup> was reached, occurring when new data no longer altered the theoretical consistency and density of the already developed analytical categories.

Data were coded without software support following the coding steps of the method from Corbin and Strauss: open, axial, and integration. In open coding, raw data were subjected to microanalysis, line-by-line analysis, generating initial codes, also called preliminary codes. Then, through comparative analysis, a characteristic of GT, these codes were compared and grouped by similarities, generating conceptual codes. With each new interview, new preliminary and conceptual codes were produced, compared, and grouped with conceptual codes from previous interviews. Conceptual codes represent a fact, object, or action identified by the researcher as repetitive and significant among the data<sup>11</sup>.

After constructing conceptual codes, comparative data analysis for similarities and differences was conducted to understand the meanings revealed by these codes, resulting in subcategories and categories. Categories are concepts arising from the data representing phenomena Subcategories, on the other hand, represent the dimensions of the concepts in the categories After developing the categories and subcategories, they were related, characterizing the axial stage. In this analytical stage, the Conditional-Consequential Paradigm/model was used as an analytical tool to capture connections and relationships between categories and subcategories This model comprises three elements: conditions, action-interaction strategies, and consequences<sup>11</sup>.



According to the authors, conditions are the reasons informants give for a phenomenon's occurrence. Action-interaction strategies are participants' responses to events or problematic situations. Consequences refer to the expected or actual results of actions and interactions<sup>11</sup>.

Finally, in the integration stage, categories were integrated, culminating in the central category/ central phenomenon, the densest key category. In this study, the central phenomenon developed was: Nursing care management for children hospitalized with rheumatic heart disease and their families. In this analytical stage, the theoretical model was refined, allowing the removal of poorly formulated or unnecessary ideas. It is emphasized that, in all analytical stages, memos and diagrams were created to help the researcher make the developed categories denser regarding their properties and dimensions<sup>11</sup>.

The research was approved by the Ethics and Research Committee (CEP) of the proposing institution and the CEP of the participating institution. Initially, participants were informed about the research's objective, method, and relevance. Then, interested participants signed the Informed Consent Form (ICF) in two copies. All ethical aspects were considered in compliance with Resolution 466/2012. To maintain the confidentiality of information and the secrecy of the participants, the nurses' statements were identified by the letter N and the nursing technicians' statements by the letters NT, both followed by the corresponding number of the interview order in their respective sample groups.

### RESULTS

A total of 19 nursing professionals participated in the study, including nine nurses and ten nursing technicians The participants have a training period ranging from six to 33 years. The experience time in caring for hospitalized children with rheumatic heart disease ranged from two to 30 years. All participants are female.

From the analysis, three categories emerged, namely: Understanding the practice of nursing care management for children with rheumatic heart disease; Implementing symbolic action and interaction strategies in care relationships; and Evaluating nursing care management for children and their families. When related to each other from the perspective of the conditional-consequential/ paradigm model, the categories corresponded, respectively, to the conditions, action-interaction strategies, and consequences of the theoretical model entitled: Nursing care management for children hospitalized with rheumatic heart disease and their families.

### CONDITIONS

The category "Understanding the practice of nursing care management for children with rheumatic heart disease" presents how care management is developed. It is composed of two subcategories: Direct care for children with rheumatic heart disease; and Indirect care for children with rheumatic heart disease.

The subcategory "Direct care for children with rheumatic heart disease" revealed that among the nursing care provided to children are vital sign measurements, medication administration, hygiene care, surgical care, self-care guidance, and wound care.

[...] the main care is guidance for the family and guidance for the child, regarding the importance of vaccination, the importance of self-care, and seeking the doctor whenever necessary (N3). [...] children with rheumatic fever receive care with access, surgeries, dressings (N8).

[...] the direct cares are vital sign measurement and medication administration (NT10). [...] in fact, these are cares given to all children here. Measuring vital signs, bathing, hygiene, always advising on safety precautions (NT12).



Nursing care is developed based on the meanings that nursing professionals attribute to their relationships with the child and the family. In this regard, the meanings revealed show a feeling of gratitude from the participants in providing care, their commitment and professional competence, as well as welcoming, in order to offer the necessary support to the child.

[...] for me, it means a lot of gratitude! It is very rewarding when I see that treatment is producing results, when there is improvement, for me it is very rewarding (N7). [...] for me, this care means competence, commitment, and the result of training (NT12).

[...] for me, taking care of a child with rheumatic heart disease means welcoming, trying to do the best for them. Welcoming for me is everything. It's trying to take it on yourself and give comfort (NT15).

Nursing care management involves the family as a care unit, as exposed below:

[...] it is a daily job, every day we have to work with this hospitalized child and family (N3). [...] you not only welcome the child, you also welcome the parents, usually the mother, you welcome the mother too, you make a broad welcoming (NT15).

The subcategory "Indirect care for children with rheumatic heart disease" presented the important roles of the nurse in planning care for the children. In this context, participants highlighted the leadership role that the nurse assumes in the team, as well as supervisory, guidance, training, delegation, and human resource management actions for the children's care.

[...] I need to know if the practice directed to children with rheumatic heart disease is correct and manage, know, and train these professionals (N1). [...] we always try to evaluate and guide nursing technicians for certain care for children with rheumatic heart disease [...] I divide the team according to their affinity for age group. Here we take care of children with heart problems from zero to 18 years old. When dividing the team, who prefers adolescents and who prefers babies (N2).

[...] in terms of vital signs, technicians do most of it, I mainly supervise to see if they are doing the vital signs and follow up. I also check the prescriptions to see if the medications are being given at the right times [...] I manage care by supervising the technicians who provide care (N7). [...] when you say nurse, I say team leader, the nurse leads the nursing team (NT15).

### Action-interaction strategies

The category "Implementing symbolic action and interaction strategies in care relationships" revealed the ways in which the study participants act and interact in relationships with the child and their family. It consists of three subcategories: Acting as a team; Interacting with the child; and Interacting with the family.

In the subcategory "Acting as a team," it was understood that care management is carried out through teamwork, which is permeated by empathy, affection, and love for others, bringing many benefits to the performance of care for the child and their family. Teamwork was seen as decisive in addressing emerging demands and was understood to be excellent for good professional relationships.

[...] we work as a team, we solve issues as a team [...] things are resolved, and we seek to comply with protocols (N1). [...] I think teamwork here is good. There's always someone who doesn't adapt very well. But overall, the whole team embraces the cause, embraces the care. Teamwork here is excellent (N2)

[...] here, the work of the nursing team is wonderful, we all have empathy, we understand each other. Here, there is complete dedication, a special work that involves empathy, love, care, and affection (NT3).

In the subcategory "Interacting with the child," it was possible to understand that the interaction between the nursing team and children with rheumatic heart disease occurs dynamically. This



relationship is characterized by dialogue, respect, playfulness, attention to the child's uniqueness, and appropriate language, as follows:

[...] in general, we always try to engage in conversations [...] we interact well with the patients [...] Now, when the patient or the family doesn't want much closeness, we have to respect, right? (N1). [...] I try to customize this care, seeing what they like the most, if they like coloring, I quickly get a pencil, a drawing to color (N2). [...] always be as clear as possible, remove the technical view to speak in a more informal way so that they understand (N3).

The subcategory "Interacting with the child's family" revealed that the relationship between the nursing team and the family is characterized by welcoming, qualified listening, empathy, and guidance for the child's care.

[...] we also guide mothers on blood pressure measurement (hypertension or hypotension), fluid balance (weighing diapers) (N2). [...] welcoming this mother, because sometimes there are other sick children, already lost other children [...] not judging, but listening, a matter of welcoming and speaking (N6). [...] and another thing, you not only welcome the child, you also welcome the parents, usually the mother, you welcome the mother too, you make a broad welcoming (NT15).

### Consequences

The category "Evaluating nursing care management for children and their families" presented an evaluation by the participants of the nursing care management practice provided to hospitalized children with rheumatic heart disease and their families. It is composed of two subcategories: Reflecting on the nursing team's work process, and Presenting possibilities for advances in nursing care management.

In "Reflecting on the nursing team's work process," it was understood that, when reflecting on their professional care practice, nursing professionals experience challenging contextual conditions that require advances. These conditions are related to feelings of undervaluation, work overload, as well as interactions within the multidisciplinary health team's work, as follows:

[...] nursing is undervalued, we provide care at all times and are not valued. I say this not only in relation to working conditions but also remuneration [...] This generates stress and affects the child's care (N1).

[...] I think interaction can improve, among the multidisciplinary team, this needs improvement (NT3). [...] I say screening, more support from all professionals in the multidisciplinary team. Because Nursing ends up being overloaded, because Nursing ends up being everything (NT6).

In "Presenting possibilities for advances in nursing care management," participants indicated the need for investments in the ongoing education of nursing professionals, as they care for children with various heart pathologies, in order to provide care with greater safety and quality.

[...] I think we need some classes, strategies that show our care. We treat many pathologies here. Each patient means a different kind of care, for each pathology there is a different kind of care (N5). [...] I think that in addition to formalizing the SOPs (Standard Operating Procedures), I think scientific investment by professionals. Here, we have nursing residences, but we do not have staff training. Access to new technologies, study, the team having online seminars, more present continuing education would help a lot here (N6).

[...] in the sector, there is no action for health education for the nursing team. There are some diseases that I do not know, it would be good to always have them for professional updating (N7).

Furthermore, the study participants indicated possibilities of a structural and organizational nature in caring for hospitalized children with rheumatic heart disease. For example, such possibilities would be related to the use of the playroom and other entertainment spaces for the child, and the organization of the ward.



[...] there is no fixed schedule in the playroom. I miss this organization, knowing the schedules properly, passing on this information to the responsible ones who always ask [...] I think our limitations here, perhaps, are of space, we work in an old building, without access to outdoor areas to take the children to. To a balcony, for sunbathing, to interact with each other (N2).

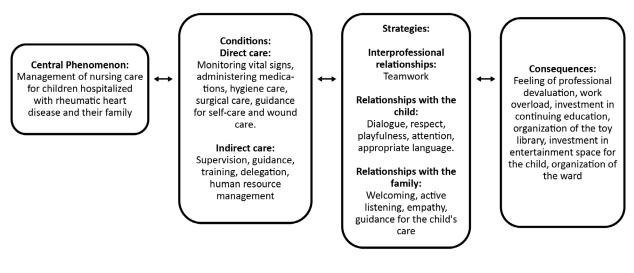
[...] we try to group the wards by age, but it doesn't work because the demand is very high. So, sometimes, there's a newborn with a school-aged child and the newborn cries all the time, wakes up in the middle of the night [...] I think what I could offer here that's best is the organization of space, keeping it that way, prioritizing the ages together, because the tastes are similar, the nighttime habits are similar. Adolescents don't wake up in the middle of the night, babies do, children, depending on the age, do. We have to prioritize the organization of space and structure. We have autistic children here, but I don't have a ward to put them in, so it's been difficult (N3).

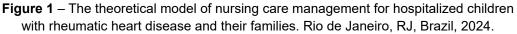
[...] it's a structural issue. Structural because we don't have enough spaces to distract these children and provide entertainment (NT12).

### Diagram of the theoretical model

Therefore, Figure 1 presents the diagram representing the theoretical model of the phenomenon "Nursing care management of hospitalized children with rheumatic heart disease and their families," based on the connection of its elements: conditions, strategies, and consequences.

Under conditions, it presents the care developed by the nursing team, from which the health needs of children with rheumatic heart disease and their families are met. In the strategies component, it includes the set of actions and interactions developed by the nursing team to enable the maintenance and continuity of care relationships. In turn, in the consequence component, it presents the participants' perceptions of their professional practice, as well as possibilities for improving the care provided.





### DISCUSSION

The theoretical model showed how nursing care management for hospitalized children with rheumatic heart disease is developed, which is based on the meanings that nursing professionals attribute to their relationships with the child and their family, as it is from these meanings that humans act and interact with others<sup>12</sup>. In this context, nursing professionals provide relevant care related to



medication administration, body hygiene, vital signs monitoring, dressings, and surgery-related care. Such care is carried out daily by the nursing team and takes into account the specificities of the child and their clinical and social condition.

Medication administration is an important nursing care, as children with rheumatic heart disease require medication throughout their treatment, including penicillin G benzathine<sup>13</sup>. In addition, it is emphasized that such care mentioned in this study is fundamental to prevent the worsening of the disease, considering that rheumatic heart disease can lead to various clinical manifestations, including myocarditis, decompensated congestive heart failure, arrhythmias, and valvular heart disease<sup>14</sup>. Therefore, inadequate care can lead to extensive valve damage and cause disabilities<sup>15</sup>.

In care relationships, feelings of gratitude are revealed, as well as the commitment and professional competence to provide care and support for the child and family are highlighted as relevant conditions. Gratitude can be related to feelings of pleasure, satisfaction, and motivation that nursing professionals experience in carrying out their work competently<sup>16</sup>.

The theoretical model showed that the nurse plays an important role in leading the nursing team, exercising exclusive attributions related to human resource management, supervision, training, and care delegation. In this context, as a nursing care manager, the nurse has an important role within the nursing team, especially regarding their role as a leader and organizer of care for children with chronic health conditions, which gives meaning to their professional practice<sup>17</sup>. However, the literature<sup>18</sup> highlights that the nurse's activities mostly focus on indirect care, predominantly involving bureaucratic issues.

Teamwork is presented in the theoretical model as an important action strategy for the care of the child and their family. In this logic, it is understood that nursing team professionals establish a relationship of complementarity, in which the nurse predominantly performs their activities in the management scope, while nursing technicians mostly develop direct care actions, understanding that there is a relationship of interdependence and reciprocity in the interprofessional relationship<sup>19</sup>. Furthermore, it is acknowledged that the nurse is an exceptional professional in coordinating care and correlating with health professionals from other categories<sup>20</sup>.

Interaction with the child is dynamic, permeated by dialogue, respect, playfulness, and the use of appropriate language. Dialogue is an important interaction strategy in all care relationships, as it favors understanding the needs and priorities in the process of caring for others<sup>21</sup>. Playfulness aims to alleviate the suffering of children with rheumatic heart disease, an important fact so that care is not imposing and traumatic for them<sup>22</sup>. Moreover, playfulness contributes to care by improving communication with hospitalized children, promoting calmness and tranquility in the context of procedures<sup>23</sup>.

It should be emphasized that care relationships with children should be conducted using language appropriate to their developmental stage, in order to allow them to understand what is happening, facilitating their coping with their health condition, although it is possible to notice that hospitalized children sometimes appropriate technical-scientific language, for example, the names of medications, devices, and other terms from the context<sup>24</sup>.

The theoretical model indicates that interaction with the family is guided by attitudes of welcoming, qualified listening, empathy, and guidance for the care of the child. Such strategies align with the literature<sup>25</sup> on the subject, which reveals the importance of good interaction between the nursing team and the child's family, as the latter collaborates in care and is a unit of care, requiring a relationship based on empathy and understanding.

Regarding this, the attributes revealed by nursing professionals in the interactive processes with the child's family reveal a professional approach concerned not only with the needs of the child, but also with those of the family. This care logic contributes to achieving better results and quality of life



for the child, increases satisfaction among those who receive and provide care, improves humanistic values, and reduces hospitalization costs and length of stay<sup>26</sup>.

From the symbolic context of the interactions established between nursing professionals and the child and their family, it is possible to understand that the strategies defined by nursing professionals reveal the meanings that arise from the interpretation they make of the behavior of the child and their family, since meanings do not derive from psychological notions of the subjects, but rather from the interactive process among those involved in nursing care management<sup>12</sup>.

In reflecting on their professional practice, nursing professionals sometimes feel undervalued, overloaded, and recognize weaknesses in their interaction with other health professionals. In this regard, feelings of undervaluation associated with work overload are factors that can significantly affect the psyche of health professionals<sup>27</sup>, generating anxiety, depression, and stress, and negatively affecting their performance in care, increasing the incidence of human errors and compromising patient safety, a fact that demands effective organizational support from leaders and their peers in the work process<sup>28</sup>.

However, the conditions exposed about nursing professional practice can undergo modifications throughout the interactive process established with the child, the family, and other health professionals, considering that meanings are constantly reviewed based on the interpretations that individuals make about objects and people. For this reason, it is admitted that symbolic interactions are dynamic and complex, as they reverberate in different human behaviors guided by meanings<sup>12</sup>.

On the other hand, the theoretical model points out possibilities for investment in the permanent education of nursing professionals, as well as progress in structural and organizational aspects in the child hospitalization unit to better care for children with rheumatic heart disease and their families, recognizing that the influence and nature of the context are crucial to effecting improvements in care environments<sup>29</sup>.

Investments in the permanent education of nursing professionals must be ongoing and comprehend the entire multiprofessional health team caring for children with rheumatic heart disease and their families, as in the face of the multiplicity of multidimensional challenges involving health promotion in public health services, there is a pressing need for articulation and integration of science with practice in the various care spaces<sup>30</sup>.

The theoretical model has contextual grounding in the specificities of the study scenario. For this reason, its generalizability is limited to similar contexts, which is due to the epistemological nature of the study object. Furthermore, nursing care management, being a complex phenomenon and, as such, not occurring in isolation, involves the participation of the family and other health professionals, a fact not addressed in this research. Although not validated, it is possible that this theoretical model provides guidelines for the practice of nursing care management for hospitalized children with rheumatic heart disease in other scenarios, mainly regarding care planning.

### CONCLUSION

The theoretical model elaborated deals with nursing care management for hospitalized children with rheumatic heart disease, considering the meanings of the subjects involved in this practice. In this particular, the model revealed that the nurse's work process involves managing and caring/ assisting, while nursing technicians are primarily involved in caring/assisting children with rheumatic heart disease and their families. Therefore, the model follows the logic of care management centered on the needs of the child and their family.



The meanings revealed are imbued with feelings of gratitude and reinforce the need for skills to develop care, which presents specificities and must be constantly informed by permanent education. In care relationships, action and interaction strategies are developed to strengthen bonds and qualify nursing care.

The theoretical model points to the need for investments in professional qualification and possibilities, in a structural and organizational scope, to offer quality care to the child and their family. Thus, it can serve as a guide for action for nursing professionals involved in caring for children with rheumatic heart disease, especially by addressing organizational aspects of nursing work processes.

Finally, given the obstacles faced in carrying out the research, it is possible to mention challenges related to the interview environment, which must be calm, without noise, and guarantee the privacy and confidentiality of participants. Furthermore, there are challenges related to achieving saturation and theoretical density of conceptual categories through methodological procedures, as they required significant immersion in the data.

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### NOTES

### **ORIGIN OF THE ARTICLE**

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### **CONTRIBUTION OF AUTHORITY**

Study design: Queiroz GOM, Silva TP.

Data collection: Queiroz GOM, Silva TP.

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Discussion of the results: Queiroz GOM, Silva LJ, Silva IR, Fagundes LC, Pereira ASL, Duarte SCM, Silva ML, Silva TP.

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Approved by the Research Ethics Committee of the Universidade Federal do Rio de Janeiro, opinion 5.840.570, Certificate of Presentation for Ethical Appreciation: 65435522.0.0000.5238. Approved by the Research Ethics Committee of the National Institute of Cardiology, opinion 5.882.192, Certificate of Presentation for Ethical Appreciation: 65435522.0.3001.5272.

### **CONFLICT OF INTEREST**

There is no conflict of interest.

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