

## Impaired comfort in children and adolescents with cancer

Conforto prejudicado em crianças e adolescentes com câncer Conforto perjudicado en niños y adolescentes con cáncer

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#### How to cite this article:

Leandro TA, Silva VM, Lopes MVO, Guedes NG, Nunes MM, Sousa TM, et al. Impaired comfort in children and adolescents with cancer. Rev Bras Enferm [Internet]. 2018;71(3):934-41. DOI: http://dx.doi.org/10.1590/0034-7167-2017-0050

**Submission:** 03-01-2017 **Approval:** 05-03-2017

#### **ABSTRACT**

**Objective:** To determine the strength of the association between the clinical indicators of Impaired Comfort and the evaluation sector in the hospital, age group and sex of patients with cancer. **Method:** Cross-sectional study, conducted in a children's hospital, with 192 children and adolescents. For the collection, we used an instrument developed for the study. **Results:** The majority of the sample was male, with mean age of 11 years. The indicators most evidenced among the hospitalized patients were Crying, Report of lack of satisfaction with the situation, Report of feeling cold, and Report of feeling uncomfortable. Crying and Fear were more prevalent in children compared with adolescents, and boys were the ones that verbalized the most the Report of lack of satisfaction with the situation. **Conclusion:** This study enabled determining the strength of the association of the indicators of Impaired Comfort expressed by children and adolescents with cancer.

Descriptors: Nursing Diagnosis; Cancer; Child; Adolescent; Nursing.

#### **RESUMO**

**Objetivo:** Verificar a força da associação entre os indicadores clínicos de Conforto prejudicado e o setor de avaliação no hospital, a faixa etária e o sexo de pacientes com câncer. **Método:** Estudo transversal, realizado em um hospital pediátrico, com 192 crianças e adolescentes. Para a coleta, utilizou-se um instrumento desenvolvido para o estudo. **Resultados:** A maior parte da amostra era do sexo masculino, com idade mediana de 11 anos. Choro, Relato de falta de satisfação com a situação, Relato de sentir frio e Relato de sentir-se desconfortável foram os indicadores mais evidenciados entre os pacientes internados. Choro e Medo estiveram mais prevalentes nas crianças em comparação aos adolescentes, sendo que os meninos foram os que mais verbalizaram o Relato de falta de sentir-se à vontade com a situação. **Conclusão:** O estudo possibilitou verificar a força de associação dos indicadores de Conforto prejudicado manifestados por crianças e adolescentes com câncer.

Descritores: Diagnóstico de Enfermagem; Câncer; Criança; Adolescente; Enfermagem.

#### **RESUMEN**

**Objetivo:** Verificar la fuerza de la asociación entre los indicadores clínicos de Conforto perjudicado y el sector de evaluación en el hospital, la franja de edad y el sexo de pacientes con cáncer. **Método:** Estudio transversal, realizado en un hospital pediátrico, con 192 niños y adolescentes. Para la recogida, se utilizó un instrumento desarrollado para el estudio. **Resultados:** La parte más grande de la muestra era del sexo masculino, con edad promedio 11 años. Llanto, Relato de falta de satisfacción con la situación, Relato de sentir frío y Relato de sentirse no confortable fueron los indicadores más evidenciados entre los pacientes internados. Llanto y Miedo estuvieron más prevalentes en los niños en comparación a los adolescentes, siendo que los niños fueron los que más verbalizaron el Relato de falta de sentirse a gusto con la situación. **Conclusión:** El estudio posibilitó verificar la fuerza de la asociación de los indicadores de Conforto perjudicado manifestados por niños y adolescentes con cáncer. **Descriptores:** Diagnóstico de Enfermería; Cáncer; Niño; Adolescente; Enfermería.

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#### **INTRODUCTION**

Cancer has low occurrence<sup>(1)</sup> in children and adolescents compared with adults or the elderly. In Brazil and in developed countries, cancer is the leading cause of death by disease among children and adolescents aged 1 to 19 years<sup>(2)</sup>. For 2017, 12,600 cases were estimated in Brazil. In 2013, there were 2,835 deaths in the age group between 0 and 19 years<sup>(2)</sup>. Data from the Ministry of Health show a decrease in the number of deaths of children and adolescents by infectious and parasitic diseases, circulatory and respiratory system diseases, and disorders originated in the neonatal period. However, deaths by neoplasms and external causes gain importance<sup>(3)</sup>.

The signs and symptoms of childhood cancer are: pallor, fatigue, weakness, pain, fever, abnormal bruising, lymphadenopathies and recurrent infections<sup>(4)</sup>, which resemble the clinical manifestations of other common diseases of childhood. Therefore, effective and accessible approaches to early diagnosis are important, since approximately 80% of children and adolescents affected by cancer can be cured if diagnosed early and treated in specialized centers<sup>(5)</sup>. Thus, after confirmation of the diagnosis of malignant neoplasm, it is necessary to initiate proper treatment in a pediatric oncology unit with structure to support this treatment.

The treatment of patients with cancer is quite complex and diverse, so each therapy will depend on the etiology of the disease and the patient's response. It is believed that the hospital environment, the period of hospitalization, the treatment, the waiting time for outpatient appointments, the physiopathology of the disease, and the procedures performed in children and adolescents with cancer can cause the appearance of clinical indicators that suggest the occurrence of the Impaired Comfort nursing diagnosis.

The Impaired Comfort nursing diagnosis was included in the Nursing Diagnosis List of NANDA International in 2008. It is found in domain 12 (comfort) and in the class of physical comfort, environmental comfort, and social comfort. It is defined as: "Perceived lack of ease, relief and transcendence in physical, psychospiritual, environmental, and social dimensions<sup>(6)</sup>."

It is worth mentioning that the nursing diagnosis is constituted by the grouping of clinical indicators, that is, of signs and symptoms that aid in determining the absence or presence of a specific diagnosis<sup>(6)</sup>. For diagnostic inference, nurses should develop skills that aid them in decision-making considering clinical manifestations expressed as signs and symptoms<sup>(7)</sup>. The nursing diagnosis represents the interpretations about the patient data, being defined as clinical judgment about the responses of an individual, family, or community to the health problems/actual or potential life processes<sup>(6)</sup>.

#### **OBJECTIVE**

To determine the strength of the association between the clinical indicators of Impaired Comfort and the evaluation sector in the hospital, age group and sex of patients with cancer.

#### **METHOD**

#### **Ethical aspects**

The study met the recommendations for research developed with human beings and was submitted to and approved by the Research Ethics Committee of the participating institution. Those responsible for the children and adolescents who composed the sample ensured their participation in the study by signing the free and informed consent form. All adolescent participants signed the Term of Assent.

#### Study design, location, and period

Cross-sectional study, conducted in a reference center specializing in children and adolescent cancer treatment, in the Brazilian Northeast. Data were collected in three different sectors of the center: day hospital, inpatient unit, and sequential chemotherapy unit. The collection period occurred between the months of September 2014 and February 2015.

#### Sample, inclusion criteria, and exclusion criteria

Sample calculation was based on the number of clinical indicators of the Impaired Comfort diagnosis. The study adopted an estimate of five children for each indicator. Impaired Comfort has 17 clinical indicators, therefore 5x17, totaling a sample of at least 85 participants in each group (day hospital and inpatient unit). Thus, we evaluated two groups of the population: in the first, it was possible to evaluate 106 children and adolescents of the day hospital; and, in the second, 86 children and adolescents in the inpatient unit. Therefore, this study had participation of 192 children and adolescents with cancer under chemotherapy treatment. The subjects were obtained by a process of successive sampling.

The research adopted the following inclusion criteria: age from 6 to 18 years; medical diagnosis of cancer; being under chemotherapy treatment and clinically stable. The exclusion criteria were: children and adolescents with comorbidities that could influence the identification of the diagnosis of Impaired Comfort and/or use of antipsychotics, anxiolytics, and antidepressants. In this study, a child was excluded for use of antipsychotics, anxiolytics, and antidepressants.

The age group was established with the aim of evaluating the Impaired Comfort in the entire sample (children and adolescents). Since the aforementioned diagnosis has subjective indicators, the cutoff age to include the patients in the child group was established as  $\geq 6$  years (school age), that is, those considered able to answer questions. For the adolescent group, we included the individuals in the age group 12–18 years, as defined by the Ministry of Health<sup>(8)</sup>.

#### Study protocol

Data were collected by three nurses, through an instrument adapted from a previous study<sup>(9)</sup>. Prior to initiating the data collection step, the collection team was invited to a training, in order to standardize the way of obtaining the information and avoid bias during the evaluations.

The child or adolescent and the respective parent/guardian were interviewed so as to obtain identification and sociode-mographic data, such as: name, sex, age, date of birth, origin, birthplace, household income, number of family members, and school data. Also during the interview, we obtained information about clinical data of the child/adolescent. Having these data, we collected objective and subjective information regarding the signs and symptoms of the nursing diagnosis Impaired Comfort, presented by the children and adolescents, namely: Anxiety, Crying, Inability to relax, Restlessness, Irritability, Grief, Fear, Disturbed sleep pattern, Report of lack of satisfaction with the situation, Report of lack of feeling comfortable with the situation, Report of hunger, Report of pruritus, Report of feeling hot, Report of feeling cold, Report of feeling uncomfortable, Report of symptoms of distress, and Sighs.

After collecting all the abovementioned information, we referred to the medical chart of each child and adolescent to obtain information related to: chart number, initials of the name, date of birth, date of hospitalization, medical diagnosis, start of chemotherapy treatment, stage of chemotherapy treatment, and protocol used for the chemotherapy sessions.

It should be noted that the data were collected from a primary source. When the subject of the study showed no conditions of replying to questions with trustworthiness, the interview was conducted with the parent/guardian.

#### Analysis of results and statistics

Statistical analysis was developed with support of statistical program IBM® SPSS® version 21.0 for Windows® and software R version 2.12.1. Descriptive analysis of data included the calculation of absolute frequencies, percentages, measures of central tendency and dispersion. For the proportions of categorical variables, we calculated confidence intervals of 95%. We used Pearson's Chi-Squared Test to analyze the association between the nominal variables and the presence of the nursing diagnosis in question. To determine the adherence to normal distribution, we applied the Kolmogorov-Smirnov test.

### **RESULTS**

Of the 192 participants of the research, 55.2% were evaluated at the day hospital, 53.6% were children, and 53.1% were male. More than 60% of the sample were from cities in the countryside of the state. A high percentage of participants – 63.5% of the children and adolescents – did not attend school because of the disease. It should be noted that 89.1% of the individuals had no comorbidities. The majority of the sample (70.8%) had no family history for cancer. As to being submitted to surgery to correct the disease, 75% of the children and adolescents had no need for this type of intervention during treatment.

The patients evaluated had median age of 11 years. The median household income of the parents/guardians was of R\$ 724.00, with median of four persons in the household. The time of treatment of the children and adolescents in the hospital unit presented median of five months. The number of chemotherapy treatments had a median of one treatment.

As to the days of hospitalization, the median was of four days, and the number of hospitalizations in the last 12 months had a median of two hospitalizations.

Leukemias (45.3%), Lymphomas (16.1%), malignant bone tumors (14.6%), and soft tissue Sarcomas (10.9%) were the types of cancer most identified in the patients. When the medical diagnoses were specified, the following subtypes were the most prevalent: Acute Lymphoblastic Leukemia (33.9%) and Osteosarcoma (12%). In relation to the stage of chemotherapy treatment, 20.8% of the sample were in the stage of maintenance.

We conducted statistical association tests to compare the children and adolescents evaluated in the day hospital with those of the inpatient unit in relation to sex (p=0.928), origin (p=0.602), birthplace (p=0.631), attends school (p=0.089), comorbidities (p=0.095), family history for cancer (p=0.506), submitted to surgical procedure (p=0.867), and medical diagnosis (p=0.078). It is observed that the tests applied indicate that these variables are not statistically significant between the groups evaluated in the inpatient unit and in the day hospital (p>0.05).

The clinical indicators of the nursing diagnosis *Crying* (p=0.013), *Report of lack of satisfaction with the situation* (p=0.000), *Report of feeling cold* (p=0.000), and *Report of feeling uncomfortable* (p=0.000) showed significant statistical association with the evaluation sector. These were more evidenced in children and adolescents who were in the inpatient unit (Table 1).

Analyses were performed comparing the children group x adolescents group with the variables sex (p=0.835), origin (p=0.036), birthplace (p=0.267), attends school (p=0.101), comorbidities (p=0.083), family history for cancer (p=0.198), submitted to surgical procedure (p=0.802), and medical diagnosis (p=0.297). The origin of the participants showed statistical difference between the groups children x adolescents (p<0.005). Therefore, the proportion of children coming from countryside cities to undergo cancer treatment is higher than that of adolescents.

When performing statistical association between the clinical indicators of the diagnosis with the children group *versus* adolescents group, *Crying* (p = 0.000) and *Fear* (p = 0.000) showed significant statistical association with the age group variable, meaning that the presence of crying and fear was more prevalent and significant for the children group (Table 2).

We carried out association analyses between the variables origin (p=0.123), birthplace (p=0.001), attends school (p=0.955), comorbidities (p=0.318), family history for cancer (p=0.474), submitted to surgical procedure (p=0.867), and medical diagnosis (p=0.467) comparing with the male and female subgroups. Accordingly, the test applied showed statistically significant difference for the birthplace variable when comparing the male and female subsamples (p < 0.005). Therefore, the data show that, of the patients coming from the countryside, the majority was male.

When evaluating both sexes, the indicator *Report of lack of feeling comfortable with the situation* presented statistical association with the male patients (p = 0.033). Thus, boys verbalized more the *Report of lack of feeling comfortable with the situation* (Table 3).

**Table 1 –** Association between the clinical indicators of Impaired Comfort and the evaluation sector in the treatment unit

**Table 2 –** Association between the clinical indicators of the Impaired Comfort diagnosis and the age group variable

Clinical indicators	Day hospital	Inpatient unit	<i>p</i> value*	Clinical indicators	Child n	Adolescent n	<i>p</i> value*
Anxiety	0.0	60		Anxiety	0.2	7.4	
Absent Present	88 16	69 12	0.915	Absent Present	83 14	74 14	0.780
Crying				Crying			
Absent Present	61 45	34 52	0.013	Absent Present	35 68	60 29	0.000
Inability to relax				Inability to relax			
Absent	88	67	0.372	Absent	88	67	0.075
Present	18	19	0.572	Present	15	22	0.07.5
Restlessness	7.4	EO		Restlessness	6.5	<i>C</i> 1	
Absent Present	74 32	52 34	0.175	Absent Present	65 38	61 28	0.429
Irritability	32	3.		Irritability	30	20	
Absent	49	37	0.657	Absent	45	41	0.471
Present	57	49	0.657	Present	58	48	0.471
Grief				Grief			
Absent	93	70	0.222	Absent	83	80	0.073
Present	13	16		Present	20	09	
Fear Absent	55	39		Fear Absent	38	56	
Present	51	47	0.367	Present	65	33	0.000
Disturbed sleep pattern				Disturbed sleep pattern			
Absent	83	63	0.415	Absent	77	69	0.654
Present	23	23	0.413	Present	26	20	0.034
Report of lack of satisfaction with the situation				Report of lack of satisfaction with the situation			
Absent Present	61 45	23 63	0.000	Absent Present	39 64	45 44	0.077
Report of lack of feeling	73	03		Report of lack of feeling comfortable	04	77	
comfortable with the situation	- 4	2.7		with the situation	4.2	40	
Absent Present	54 52	37 49	0.274	Absent Present	43 60	48 41	0.092
Report of pruritus				Report of pruritus			
Absent	89	65	0.147	Absent	82	72	0.022
Present	17	21	0.147	Present	21	17	0.823
Report of hunger				Report of hunger			
Absent Present	86 20	60 26	0.067	Absent Present	81 22	65 24	0.364
	20	26			22	24	
Report of feeling hot Absent	79	70		Report of feeling hot Absent	81	68	
Present	27	16	0.256	Present	22	21	0.711
Report of feeling cold				Report of feeling cold			
Absent	80	30	0.000	Absent	57	53	0.556
Present	26	56	0.000	Present	46	36	0.550
Report of feeling uncomfortable	0-	0-		Report of feeling uncomfortable	4.5	4.5	
Absent Present	27 79	05 81	0.000	Absent Present	19 84	13 76	0.477
	/9	01			04	/0	
Report of symptoms of distress Absent	94	79		Report of symptoms of distress Absent	90	83	
Present	12	07	0.463	Present	14	06	0.174

Note: \*Pearson's Chi-Squared Test

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**Table 3 –** Association between the clinical indicators of the Impaired Comfort diagnosis and the sex variable

Clinical indicators	Male n	Female n	<i>p</i> value*
Anxiety			
Absent Present	85 14	72 14	0.686
Crying Absent Present	5 <i>7</i> 45	38 52	0.059
Inability to relax Absent	83	72	0.810
Present	19	18	0.010
Restlessness Absent Present	66 36	60 30	0.775
Irritability Absent Present	46 56	40 50	0.928
Grief			
Absent Present	87 15	76 14	0.870
Fear Absent Present	51 51	43 47	0.759
Disturbed sleep pattern Absent Present	73 29	73 17	0.122
Report of lack of satisfaction with the situation Absent	44	40	0.855
Present  Report of lack of feeling  comfortable with the situation	58	50	
Absent Present	41 61	50 40	0.033
Report of pruritus Absent Present	83 19	71 19	0.666
Report of hunger Absent Present	76 26	70 20	0.597
Report of feeling hot Absent Present	84 18	65 25	0.093
Report of feeling cold Absent	59	51	0.869
Present Report of feeling uncomfortable Absent	43 16	39 16	
Present	86	74	0.698
Report of symptoms of distress Absent Present	91 10	81 09	0.964

Note: \*Pearson's Chi-Squared Test

#### **DISCUSSION**

Rates for child/adolescent cancers are usually higher in boys, similar to that which was observed in our study, which accounted for 53.1% male participants. Previous research corroborates the data observed. In an epidemiological study conducted with adolescents with cancer, 56.8% of the participants were boys<sup>(10)</sup>. In relation to the population of children, boys are also more affected by the disease – a study reported a percentage of 63.8% of the cases<sup>(11)</sup>.

The research had participation of children and adolescents with median age of 11 years and 53.6% of them belonged to the children subgroup, that is, patients aged  $\geq 6$  years. Most evaluations were conducted at the day hospital (55.2%). A research conducted in the pediatric oncology sector showed similar data to those of this study. In such research, the participants had median age of 12 years<sup>(12)</sup>.

The subjects had median household income of R\$ 724.00 and mean of four persons per household. This value refers to the minimum wage in force at the time of the study's data collection (2014–2015). Corroborating the data from this study, other authors found households of individuals with cancer whose monthly income was of one minimum wage and observed difficulties such as: abandonment of employment and availability of time for treatment(13-15). Additionally, another research found households composed of, on average, 3.8 persons per house<sup>(16)</sup>. Many parents or guardians reported that the long period of treatment of the disease, constant hospitalizations, and distance from the residence to the treatment center were factors that interfered with the maintenance of employment and, as a result, they needed to abandon it so as to accompany their children during treatment. Thus, sickness benefit was often the household's only source of income.

The participants of our research came mostly from the countryside of the state. It is worth mentioning that the institution where the research was conducted is a benchmark in the treatment of child/adolescent cancer in northeastern Brazil. Thus, patients from countryside cities or even from other states come to have treatment in the institution, which may justify the high prevalence of persons from the countryside under treatment in the unit. Studies in other states with the same patients result in similar situation: children and adolescents from countryside cities<sup>(15)</sup>.

The abandonment of school activities during treatment is a very common situation. Many children and adolescents reported not attending school because of cancer, of the effects of treatment, hospitalizations, frequent appointments, among others. Research confirms such findings, since, in most cases, during cancer treatment they abandon school due to frequent hospitalizations and toxicities of chemotherapeutic agents<sup>(14-15,17)</sup>. We perceived – in the participants' discourse – sadness for the need to abandon school activities and socialization with schoolmates.

Generally, the treatment of cancer is related to chemotherapy, surgery, and/or radiation therapy. In childhood cancer, chemotherapy is an important therapeutic component, since most diseases are sensitive to chemotherapeutic agents, which justifies

the low occurrence of surgical procedures for treatment of the disease in the children population. In this study, 75% of the participants had not been submitted to this procedure.

The time of treatment of the children and adolescents in the hospital unit ranged from zero to 57 months, with median of five months. In relation to the number of chemotherapy treatments, the participants showed a median of at least one treatment. The median for the days of hospitalization and number of hospitalizations in the last 12 months variables was of at least four days and two hospitalizations, respectively. A study conducted with children under palliative care showed a mean of 2.5 hospitalizations<sup>(18)</sup>. Another research, conducted with children with cancer in the outpatient clinic, showed that, for 33.3% of the participants, the treatment period did not exceed six months and 76.6% had been hospitalized two or more times<sup>(19)</sup>. The treatment of cancer is long and delicate, requiring more than one hospitalization and frequent appointments.

Acute Lymphoblastic Leukemia is the most common type of childhood Leukemia<sup>(3)</sup>. This affirmation corroborates the results of our study, in which most of the population had leukemia and the most prevalent was Acute Lymphoblastic Leukemia (45.3% and 33.9%, respectively). Among the lymphomas, the most common in childhood is the non-Hodgkin's Lymphoma<sup>(20)</sup>. In our research, this was the type of lymphoma most commonly observed in the children and adolescents (7.8%). The most common malignant bone tumors in childhood, the Ewing tumor and Osteosarcoma, represent 5% of the cancers in children<sup>(21)</sup>. In this study, they were the third most prevalent type of tumor in the population, with 14.6% of the cases. In relation to the subtype, osteosarcoma predominated.

In relation to the stage of chemotherapy treatment, 20.8% of the population were in the maintenance stage. The treatment is divided into stages, and the maintenance stage is the most extensive<sup>(22)</sup>. Therefore, the high incidence of children and adolescents in this stage in this study is due to the fact that it corresponds to the longest period of treatment.

When analyzing the association of the indicators, *Crying*, *Report of lack of satisfaction with the situation*, *Report of feeling cold*, and *Report of feeling uncomfortable* were more evidenced in hospitalized children/adolescents. The *Crying* and *Fear* indicators were more prevalent when evaluated in the children subsample.

Crying is a common reaction in the children and in the hospitalized population, especially to an aggressive and painful treatment such as that of cancer. Often, learning about the hospitalization causes crying in children and adolescents, because it is an event associated with negative health factors. In the specific group of children, crying is often related with Fear. In a study conducted with a group of children during the hospitalization period, the emotional reaction Fear was the most identified (37.8%). The hospital environment is related to some situations that cause natural reaction of Fear before the possibility of invasive procedures<sup>(23)</sup>.

When evaluating the differences between the indicators presented, we observed that *Report of lack of feeling comfortable with the situation* showed to be more prevalent among boys, while for the girls the *Crying* indicator was highlighted.

It is known that most of the child/adolescent cancers are more frequent in the male population<sup>(3)</sup> and, therefore, this group is more susceptible to the harmful and traumatic effects of chemotherapy treatment, as well as to the effects of the disease itself, which may justify the *Report of lack of feeling comfortable with the situation* indicator being the most prevalent in the male population. In addition, this indicator showed significant statistical association for the male participants.

On the other hand, among girls the *Crying* indicator was more evidenced due to the fact that, often, it is not externalized by boys because of the still sexist raising, incorporated since childhood, of absence of crying for the male population. As mentioned, a child's main reaction to *Fear* is *Crying*. Therefore, the treatment of disease and the hospital environment itself cause a feeling of *Fear* in the child and, consequently, the reaction of *Crying*. A prior study, evaluating children with cancer under chemotherapy treatment, observed that girls are more likely to present psychological stress, because, generally, the women are more sensitive to the events of their lives<sup>(24)</sup>. This event may, also, justify the presence of *Crying* in this subsample during the experience of cancer.

Report of feeling cold and Report of feeling uncomfortable were also significant indicators for the group of hospitalized participants. Martins<sup>(25)</sup> observed similar findings, showing the relationship between hospital procedures and the presence of thermal discomfort. In addition, hospitalization may generate anxiety in patients and, consequently, physiological reactions responsible for alterations in blood pressure and temperature<sup>(23)</sup>. Furthermore, the high number of reports of discomfort in hospitalized patients may be justified by the exposure to the various procedures of hospital routine<sup>(26-27)</sup>.

#### **Study limitations**

The scarcity of studies conducted with the Impaired Comfort nursing diagnosis limited the comparison of the results for the clinical indicators presented by this specific population. Noteworthy, we found no published research on the above diagnosis in children and adolescents with cancer. Furthermore, the method used did not enable describing temporal relationships between the variables, that is, it did not enable determining the influence of the indicators on the progression of the diagnosis; therefore, there may be other important aspects to the comfort of this population that, perhaps, have not been determined.

# Contributions to the fields of nursing, health, or public policies

Nursing professionals are directly related to the promotion of comfort to their patients. Thus, determining the clinical indicators of Impaired Comfort associated with children and adolescents under chemotherapy treatment becomes relevant to the nursing practice in Pediatric Oncology, as this knowledge will aid in interventions directed to the etiological factors of the diagnosis during cancer treatment and will enable promoting quality care geared towards this population. It is suggested that further studies are conducted to deepen the knowledge of the presence of this diagnosis in the children population.

#### CONCLUSION

Our results enabled determining the strength of the association of sociodemographic and clinical data with the clinical indicators of Impaired Comfort in children and adolescents with cancer. Thus, the indicator *Report of lack of feeling comfortable* 

with the situation presented statistical association with the male patients. Crying and Fear presented significant statistical association with the children group. Finally, four indicators had significant statistical relation with the evaluation sector (inpatient unit): Crying, Report of lack of satisfaction with the situation, Report of feeling cold, and Report of feeling uncomfortable.

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