

Hospital School Service for students undergoing cancer treatment: what do the research say?

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Abstract

This article aimed to analyze the Brazilian scientific production about hospital school care for students undergoing cancer treatment. The investigation used bibliographic research and started with the survey of articles, dissertations and theses in the Scielo databases, Capes Periodicals and the Brazilian Digital Library of Theses and Dissertations (BDTD). It was possible to find 123 productions, with seven productions selected according to the proposed objective. For the discussion of the data, both technical analysis and content analysis of the selected productions were carried out so that the technical analysis classified the researches according to the year of publication, the types (theses, articles, dissertations) and the regions where they were published. In the content analysis, based on the themes found, the following three thematic classes were identified: conception of hospitalized students in relation to hospital school attendance; contributions of hospital school attendance; and curriculum and the teaching of disciplinary contents: building knowledge. As a result, the research pointed to the importance of a flexible and individualized curriculum, also thinking about teaching strategies that value school culture, without neglecting relevant aspects such as family, health and school, regarding school attendance for students in cancer treatment.

Keywords: Hospital School Service, Hospitalized Students, Oncology, Teaching-learning.

Introduction

Health, based on the incorporation of the concept and principles of Humanization through the National Humanization Policy - HumanizaSUS (BRASIL, 2004), provides the commitment to the integrality of the human being and at the same time highlights the concept of listening to life. This concept regards experiences in a body, whether concrete or emotional, which are part of the subjects' experience and which must be considered in any type of health

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treatment as a whole human being (GONÇALVES; MANZINI, 2011). Aware of this challenge, health from the perspective of humanization joins the field of education.

With regard to hospitalized children and adolescents, psychological and pedagogical needs are acknowledged as well as medical and nursing needs. Although sick, the child/adolescent is not restricted from learning, being able to discover and discover themselves through new experiences. For this, professionals who are in contact with this child/adolescent within hospital institutions must conduct their gaze in a sensitive and humanized way. (GONÇALVES; MANZINI, 2011).

The dialogue established between the areas of health and education shows the need for continuity of schooling for a child/adolescent undergoing hospital treatment, supporting integral development and ensuring the protection of the right to education and all processes that involve training and learning (CECCIM, 1999). In agreement with Paulo Freire, awareness and dialogue is what reconciles human beings in the educational process, as well as for the construction of their humanization (MELO JÚNIOR; NOGUEIRA, 2011). In this same sense, Freire (1969) argues that the reflexive and critical action of reality makes it possible to transform it from the conception of the ontological vocation of "being-more". The human being is in a continuous process of humanization.

Thus, this article, through a bibliographical research, seeks to present answers to the following research problem: how do scientific productions about hospital school care address the specificities of students undergoing cancer treatment? It proposes, as a general objective, to analyze the Brazilian scientific production in articles, theses and dissertations about school attendance in health care, more specifically for students undergoing cancer treatment. Therefore, based on the results obtained in the bibliographical research on the assistance provided to schoolchildren undergoing cancer treatment, it was possible to discuss the understanding of how it occurs and what the contribution of this assistance is, and the conception of those involved in this process based on in the analysis of the productions found.

Development

Hospital Class: hospitalized student care

In Brazil, some legal frameworks were obtained that allowed for enunciating the rights of hospitalized students, and consequently, school work in the hospital environment, so that the hospital class came to be recognized through special education, in the prism of inclusive education. Several nomenclatures are used to refer to the theme, such as "hospital school", "hospital educational-pedagogical service", "hospital schooling", "hospital class". In the present work, we chose the term "Hospital School Service".

The Law of Guidelines and Bases of National Education (LDB), Law n^o 12.796/13, art. 58, § 2 states that: "The educational service will be provided in classes, schools or specialized services, whenever, depending on the specific conditions of the students, it is not possible to integrate them into regular classes of regular education" (BRASIL, 2013).

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There are still many gaps in terms of guaranteeing the rights of students in health care. We emphasize that in 2018, the LDB was amended pursuant to Law n^o. 13.716/2018, which defines in Article 4-A:

Art. 4-A. Educational assistance is ensured, during the period of hospitalization, to the basic education student hospitalized for health treatment in a hospital or at home for a long time, as provided for by the Public Authorities, within the sphere of its federative competence (BRASIL, 2018, p. 5).

We do not deny the relevance of the alteration in the LDB for the recognition of guarantee of rights for hospitalized students, but Article 4-A refers to students hospitalized for a long time, without establishing the length of it. Furthermore, we know that with the evolution of medical treatments, it is possible to reduce the length of stay, minimizing the risk of contamination in the hospital environment. This implies another questioning, considering that this change in legislation does not establish the right to students undergoing health treatment in outpatient clinics or specialized centers and who do not remain hospitalized, yet are unable to attend school.

For reflections and challenges about hospital school service, we consider it relevant to understand what the hospital class is and its way of functioning. The hospital class is defined as a format of school care offered to children and adolescents from 4 to 17 years of age (compulsory Basic Education) who, for reasons of health treatment, are unable to attend their schools. The hospital classroom can be a space characterized by the different activities that are developed with hospitalized students who are often at different levels of education, so it should be understood as an environment not only for schooling, that is, as a school in the hospital, but also as an opportune moment for each hospitalized student to restore socialization, through inclusion, enabling continued development (OLIVEIRA; FILHO; GONÇALVES, 2008).

According to Gonçalves and Manzini (2011), hospital classes have as objectives:

a) prevent the interruption of the hospitalized child's learning process to be integrated into the classroom in the future;

b) contribute to reduce hospital trauma by bringing to the hospital a part of their life, which is school;

c) expand the hospital service by joining education with health;

d) contribute to the child's recovery by assigning him/her educational responsibilities;

e) guide the student, the teacher at the school of origin and the family regarding the need to continue their studies after hospitalization in possible cases;

f) provide conditions for the continuity and achievement of school termination, appropriate to individual characteristics. (GONÇALVES; MANZINI, 2011, p. 4-5).

Thus, the purpose of the hospital class, in addition to the attention focused on the curricular monitoring of students/patients, is also concerned with contributing to the recovery of hospitalized children and adolescents, bringing them closer to their lives outside the hospital context. In this way, the relevance that the hospital class has in contributing to comprehensive health and care for hospitalized students is evident.

Student undergoing oncological treatment

According to the José Alencar Gomes da Silva National Cancer Institute (INCA, 2020), childhood cancer is understood as a set of abnormal cells that start to multiply uncontrollably in some organ of the body, so that leukemias become the more frequent cases in children and adolescents. According to INCA (2020), there has been significant progress in the treatment of childhood cancer in the last four decades. According to the same source, Brazil has 8% of the causes of death from cancer compared to other diseases in children and adolescents, however, currently about 80% of cases, when previously diagnosed, are treated promoting the cure of patients.

The understanding of how relationships are established in the hospital space by children and adolescents undergoing cancer treatment can be a relevant aspect to be investigated, as a better understanding of the situations experienced by patients contributes to a more sensitive and humanized performance of the patients. professionals who work in this space, both in the field of health and in the multiple aspects that the hospital context can encompass.

In this sense, reflection on the importance of hospital classes for sick students is necessary to build an understanding of the issues surrounding this theme. The specific cut of the study addresses the particularities surrounding the schooling and education of those who are away from regular schools due to cancer treatment. Regarding interferences in the schooling process of students with cancer, Covic and Oliveira (2011) point out:

> First, since the end of the 1980s, the conclusion in studies of the treatment of childhood and adolescence cancer in Western culture has been practically unanimous, that the process of school monitoring must occur throughout the treatment; second, that there may be late effects from the treatment and from the cancer itself, and thus, the follow-up has to be lifelong; and, third, that these late effects are attenuated when patients study during treatment. (COVIC; OLIVEIRA, 2011, p. 95-96).

Therefore, the conditions imposed from the diagnosis of illness due to cancer demand delicate changes in relation to the health treatment required for the child, for example, those related to school life. Breaking the routine directly involves schooling, often causing constant absences, compromising student performance, also occurring in the absence of flexibility in schools and even physical limitations resulting from the treatment of these children and adolescents, in addition to numerous other issues that involve social restrictions, increasing the anguish experienced by everyone involved in this process (COHEN; MELO, 2010, p.313).

Covic e Oliveira (2011) state:

The education of young people with cancer faces some obstacles, similar to those faced by students with disabilities, or

even chronically ill children. The disease and its treatments can cause difficulties, direct in learning, or others indirectly, such as discrimination. Interruptions in the school year and failure to learn weigh on the future of students undergoing cancer treatment (COVIC; OLIVEIRA, 2011, p. 96).

A study on the implications of cancer in students in the literacy process aimed to identify the existence or not of problems in the literacy process of students undergoing cancer treatment. The research proposed a methodology to observe the problems in this period, showing that when the treatment is applied at the correct time and with adequate quality for educational practice, such problems in the literacy process are minimized or totally eliminated (KANEMOTO; PETRILLI; COVIC, 2020).

Therefore, the discussion about the schooling of children and adolescents undergoing cancer treatment is considered relevant so that it is possible to achieve advances in this field, helping hospitalized students to be included in the teaching and learning process guaranteed by law.

The pedagogue in the hospital context

Currently, reflections in the field of educator training have been extended to the performance of these professionals in different spaces and beyond the traditional school institution, characterizing itself as one of the challenges for training courses. The action of the pedagogue in non-school spaces has sometimes been a subject that has been little discussed and disseminated during the training of teachers, resulting in the invisibility of hospital school care through the hospital classroom, as a matter to be addressed. addressed in this medium. In this way, the education of the pedagogue must meet the necessary condition for the qualification and performance of work carried out also in non-school spaces, ensuring education as a human right (RABELO, 2011).

According to Fontes (2005), the work of the pedagogue in the hospital context manifests several interfaces in addition to pedagogical, such as psychological, political and ideological, being exercised not only in a single way, but by identifying themselves in their what to do through the reflective process of practice, the teacher can enter in the search for new answers those questions that arise in the exercise of their action. As a result of this reflective action, the main characteristic of this professional in the hospital environment is the potential to be together with students, building in dialogue and through careful listening to the teaching and learning processes.

Thus, the role of the educator of the hospital class also consists of mediating the relationships that are established in this environment, helping, in a way, in the child/adolescent's recovery through activities that allow for a look at their conditions, limitations and overcoming difficulties as a student and patient (RABELO, 2011).

The positive contribution in the sick child's recovery process is felt in the very presence of the teacher and in the pedagogical activities developed at the hospital. Furthermore, the school hospital, when presented to hospitalized students, appears as a link with the life of a child outside the hospital, raising as a reference the school as the meeting place for healthy children, that is, the

school is understood as link to the (re)construction of their identity as a child/student. In this sense, the meaning of school in the hospital can open the way for the construction of fluid communication and the construction of spontaneous dialogue between students in the hospital class. The moment in which the hospitalized student expresses himself or herself verbally or exchanges information through a continuous and, at the same time, affective dialogue, the result of a pedagogical listening that is also dialogic is perceived. (FONTES, 2005).

Pedagogical listening, therefore, not only marks the dialogue as a way of expressing the feelings experienced by children, in this case hospitalized, but also allows the hospitalized student to build the systematization of their thoughts from language, so that when systematizing their ideas and thoughts, the child will also be able to develop an understanding of the reality in which they are inserted and even the knowledge regarding their health status (FONTES, 2005).

> Listening to children, their desires, wishes and possibilities allows for a meaningful, collaborative and reflective practice, in which everyone can express themselves and act as protagonists in the educational practice in the hospital. It is necessary to create alternatives for the redefinition and understanding of the experiences lived by patients/students in the hospital, offering them new perspectives on themselves, their histories and, thus, unveiling new ways of being, feeling, thinking and acting in the face of illness and hospitalization (ROCHA, 2012, p. 134).

Therefore, followed by the compression of concepts related to the hospital class and involving the role of the teacher in this context, as well as the conditions and challenges of hospitalized students, it is necessary to present the path taken to achieve the goals regarding the analysis of scientific productions on this theme.

What do researches say about hospital school service for students undergoing cancer treatment?

The search for research on educational work in the hospital environment for students undergoing cancer treatment occurred through a bibliographic research carried out in 2020, through the analysis of articles, theses, books and dissertations, in the SciELO – Scientific Electronic Library databases Online, CAPES – Capes Periodicals and BDTD – Brazilian Digital Library of Theses and Dissertations. In the first moment, the combinations of the keywords were carried out: Hospital School, Children with cancer, Adolescents with cancer, Hospital educational assistance, Hospital school assistance and Oncology. With the combinations, it was possible to define the following search terms: "Hospital School AND Children with cancer AND adolescents with cancer"; "Hospital educational care AND oncology"; "School care AND oncology hospitals" and "School care AND children with cancer".

Thus, from the survey in the databases, it was possible to find 123 productions, seven of which were selected for analysis. The exclusion of other productions was performed based on the criteria that established the exclusion of research that did not present the debate on school care in hospital contexts, with a specific cut for children undergoing cancer treatment or/and when the investigations were not fully available, in addition to this, those productions that were found repeated between the bases were also excluded.

Table 1 below shows the number of productions found in each of the databases, selected for full reading and finally, selected for analysis.

DATABASE	Number of found productions	Number of productions selected for full reading	Number of productions selected for analysis
CAPES' periodicals	86	4	1
BDTD	12	3	3
Scielo	25	3	3
Total	123	10	7

Table 1: Number of productions found and selected for analysis

Source: Author, 2020

Results and Discussion

From the data collection, four articles and three dissertations were selected and analyzed through the outline of the technical and content stages, the first stage referring to the classification of researches by year, type and location of publications, while the second stage sought to raise discussions regarding the content covered according to thematic classes.

According to the technical analysis regarding the year of publications, in 2010 there was a small increase in the number of published productions, which is still not considerable to stand out quantitatively in the following years. With the exception of the years 2011, 2012, 2014, 2016, 2017, we found the constant of one publication per year within the research clipping. As shown in Graph 1 below:





The scarcity of publications in the field of hospital pedagogy in relation to the teaching and learning processes of students undergoing cancer treatment was confirmed due to the low number of publications per year. Added to this, the productions found were mostly published in journals in the fields of Education, Health and Research, as shown in Graph 2 below:



It is possible to note the importance of these productions being published in education program journals, but we also consider putting into discussion the need for research that deepens the intersection between the areas of health and education.

Likewise, the need to understand the aspects involving the school in the hospital, extended to the search for identifying in which regions the studies were published, two in the state of Bahia (LUCON, 2010; RIBEIRO, 2018); three productions in the state of São Paulo (ROLIM, GÓES, 2009; MORAES, 2010; CARVALHO; PETRILLI; COVIC, 2015); and finally, two works in the state of Rio Grande do Sul (LINHEIRA; CASSIANI; MOHR, 2013; SCREMIN, SCHUMACHER; 2019), as illustrated in graph 3 below:

Graph 3: Quantity referring to region of publication



Publishing by geographical area

The amount of publications found in the Southeast region is greater than the amount in other regions of the country, the high number of universities in this region³, as well as the high number of hospital institutions in line with the proportion of physician/inhabitant by state⁴, factors for such concentration are considered, which according to Bernardo (2017) significantly influences the regions chosen for the development of research on the service offered through the hospital classes.

Therefore, after performing the technical analysis of each of the productions resulting in the information previously presented regarding the type, year, area and region in which the productions were published, the next step consisted of analyzing the content of these studies. For content analysis, an exhaustive reading of the articles and dissertations found was carried out, and then classified according to the categories that emerged during the analysis⁵. Thus, three thematic classes were established: "conception of hospitalized students in relation to hospital school service"; "contributions of hospital school service from the perspective of caregivers and teachers" and "curriculum and the teaching of disciplinary content: building knowledge".

The first thematic class, entitled "conception of hospitalized students in relation to hospital school service", emerged as a relevant field for understanding the aspects involving the hospital universe, considered so peculiar to hospitalized children and adolescents, as well as the importance of this care in this space. In the second thematic class "contributions of hospital school service", only one dissertation that addressed the Hospital Class from the perspective of different subjects involved in this process was classified, such as teachers in the regular classroom, in the hospital class and relatives of students/patients. Finally, in the third thematic class "curriculum and teaching of disciplinary content: building knowledge", the productions presented the challenges arising from the practice in hospital classes in relation to the construction of flexible planning and curriculum.

Discussions between the different authors will be presented below, according to the classification of thematic classes.

Conception of hospitalized students in relation to hospital school service

Understanding the meanings, senses and representations attributed by hospitalized children to pedagogical care in the hospital environment contributes to the improvement of this work through activities worked on by teachers in the hospital class and even in the construction of relationships in this space, providing opportunities at the same time with that the hospitalized child and/or adolescent have their right of voice exercised.

³ INEP, 2014.

⁴ Demografia Médica no Brasil, v. 2 / Coordenação de Mário Scheffer; Equipe de pesquisa: Alex Cassenote, Aureliano Biancarelli. – São Paulo: Conselho Regional de Medicina do Estado de São Paulo: Conselho Federal de Medicina, 2013 (CREMESP 2013).

⁵ In some cases, the productions found worked with more than one element of each category, however, the main discussion presented by the authors of the productions was the determining criterion for classifying the production within a given thematic class.

Lucon (2010) highlights that hospitalized students end up not identifying the schooling process in the hospital class, understanding hospital classes as a way to pass the time, and when possible, disconnect from the bad times and even the illness that affects them, which is perhaps why they recognize the relevance of this service for the return to regular school. As the author presents: "[...] they even criticize when classes are too easy and ask that they be more challenging, because regardless of the activity, teenagers want to be in class with the teacher" (LUCON, 2010, p. 246).

In the specific case of the work developed by Ribeiro (2018), storytelling was perceived as important for children to have the opportunity to express their feelings and emotions, such as their fears, sadness, desires, fantasies and joys. Ribeiro (2018) highlights the statements of hospitalized children about the comfort they feel when participating in educational activities, as it becomes for them the moment when they distance themselves from the diagnosis, moving away from the disease affected, imagining themselves at school.

Children's understanding of the pedagogical practice in the hospital brings part of what they lived in their lives before the beginning of health treatment, especially in storytelling moments, as they can enter the world of imagination. "For them, around the diagnosis and the pedagogical practice there is an inside and outside, which is imaginary, it is the moment when the child is in the hospital, but feels outside it" (RIBEIRO, 2018, p. 81).

In this sense, the figure of the teacher contributes to this moment, as he/she does not carry the medications, injections, but the playful educational practice that enables smiling, playing, conversations and the perception of connection with the school (RIBEIRO, 2018). Thus, there is recognition of the role of the educator in this environment, seeking to have the figure of this professional close by, as they establish a bond of trust with them that results in self-confidence regarding their school identity, understood as the main childhood social identity (LUCON, 2010).

Fontes (2005) declares the value of pedagogical listening, as it allows the hospitalized student to see the teacher in the hospital class as someone they trust, allowing interactions and relationships built in the hospital environment to open up paths for (re)signification of that space. By expressing themselves through dialogue in the hospital classroom, from the listening relationship established by the trusted teacher, the hospitalized student organizes their thoughts based on the language and knowledge that involve their health status, giving meaning to the teaching and learning experiences that are part of this moment of your life.

In addition, Rolim and Góes (2009) highlight that educational practice in the hospital can allow the child to build their autonomy through activity choices, contrary to the condition that hospital routine often imposes during the hospitalization process. This issue is perceived when the children indicate in their speeches, for example, the willingness to carry out activities in the hospital classroom, demonstrating an explicit desire for continuity of schooling.

Likewise, the hospitalized student demonstrates hope for the future, when, according to Lucon (2010), adolescents give importance to the role of the hospital class as a way of rescuing the pleasure of studying. Even understanding the hospital class as an unconventional school with a trait of school reinforcement, they point out how they feel encouraged to continue their health treatment in the search for a cure. According to Fontes (2005), considering the relevance of teaching and learning in the hospital context essentially implies understanding the right to life, as the desire to learn aroused in hospitalized students becomes intrinsic to the will to live.

Furthermore, the studies analyzed show that the perception of hospital class by children and adolescents undergoing cancer treatment extends to the figure of the teacher and the interest in continuing education, as positive and essential aspects related to school identity and gifts in the daily life of the hospital environment. In this sense, according to Covic and Oliveira (2011, p. 89) "the seriously ill students have in the hospital school a massive meeting space with the knowledge they have with that systematized and historically and socially educated".

The perception of hospitalized students does not neglect the critical considerations they make regarding the hospital class as a considerably small space, so that with a larger environment for the development of activities, the number of teachers would also be greater, enabling the separation of hospitalized students, according to age and specific needs. That is, there is a desire expressed by adolescents in the hospital class, that school care is not carried out in a multigrade classroom format, but that this school in the hospital can be increasingly similar to the regular classroom, as this allows them to establish a closer relationship with the extra-hospital reality (LUCON, 2010).

Rolim and Góes (2009) highlight the ongoing comparisons between hospital class and school of origin by hospitalized students, indicating that those who recently left school due to treatment showed sadness at the change in their routine, in the same way as those who were about to be discharged from hospital felt fearful and insecure about returning to school. The authors' research involved the monitoring of children who were in the process of reintegration into their schools of origin, so they reported their expectations in overcoming obstacles and prejudices that they could find in the regular classroom, however, the expressed speeches of students after the return, were evident in relation to the absence of reception as well as the continuity of learning of school contents, as well as the difficulty of living in regular school.

In line with these challenges, Holanda and Collet (2011) point to the difficulties that hospitalized students face in relation to their image in society, as:

[...] Children and adolescents do not like comments about their physical appearance and health problems, as they want to be seen as "normal" people, not with the stigma of being sick. Being sick is negative and comprises being harmful, undesirable and socially devalued. In this situation, comparisons usually arise that cause a decrease in self-esteem and discrimination (HOLANDA; COLLET, 2011, p. 386).

Therefore, it is not enough to know that the hospital class plays an important role in the development of hospitalized students by helping to develop their self-confidence, if the schools of origin and society do not do their part in the inclusion of these children and adolescents who have gone through social isolation when undergoing health treatments.

Therefore, the hospital class helps students to maintain a link with the daily life of a healthy child, also preserving their school identity, in addition to

enabling autonomy and the construction of new learning in a space as peculiar as the hospital. Although it is not seen by hospitalized students as a "conventional" classroom, the hospital class, for the reasons already presented, can even favor the recovery of cancer treatment for children and adolescents who face these processes.

Contributions of hospital school service

The positive contribution regarding the educational work carried out within the hospitals is already evident from the conception of the hospitalized students themselves in the category presented above, however, it is equally relevant to present the contributions of this service from the perspective of the different people involved in this process, such as teachers from the hospital class and teachers from the school of origin, as well as family members of children undergoing cancer treatment.

Moraes (2010) highlights how essential it is to make explicit the views of mothers and teachers of children in health care linked to the hospital class, as they can help in the development of an understanding of the challenges found within the hospital context, as well as the challenges that accompany the pedagogical practice in this environment.

Thus, the research classified in this category, through the case study, carried out semi-structured interviews with mothers of children undergoing cancer treatment, with teachers from the hospital class and from the school of origin of two children. The first obstacles pointed out by the teachers working at the hospital were indicated by the difficulty in establishing contact with the hospitalized students' home schools. The educators also draw attention to the urgent need for better articulation between the fields of health and education, aiming at an initial training that enables the training of teachers to work in the hospital context, while allowing a precise definition of the action of this professional in the hospital (MORAES, 2010).

From this perspective, Rabelo (2011) points out that:

In order to meet the new demand of society, the training of pedagogues should seek to enable them to work in school and non-school spaces, as education is a human right as a necessary condition for them to benefit from other privileges that constitute a democratic society. To deny access to this right is to de-characterize the human being. Being able to continue learning is a right of citizenship, which should never be restricted, but always fulfilled and guaranteed in practice (RABELO, 2011 p. 6-7).

Understanding the educational right regardless of any circumstances leads to considering the role of the educator in the hospital environment as fundamental to guaranteeing this right to hospitalized children and adolescents, as stated by Moraes (2010, p. 127) "[...] there are many contributions when this service is carried out with seriousness and commitment of professional educators within the hospital".

Likewise, it is relevant to reflect on the understanding of the educational universe in the hospital by educators in the regular classroom, which, according to Moraes (2010), points to the indispensability of developing actions that are able to help them in the reception of students who were absent from the classroom due to hospitalization and to guide them in practice with those who return with specific needs.

In this sense, together with the view of teachers from both the hospital and the regular school, the understanding elaborated on the hospital school service by the families of hospitalized children and adolescents should not be disregarded, as Moraes (2010, p. 127) presents "[...] no less important is the role of mothers, encouraging children, working to contribute to the continuity of children's schooling, despite so many other tasks required".

Therefore, the relevance of the relationships established between the hospital, the school and the family is affirmed, based on dialogue and understanding, in the search for joint work for the development and improvement of hospitalized children and adolescents. Furthermore, understanding the importance of the hospital class, not only in terms of the contributions to children undergoing cancer treatment, but also in the conception of those who accompany them, helps in recognizing the need for the participation of the family, the school, as well as the health field, as elements that make up educational assistance in this context (CARVALHO; PETRILLI; COVIC, 2015).

Curriculum and the Teaching of Disciplinary Content: Building Knowledge

According to Scremin and Shumacher (2019), the school contents prepared in the hospital environment must be designed from different proposals according to the profile of each hospitalized student, taking into account the aspects involving hospitalization so that this moment does not become more painful. Thus, hospital teachers should propose playful, recreational activities that involve storytelling, dramatization, games, drawings and paintings, seeking an education that in their practice is focused on the autonomy of hospitalized children and adolescents.

The pedagogical process in the hospital environment is designed so that hospital students feel protagonists of their educational process, and for this, the pedagogues define objectives, plan the contents and procedures for actions that involve students aiming to achieve the learning of each one involved (SCREMIN; SHUMACHER, 2019).

Regarding the school contents worked in the hospital classroom, the research developed by the authors Linhera, Cassiani and Mohr (2013), points to the experiences of teachers in science teaching in this environment. The authors present the challenges regarding the selection of contents and activities that, to be worked on in the hospital class, require a pedagogical planning different from those of regular classrooms, due to the peculiar characteristics that involve the hospital context, as an example, they seek to organize the same class based on the same theme.

The investigation about the teaching strategies that can be better employed in the performance of the hospital educator, specifically in the practice of teaching science, led the authors Linheira, Cassiani and Mohr (2013) to the assumptions that theoretical knowledge they are important tools to aid in the development of classes that seek to awaken in students the understanding of the world, contributing to scientific literacy and highlighting procedures related to language mediation, encouraging reading and writing. The educators plan their activities not only thinking about the environment, whether in the hospital classroom or in bed, but also have their attention focused on the profile of students regarding the level of learning and age, seeking to identify the educational needs of each one of them (SCREMIN; SHUMACHER, 2019).

In addition, pedagogical actions must be guided by planning classes and activities with a beginning, middle and end, taking into account aspects that involve the permanence or not of the child and adolescent in the hospital, in addition, a survey of the patient's profile can be carried out how much, age, motor and cognitive condition, thinking about the development of activities that allow games, manipulation of objects and social interaction. The pedagogical support actions enable students to improve their learning through practicaltheoretical activities in a playful way, highlighting that the practices related to complementary experiences in the hospital environment also enable the continuity of the bond with the regular school institution (SCREMIN; SHUMACHER, 2019).

The importance of perceiving hospitalized students, in a broad way, also implies the possibility of creating pleasant moments in the teaching process within hospitals, seeking to develop a plan that involves playfulness, in which creativity and participation are present. Therefore, the activities can seek to improve fine motor skills, exercise logical reasoning, arouse curiosity, work on memory, attention and patience and provide integration and socialization in the hospital environment (SCREMIN; SHUMACHER, 2019).

As for the perception of how this service occurs, there is no regularity and this process varies from institution to institution, in the research by Scremin and Shumacher (2019) the authors highlight the teachers' speeches regarding pedagogical care in the hospital environment:

> We do not have an exact service time for each student, we pay attention to the signs, often on the day of chemotherapy they feel unwell, one activity or time talking is enough. And there are days when they wake up excited and eager to learn, where time flies by and the 4 or 5 activities we prepare don't work and we resort to extra activities like modeling clay, storytelling, painting, conversation circles, games with balloons (SCREMIN; SHUMACHER, 2019, p. 9).

The teacher of the hospital class is not able to know in advance what may happen in the next class, thus needing to be prepared with several possibilities in their way of acting, so that the pedagogical work in this context can be built from flexible planning (LINHEIRA; CASSIANI; MOHR, 2013). About this flexible planning, they emphasize:

> Thus, one of the challenges in planning is the combination of new and different resources and activities with those to which children and young people are already more accustomed in their schools of origin.[...] The development of internships, coupled with other investigations of the area of natural sciences in the hospital classroom, showed us that an interesting path for

the development of teaching strategies and content selection is to choose a few themes and, from them, develop related contents, so that the teacher can have different options of course depending on the students who present themselves to the class and even on the changes that are made during the class (students entering or leaving for medical procedures, for example). This makes it possible, if necessary, to develop more individualized activities, if the teacher deems it interesting (LINHEIRA; CASSIANI; MOHR, 2013, p. 550).

Thus, the selection of contents through a few themes and from them the presentation of other new contents, are some of the teaching strategies that have been shown to be efficient for teaching and learning in the field of science, developed in the practice of the pedagogue in the hospital class (LINHEIRA; CASSIANI; MOHR, 2013). Reflecting on the methods that accompany teaching in the hospital context, specifically in hospital classes, the curriculum is another element to be discussed together with flexible planning.

As for the construction of knowledge in the hospital classroom, Carvalho, Petrilli and Covic (2015), emphasize in an action research developed in early childhood education in a hospital classroom, that the potential of learning for young children and those undergoing cancer treatment is only possible through of an individualized look that takes into account the particularities of each child. It is in this sense, the "construction of a specific curriculum that takes into account the curricular guidelines for Early Childhood Education, the contact with the schools of origin and with the families and the hospital routine of each student" (CARVALHO; PETRILLI; COVIC, 2015, p. 1229).

> As the service to this student matures, the movement between the three stable thematic components is better perceived. Identification, contents and strategies are being revisited and reorganized according to what each student has learned in a spiral movement of learning, construction of knowledge and relationship with it (CARVALHO; PETRILLI; COVIC, 2015, p. 1223).

Thus, Carvalho, Petrilli and Covic (2015) present the curriculum within the perspective of the National Curriculum Framework for Education - volume 1 (BRASIL, 1998) starting from the organization of teaching in early childhood education established by age, scope and axes, aiming the construction of curricula that work with physical, affective, cognitive, aesthetic, social and interpersonal development, according to the aforementioned document:

> Thus, it should be clear that some conceptual contents are possible to be appropriated by children during the period of early childhood education. Others do not, and these will take longer to build. This means to say that many contents will be worked with the objective only of promoting approaches to a certain knowledge, of collaborating in the elaboration of

hypotheses and for the manifestation of original forms of expression (BRASIL, 1998, p. 50).

Therefore, since infanthood, children gradually develop from playing, feeling, relating, expressing themselves as processes that are part of their existence through the contacts they establish with themselves, with people and space where they find themselves (BRASIL, 1998). Thinking about the elaboration of curricular elements in the hospital environment for children in kindergarten is also one of the great challenges of planning that involves the role of the pedagogue in the hospital context.

Therefore, from the research classified in this thematic class, it was possible to point to the importance of building curricula that consider the pedagogical proposals established for each level of learning and according to the specific needs of each child and teenager as hospitalized students.

Not only the planning of science classes in hospital classes, for example, but all the contents worked on in the hospital context must reflect the characteristics that involve teaching and learning in a context as different as the hospital. It is in this sense that an individualized curriculum, without disregarding the school culture and taking into account different teaching strategies, can allow the educator in the hospital class to have a more confident posture in the face of recurring unforeseen events in the teaching and learning process in this environment.

Final considerations

The results of the research carried out in order to understand how scientific studies have been conducted on hospital school care for students undergoing cancer treatment, allowed us to verify the need for more research in this area, as in general, hospital pedagogy has been little debated in the academic field.

However, the few productions analyzed on this topic showed gaps in hospital educational care, showing that each space is made up of particularities, and it is not conceivable to prescribe clear steps to be followed in the teaching and learning process in hospital environments. However, the objective of the research was not linked to the search for a mere description of the processes involving this theme, but to the attempt to find evidence of concepts, discussions and theories about this school service as an important axis of Brazilian education, developed in the countryside. of non-school spaces, specifically in hospitals for children and adolescents undergoing cancer treatment.

The analyzed productions highlighted the relevance of a flexible and individualized curriculum, based on teaching strategies that recognize the needs and particularities of each child, taking into account the family, health and school of origin of these hospitalized students, promoting the interaction of these aspects, through dialogue and understanding between everyone involved.

Many researchers in Brazil seek to defend the right to quality education for all, however the hospital environment can sometimes go unnoticed in this debate. Therefore, thinking of education as a right for all also requires making efforts to recognize education in non-school spaces, such as the hospital class inserted in a hospital institution.

Moving in this direction is taking part in the struggle for the democratization of education, proposing to overcome the existing challenges, which in the case of hospital school services, requires the search for mechanisms that help in the visibility of this service, guaranteeing the right to education of hospitalized students. The hospital class for students undergoing cancer treatment, as it is a relevant topic for the integral development of sick children and adolescents, can present significant elements that contribute to the advancement of research in this area, aiming at the problematization and dissemination of this theme, in order to list probable directions, not yet unveiled.

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