

# Protocol for the evaluation and classification of Pediatric patients according to the nursing team demand level

## *Protocolo de avaliação e classificação de pacientes pediátricos conforme o grau de demanda da equipe de enfermagem*

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### ABSTRACT

The aim of this study was to construct and present a pediatric protocol according to the degree of demand of the nursing team in a general Hospital of the State of São Paulo. This is a descriptive, exploratory and qualitative study, with the application of questionnaires and presentation of the protocol through an expositive and dialogued class. All participants declared it important to evaluate and classify pediatric patients, 76% did not find adequate the instrument currently used in the institution, 93% answered that there is a need for another protocol more appropriate to specificities of the pediatric patient, and only 14% already knew the ICPP. Most participants think that the protocol has an adequate language, which can benefit clinical practice and is easy to apply, but 10% do not find it feasible. It is concluded that for an adequate dimensioning of pediatric patients, it is necessary a protocol that contains an instrument that addresses the singularities of the child and considers his family as part of the care. The ICPP is an instrument that uses appropriate language, benefits clinical practice, is easy to apply, but its viability depends on institutional issues.

**Keywords:** Protocol; Personnel Dimensioning; Pediatric Nursing.

### RESUMO

Objetivou-se construir e apresentar um protocolo pediátrico conforme o grau de demanda da equipe de enfermagem em um Hospital Geral do estado de São Paulo. Trata-se de um estudo descritivo, exploratório e qualitativo, com aplicação de questionários e apresentação do protocolo através de uma aula expositiva e dialogada. Todos os participantes declararam ser importante avaliar e classificar os pacientes pediátricos, 76% não achou adequado o instrumento utilizado atualmente na instituição, 93% responderam que há a necessidade de um outro protocolo mais adequado às especificidades do paciente pediátrico, e apenas 14% já conheciam o ICPP. A maioria dos participantes acham que o protocolo tem uma linguagem adequada, que pode beneficiar a prática clínica e que é de fácil aplicação, porém 10% não o acham viável. Conclui-se que para um dimensionamento adequado de pacientes pediátricos, é necessário um protocolo que contenha um instrumento que aborde as singularidades da criança e considere sua família como parte do cuidado. O ICPP é um instrumento que utiliza uma linguagem adequada, beneficia a prática clínica, é de fácil aplicação, porém sua viabilidade depende de questões institucionais.

**Palavras-chave:** Protocolo; Dimensionamento de Pessoal; Enfermagem Pediátrica.

### NOTA

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## INTRODUCTION

Health services have among their objectives, the maintenance and recovery of the health of individuals and populations, and for that, it is fundamental to analyze managerial issues, such as demand, quality and security offered. Health services with more adequate technologies, as well as physical structure, inputs and human resources are better able to offer better care to their patients<sup>(1)</sup>.

Human resources refer to the work team that works in a particular health service. Considering that the dimensioning of the nursing team is directly related to the quality and safety of the care provided, it is necessary that it receive special attention on the part of the nursing managers<sup>(2,3)</sup>.

Sizing is a systematic process that allows the balance between the need of the number of nursing professionals and the demand for care, in order to promote quality care for a group of patients<sup>(2)</sup>.

One strategy to aid in sizing is the Patient Classification System (PCS), which allows quantifying, assessing and estimating the demand for nursing care by groups of patients, discriminating different categories of care according to the degree of dependence of the nursing staff. This strategy, in addition to informing and subsidizing the distribution of nursing personnel, also assists in the planning and forecasting of costs<sup>(3)</sup>.

The Federal Nursing Council (COFEN), based on Resolution No. 543/2017, considers and establishes parameters for the dimensioning of the nursing team that subsidize the planning, control, regulation and evaluation of care activities<sup>(4)</sup>.

Hospitalizations of pediatric patients are increasingly complex and require strategies focused on the psychosocial and familial aspects of the child<sup>(5)</sup>.

Currently, there are several instruments for the SCP, and among them, the most appropriate and suggested for use by COFEN<sup>(4)</sup>, is the Pediatric Patient Classification Instrument (ICPP). It is a validated instrument, divided into three domains (family, patient and therapeutic procedures), composed of 11 indicators and each indicator has four care dependency situations graduated from one to four points, increasing according to the demand for care. From this, five categories of care are classified: Minimum Care, Intermediate Care, High Dependency, Semi-Intensive Care and Intensive Care<sup>(5)</sup>.

For health services to use a PHC adequately, it is necessary to create institutional protocols that guide the completion of the chosen instrument, delimit the places where it will be used, standardize them according to their reality and evaluate the results of them. of indicators.

The protocol should be understood as the aid instrument that favors the management of care and, consequently, assistance, since it allows access to systematized

information and aims to organize, guide and regulate care, thus facilitating the conduct to be power plug<sup>(6)</sup>.

Therefore, this research aims to contribute to the nursing management process by subsidizing nursing team dimensioning, through the evaluation protocol and classification of pediatric patients according to the degree of demand of the nursing team, in order to promote safe and of quality.

The objective of this study was to construct and present a protocol for the evaluation and classification of pediatric patients according to the degree of demand of the nursing team in a general hospital in the State of São Paulo.

## METHOD

The research was carried out in a general hospital in the South Zone of the Municipality of São Paulo, with medical and hospital assistance of reference in emergency and emergency care of medium and high complexities, and with public-private administration. The hospital is certified as a teaching hospital and has internship programs for the various health areas, as well as specializations, medical and multiprofessional residency.

The study sites included pediatric units for children's emergency, pediatric hospitalization, pediatric surgical hospitalization and the pediatric intensive care unit, which serves children from three days to twelve years of age. The hospital has 286 beds and of these, 62 are for pediatric sectors.

The sample consisted of 29 nurses from the pediatric care sectors. Inclusion criteria were nurses or nursing residents who had been in a pediatric unit at the hospital in question for at least three months. Exclusion criteria were nurses or nursing residents who were not present at the time of the study and who did not agree to participate.

All ethical aspects were respected according to Resolution 466/12 of the National Health Council - CNS<sup>(7)</sup>. The research was presented to all the participants and explained the importance of their collaboration, considering the benefits of understanding the theme, being clarified the voluntariness and freedom of participation without any sanction or prejudice. All those who accepted to participate received the Free and Informed Consent Form (TCLE) and agreed to sign it. The research project was approved by the Ethics and Research Committee of the Santo Amaro University (CEP/UNISA) under No. 2,661,015 and CAAE: 87855918.0.0000.0081; and hospital field research under No. 2.708.320 and CAAE: 87855918.0.3001.5447.

Research of descriptive and exploratory character with qualitative approach. The data collection took place in two stages, the first being the application of a ques-

tionnaire that verified the participants' knowledge on the subject and raised the need for an adequate instrument for pediatrics compared to the instrument used in the hospital field of research.

After the end of the first stage, a dialogic expositive class was started, in which the protocol and orientation for its application were presented. The participants were then instructed to perform the evaluation and classification of pediatric patients from various case studies.

These pedagogical strategies were chosen because they allow an exposition of the content along with the participation of the subjects involved, allowing them to question and interpret the object of study from the confrontation with their daily reality, besides presenting them, through the study of cases, common situations, enabling a thorough and objective evaluation of what is proposed<sup>(8)</sup>.

Finally, the second stage of the data collection was carried out, with the application of a new questionnaire to evaluate the protocol. The two questionnaires contained closed questions and binary response possibilities (yes or no). The first questionnaire contained five questions and the second questionnaire contained four questions and a space for suggestions.

## RESULTS

Regarding the participants, the majority were female, and only one of the participants was male, which corroborates the profile of nursing professionals who are mostly women<sup>(9)</sup>.

As for age, the majority are between 26 and 36 years old (45%), followed by people between 37 and 47 years (41%), and finally aged 25 or less (14%). Regarding the time spent by professionals in pediatric units of the institution, the majority have worked in the hospital for more than ten years (31%), followed by employees aged one to five years (28%), and five to ten years and less than one year, both with 21% each.

In response to the first questionnaire, all participants (100%) believe that it is important to evaluate and classify pediatric patients, with the resultant score as one of the parameters for the nursing team dimensioning. The hospital field of research uses as SCP the instrument created by Fugulin and his collaborators<sup>(3)</sup>, however, 76%

of the participants do not think it is suitable for use in pediatric units, and only 24% consider it adequate, which is in line with COFEN's guidance indicating this protocol as applicable.

Concerning the need for a new institutional protocol, as well as the use of an instrument more suited to the specificities of the pediatric patient, 93% of respondents answered that there was this need, and most of the participants (86%) did not know of another instrument with the same purpose of evaluating and classifying the patient for the daily sizing of the team, besides the instrument already used in the hospital. Only four participants (14%) were already familiar with ICPP.

In response to the second step, we obtained protocol evaluation data regarding language, benefits of use in clinical practice, feasibility and ease of filling. The results are shown in Table 1.

Most participants consider that the protocol has an adequate language, which can benefit clinical practice and is easy to apply, but 10% do not find it feasible.

The most frequent suggestion was related to the extension of the protocol correlated with the high demand for other activities required by the day-to-day nurse associated with the lack of human resources within the institution. Suggestions also appeared that the new protocol would be more appropriate for clinical practice, requested the availability of the same in the form printed in the units and not only in the information system and that it be implemented in the institution.

## DISCUSSION

Sizing is a subject that has been studied all over the world because it represents a managerial activity of great importance for nurses<sup>(10)</sup>. The planning of the assistance must count on a qualitative and quantitative evaluation of human resources, and as a subsidy, there should be use of a suitable CSP<sup>(11)</sup>.

It is evidenced that knowing only the number of beds occupied is not a reliable indicator to establish the amount of professionals needed to obtain quality and assurance of care, it is necessary a characterization of the clientele that considers several factors and individual needs<sup>(12)</sup>.

Regarding the pediatric patient profile, there are inherent differences in their development stage, however,

**TABLE 1 – Protocol evaluation questionnaire. São Paulo, SP, Brazil, 2018.**

	YES (%)	NO (%)
Proper language	100	0
Benefit from clinical practice	100	0
Viable	90	10
Easy to apply	100	0

Source: survey data.



there are common characteristics regarding the demand for nursing care to be considered<sup>(13)</sup>.

When the pediatric patient is characterized, the presence and involvement of the family in their care is notorious. In Brazil, this involvement has been studied in the hospitalization of the child, in view of the right established by the Statute of the Child and Adolescent (ECA), which guarantees the presence of a relative or legal guardian accompanying the child or adolescent during the period of their hospitalization<sup>(14,15)</sup>.

This is in line with the principles of Family-Centered Care, which considers both the child's health needs and the well-being of the family, and includes it in care planning<sup>(16)</sup>. For this to occur, the team needs to provide a means of integrating the family into care so that it can, as far as possible, support the child<sup>(14)</sup>.

In view of the fact that the instrument created by Fugulin<sup>(17)</sup> does not apply to pediatric units and that ICPP addresses not only patient-related issues and therapeutic procedures, but also includes the family, it is believed to be a more appropriate instrument, as well as being of practical and easy application<sup>(13)</sup>.

Second study<sup>(18)</sup> which discusses the use of ICCP in pediatric hospital units, it has been found that in fact it allows an adequate dimensioning that is in line with the current personnel sizing resolution. However, it is important to highlight that the dimensioning involves several factors ranging from the quantity of available human

resources to issues such as the philosophy and structure of the institution<sup>(13)</sup>.

Therefore, an institution that does not have resources will not be able to carry out an adequate dimensioning. According to Fugulin<sup>(17)</sup>, several policies and guidelines that impose cost containment, do not have a corresponding increase in the number of professionals, and in addition, nursing has several factors, such as lack of investment, precarious human resources policies, insufficient remuneration, excessive workload among others, which end up affecting the performance and performance of these professionals, and, finally, the quality of care provided.

## CONCLUSION

For an adequate dimensioning of pediatric patients, a protocol is needed that contains an instrument that addresses the child's singularities and considers their family as part of the care.

ICPP is an instrument that uses adequate language, benefits clinical practice and is easy to apply, but its viability depends on institutional issues.

It is hoped that this research will help in the process of implementing an institutional protocol that evaluates and classifies the pediatric patient and his / her family, considering their specificities, and thus provide data that subsidize a better dimensioning of the nursing team and, consequently, better care, safe and quality.

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