



Original article



Journals
BAHIANA
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Playing as a strategy in physiotherapy care of hospitalized children under the perception of the companion: a descriptive cross-cross study

O brincar como estratégia no atendimento fisioterapêutico da criança hospitalizada sob a percepção do acompanhante: um estudo transversal descritivo

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ABSTRACT | INTRODUCTION: To report the family and/or companion's point of view regarding the importance of using play as a resource in the physiotherapeutic treatment of hospitalized children. **METHODS:** This is a descriptive cross-sectional study. The study population consisted of caregivers of children admitted to the Pediatric Ward of the Hospital Geral Roberto Santos and undergoing physiotherapeutic follow-up. Secondary data were collected to confirm the start time of care with the Physiotherapy team and primary data through the application of a form from April to June 2022. The instrument was composed of blocks of sociodemographic questions, social activities of the child previously hospitalization, child's behavior during hospitalization. Furthermore, adherence/acceptance to treatment, emotional reaction and interest during and after intervention using play. **RESULTS:** A total of 37 companions were interviewed. Regarding the sociodemographic characteristics of the children, 64.9% were male and the most frequent age was between two and five years. In what characterizes the child's mood before the hospitalization before the intervention, 81.1% reported crying and 64.9% fear. Finally, 59.5% of the companions highlighted excellent adherence/acceptance, 75.7% mentioned improvement in mood, in addition to 83.8% classifying the child's interest and interaction as excellent. **FINAL CONSIDERATIONS:** It was found, based on the perspective of the companions, that playing as a supporting tool of physiotherapeutic conducts in the pediatric ward is important in the treatment of hospitalized children, as it improves mood, acceptance, interaction/interest during and after the intervention, which makes care more comprehensive and humanized.

KEYWORDS: Hospitalized Child. Physiotherapy. Pediatrics. Play and Playthings. Family.

RESUMO | INTRODUÇÃO: Relatar a percepção familiar e/ou do acompanhante em relação à importância da utilização do brincar como recurso no tratamento fisioterapêutico de crianças hospitalizadas. **MÉTODOS:** Trata-se de um estudo descritivo de corte transversal. A população do estudo foi composta por acompanhantes das crianças admitidas na Enfermaria Pediátrica do Hospital Geral Roberto Santos e em acompanhamento fisioterapêutico. Foram coletados dados secundários para confirmação do tempo de início do atendimento com a equipe de Fisioterapia e dados primários por meio da aplicação de formulário no período de abril a junho de 2022. O instrumento foi composto por blocos de questões sociodemográficas, atividades sociais da criança anteriormente à hospitalização, comportamento da criança durante a hospitalização. Outrossim, aderência/aceitação ao tratamento, reação emocional e interesse durante e após intervenção utilizando o brincar. **RESULTADOS:** Foram entrevistados um total de 37 acompanhantes. Em relação às características sociodemográficas das crianças, 64,9% foram do sexo masculino e a idade de maior frequência foi entre dois a cinco anos. No que se caracteriza o humor da criança perante a hospitalização, antes da intervenção 81,1% relataram choro e 64,9% medo. Por fim, 59,5% dos acompanhantes salientaram ótima aderência/aceitação, 75,7% mencionaram melhora do humor, além de 83,8% classificarem como ótimo o interesse e a interação da criança. **CONSIDERAÇÕES FINAIS:** Constatou-se, com base na percepção dos acompanhantes, que o brincar como ferramenta coadjuvante das condutas fisioterapêuticas na enfermaria pediátrica é importante no tratamento da criança hospitalizada, pois melhora o humor, a aceitação, interação/interesse durante e depois intervenção, o que torna o cuidado mais integral e humanizado.

PALAVRAS-CHAVE: Criança Hospitalizada. Fisioterapia. Pediatria. Jogos e Brinquedos. Família.

Submitted 03/13/2023, Accepted 06/30/2023, Published 07/21/2023

J. Physiother. Res., Salvador, 2023;13:e5127

<http://dx.doi.org/10.17267/2238-2704rpf.2023.e5127>

ISSN: 2238-2704

Assigned editors: Ana Lúcia Góes, Cristiane Dias

Como citar este artigo: Santos SBB, Andrade MCB. Playing as a strategy in physiotherapy care of hospitalized children under the perception of the companion: a descriptive cross-cross study. J Physiother Res. 2023;13:e5127. <http://dx.doi.org/10.17267/2238-2704rpf.2023.e5127>



Introduction

Hospitalization for children is a challenging period, marked by emotionally and physically changes.¹⁻³ It is characterized by a change of environment, restrictions in interpersonal exchange with family and friends, imposition of routines, exams and procedures, which can reflect in a traumatic experience. Moreover, it is considered to be the major responsible for possible psychological disorders and damages in child development, which commonly result from behavioral oscillation.^{1,2,4} This situation also impacts negatively on the family/caretakers who often have feelings of insecurity and incapacity.^{5,6}

In the hospital environment, the field of Physiotherapy in children's health stands out for the importance of the preparation of the program, in which the professional considers from the evaluation the needs of each child, as well as the aspects of the family, allowing a humanized and individualized approach.^{7,8} A strategy used that must be inserted and associated with the physiotherapeutic care performed in the process of pediatric hospitalization is playing, from the assessment to the treatment procedures.⁹

Playful activity is considered a strategy for humanization in the hospital environment, providing play as a facilitating and adjuvant tool in physiotherapeutic treatment.^{5,10} In addition, it contributes to the development of motor, psychosocial, affective, and cognitive skills, and to changing the inert routine of hospitalization, thus reintegrating the emotional and physical well-being, resulting in a less traumatic hospitalization.^{5,10} Furthermore, the family plays a very important role in caring for hospitalized children, understanding play as an efficient, humanized, and effective care in this environment.^{11,12}

The use of play in physiotherapy treatment also serves as an ally in the interaction of the professional with the child, facilitating and making communication more effective to understand their needs.¹³ This interaction is of utmost importance for a better understanding of the process experienced and adaptation to the environment in which the child is inserted, to maximize collaboration and therapeutic adherence, and to improve socialization.^{3,14} Despite this, there are few studies that quantitatively analyze the perception of family members and/or companions

in the use of playing as a tool to help in the treatment, especially in the Physical Therapy field. In this context, the objective of this study was to report the perception of the family and/or companion regarding the importance of using play as a strategy in the physical therapy treatment of children hospitalized in the Pediatric Ward of Hospital Geral Roberto Santos.

Material and methods

Study design

This is a descriptive cross-sectional study.

Population and area

The population of the study was composed of family members and/or companions of children admitted to the Pediatric Ward of the Hospital Geral Roberto Santos, Salvador-Bahia, under monitoring by the Physiotherapy team. The inclusion criteria were being a companion of children of both genders, with ages ranging from 29 days to 13 years, admitted to the Pediatric Ward and after one week in physiotherapy treatment, being included in this research after signing the Informed Consent Form - ICF ([Appendix 1](#)). Companions who were not present during the physiotherapy session were not included, and the companions of children who did not play because of excessive irritation during the session were excluded. The sampling of the study was by convenience, because the researchers were present 3 times a week in the sector, selecting the participants. The physical therapist working in the unit indicated the elective children for the research.

Data source

Primary data were collected by means of the form, and secondary data were collected on the date of admission of the child to the pediatric ward through the medical records to confirm the time of the beginning of care with the Physical Therapy team.

Data collection

The collection consisted of an individual interview with the family member and/or companion of the

child, in the Pediatric Ward environment, where the questionnaire formulated for this purpose ([Appendix 2](#)) was applied, in the period from April to June 2022, conducted by the main researcher of the study. To conduct the interview and obtain field data, the study was submitted to the Research Ethics Committee of the Hospital Geral Roberto Santos. A pilot study was conducted to calibrate the survey instrument and the researchers.

Data collection instrument

An instrument structured through direct questions with multiple choice was developed by the researchers of the study, composed of blocks of sociodemographic questions, social activities of the child prior to hospitalization, time of the beginning of care with the physiotherapy team, and behavior of the child during hospitalization. Also, physiotherapeutic care, adherence/acceptance to treatment, emotional reaction and interest of the child after the physiotherapeutic intervention using play.

Definition of variables

The sociodemographic variables of the child and the caregiver were the sex described as female and male, age described in days and years, skin color classified as white, black and brown. The accompanying person's variables were also verified, such as the level of kinship classified as mother, father, uncle/aunt, and others, and the level of education described as low (illiterate - elementary), medium (complete and incomplete high school), and high (undergraduate and graduate). Furthermore, the child's social activities before hospitalization were evaluated, described by good interaction with toys and family members, school participation, playing in the street or with friends, sports activities, and artistic activities. Through the medical records, the variable time of admission to the pediatric ward was evaluated, to confirm the time of onset of care with the physical therapy team described in weeks. The variables mood of the child before hospitalization described by emotional states such as fear, joy, sadness, crying, aggressiveness, irritation and none of these emotions shown were also investigated, presence of the guardian during physiotherapy care described by yes

or no, and in how many physiotherapy sessions was present described in 1, 2, 3 or more than 3.

Analysis plan

To quantitatively construct the outcome of the companion's evaluation of the importance of the use of play in physiotherapeutic treatment, the variables adherence/acceptance of the child to the procedure were evaluated, classified as bad, regular, good and great, the child's reaction during and after the treatment, described by emotional states such as fear, joy, sadness, crying, aggressiveness, irritation and not showing any of these emotions. Finally, the child's interest variable was also studied, described by the interaction with the environment and with other people (talking and playing) after the physiotherapeutic intervention using play classified as bad, regular, good and great.

Ethical aspects

The variables were quantitatively analyzed using the SPSS 17.0 program. Data were expressed as measures of central tendency, dispersion and proportions. The participants were included in the study by signing the Informed Consent Form (ICF), and were informed that they could interrupt or give up participating in the study at any time. The confidentiality of the data obtained in this study was reinforced by the inclusion of the information in a database, accessed only by the researchers of this project. The research was conducted in accordance with the Research Ethics Committee of the Hospital Geral Roberto Santos, in compliance with Resolution 466/2012 of the CNS/MS. Approved by the CEP under opinion number 5.250.209 and CAAE number 55670722.3.0000.5028. The STROBE Checklists tool was used as an aid to construct the entire study.¹⁵

Results

A total of 37 individuals were interviewed, among family members and/or companions of children admitted to the Pediatric Ward of the Hospital Geral Roberto Santos, with no refusals or withdrawals.

Table 1 shows the sociodemographic characteristics of the companions, 33 (89,2%) were female, the predominant age bracket was between 30 and 39 years (54,1%) and 18 (48,6%) reported themselves as having brown skin color. Regarding education, 20 (54,1%) had incomplete or complete high school, characterizing it as average and as to the degree of kinship 28 (75,7%) were mothers, while only 4 (10,8%) were the children's parents.

Table 1. Sociodemographic characteristics of companions of hospitalized children being monitored by the Physical Therapy team using play, admitted to the Pediatric Ward of the Hospital Geral Roberto Santos. Salvador, Bahia, 2022

Sociodemographic Characteristics	n (37)	%
Sex		
Female	33	89,2
Male	4	10,8
Age (in years)		
19 to 29	11	29,7
30 to 39	20	54,1
40 to 49	5	13,5
50 to 59	1	2,7
Skin Color		
White	2	5,4
Black	17	45,9
Brown	18	48,6
Education		
Low	11	29,7
Average	20	54,1
High	6	16,7
Degree of kinship		
Mother	28	75,7
Father	4	10,8
Uncle/Aunt	3	8,1
Other	2	5,4

Source: the authors (2022).

As for the sociodemographic characteristics of the children included in the study who were being monitored by the physical therapy team using play, 24 (64,9%) were male. The most frequent age group (35,2%) was between two and five years old, with children aged from five months to 13 years. Regarding skin color, 17 (45,9%) were reported as brown by the caregivers (Table 2).

Table 2. Sociodemographic characteristics of hospitalized children being monitored by the Physical Therapy team using play, admitted to the Pediatric Ward of the Hospital Geral Roberto Santos. Salvador, Bahia, 2022

Sociodemographic Characteristics	n (37)	%
Sex		
Female	13	35,1
Male	24	64,9
Age (in years)		
0 to 1	8	21,6
2 to 5	13	35,2
6 to 10	8	21,6
11 to 13	8	21,6
Skin Color		
White	10	27,0
Black	10	27,0
Brown	17	45,9

Source: the authors (2022).

Table 3 shows the data concerning the perception of the caregiver regarding the behavioral characteristics of the hospitalized child. As for the social and leisure activities of the child before hospitalization, the caregivers reported more than one activity, 32 (86,5%) had good interaction with toys/family members and 23 (62,2%) studied and performed artistic activities. Most of the children were admitted less than four weeks ago (75,7%) and in what characterizes the child's mood before hospitalization before the physiotherapeutic intervention with play interaction, 30 (81,1%) reported crying and 64,9% observed episodes of fear. Most of the caregivers were present in more than three visits (78,4%), and a total of 22 (59,5%) emphasized great adherence and acceptance to treatment using play. Finally, in the research, 28 guardians (75,7%) mentioned an improvement in mood during and after the treatment, in addition to classifying as excellent the interest and interaction of the child (83,8%) after the physiotherapeutic treatment using play.

Table 3. Classification under the perception of the companion before the behavioral characteristics of hospitalized children and in monitoring by the Physiotherapy team with the use of play, admitted to the Pediatric Ward of the Hospital Geral Roberto Santos. Salvador, Bahia, 2022

Behavioral Characteristics	n (37)	%
Social/leisure activities of the child before hospitalization		
Had good interaction with toys and family members	32	86,5
Studied	23	62,2
Played in the street/at home with friends	22	39,5
Performed sports activities	8	21,6
Performed artistic activity	23	62,2
Admission Time (in weeks)		
1 to 3	28	75,7
4 to 6	4	10,8
> 6	5	13,5
Child's Mood in the Face of Hospitalization		
Fear	24	64,9
Joy	16	43,2
Sadness	20	54,1
Cry	30	81,1
Aggressiveness	6	16,2
Irritation	22	59,5
He did not show any of these emotions	4	10,8
Presence of the companion during the care of the physical therapy team with the use of play		
Once	3	8,1
Twice	3	8,1
Three times	2	5,4
More than three times	29	78,4
Child acceptance of the physiotherapeutic procedure with the use of play		
Regular	2	5,4
Good	13	35,1
Great	22	59,5
Child's mood during and after physiotherapeutic care with the use of play		
Fear	3	8,1
Joy	28	75,7
Sadness	1	2,7
Cry	3	8,1
Irritation	1	2,7
He did not show any of these emotions	7	18,9
Children's interest in talking and playing after physical therapy with the use of play		
Bad	-	-
Regular	-	-
Good	6	16,2
Great	31	83,8

Source: the authors (2022).

Discussion

Based on the changes suffered by the child during hospitalization, it is noticeable in the field of research the need and importance of the insertion of methods that ensure better adaptation and cooperation to treatment and conducts, presenting in this study the strategy of playing as an important increment in the child's physiotherapeutic approach. The results of this research suggest that the perception of companions regarding the use of playing as an adjuvant tool in physiotherapeutic treatment was important during the child's hospitalization. This therapeutic strategy provides opportunities to experience this new moment in his life in a less stressful way, reducing the negative effects of the rupture with his social life. Furthermore, the companions highlighted the children's great adherence and acceptance to treatment using play, besides the improvement in mood and their interaction and interest in the environment during and after the intervention.

It is believed that playing is inherent to the child's life and an effective instrument for the expression of imagination, learning, and knowledge of oneself and of the world in which one is inserted. In pediatric hospitalization, an event surrounded by numerous adversities, play, in the form of play, may acquire therapeutic application, which helps the child in understanding and better acceptance.³ Fujisawa and Manzini⁷ stated that playing can be present in physiotherapeutic care since the assessment, but that it must be used in a planned manner. In this sense, one must characterize the play as a tool to conduct and facilitate the intended objectives.⁸

It was noticeable in this study that most of the companions were present during the care, which denotes that this presence has a relevant role in the assistance.¹² The companion is an active subject in the process of hospitalization of the child and thus can also have a perception about the playful activities as an intervention.^{1,16} During hospitalization, the family has the perception of playing as an efficient, humanized, and effective care. A way of improving adherence or even potentiating the effect of physiotherapeutic conducts.^{10,11,17} According to Marcon and Sari¹⁸, the family-child-play relationship during hospitalization is very important for the child's development, as it consolidates learning. There is a need to be guided as to their participation and interaction at all times

in order to facilitate the child's adherence to the environment and to the conduct performed, since the family is the one who spends most of the time with the child.

Regarding the social and leisure activities of the child developed before hospitalization, the caregivers reported in the study that children did more than one activity every day, among them they highlighted: studying, interacting with toys/family, and performing artistic or sports activities. However, during the period of hospitalization, children have these activities interrupted, becoming inert from their routine and from their social life. Corroborating this study, it was found that play can be explored to provide opportunities for human development, because it is a way of interacting with the environment, and it favors the maintenance of the child's daily habits, reducing idleness and performing care, in its entirety, in the pediatric environment.¹⁴

Another important item in what characterizes the child's mood before hospitalization before the physiotherapeutic intervention with play interaction, the largest proportion of caregivers reported crying and observed episodes of fear and irritation. Studies discuss that both hospitalization and illness can cause stress to the child.^{1,2,4} And that this situation can create real or imagined threats, which can be expressed through fear of doctors, crying, aggression, addiction, anxiety, depression, sleep disturbance, avoidance of medical procedures, and other forms of responses.¹⁴

From the perspective of the caregivers, the results of this study showed an improvement in mood during and after physical therapy with the interaction of play. Studies indicate that play is seen as an intervention activity that should be incorporated into the hospital setting to help children adapt to the hospital and improve their health status. Moreover, play can also alleviate fears and anxieties and allow the child to continue growing, developing and regaining his/her health, enabling his/her physical and emotional recovery, and reducing the trauma of hospitalization.^{1,16}

Authors point out that playing enables the continuity of child development and physical and emotional recovery, by making hospitalization less traumatic. It also contributes to demystifying the hospital environment, commonly perceived as hostile, since

playing allows children to see this environment as good and pleasant, and allows them to express their feelings.^{19,20} Similarly, Barroso et al.^{21,22} clarify that the interaction of structured therapeutic play promotes the child's well-being, and relieves anxiety and stress generated by atypical experiences for his/her age, to which he/she is submitted in the hospital environment.

The caregivers stated in the study that the children showed great interaction and interest after the intervention performed by the physical therapy team using play. It is worth noting that the theme about the interaction of play in physiotherapy treatment facilitates a better relationship between the child and the therapist, which enables the professional to easily identify their demands and potential for better adherence to treatment, since playing is the main activity of childhood. This strategy, along with effective communication, is a way to stimulate a series of aspects that contributes to social interaction, which makes the sessions more pleasurable, potentiates an improvement in their general state, thus, to a greater disposition and potentiates the benefits of the intervention.^{12,23}

A limitation of this study is the methodological design, in which, since it is a cross-sectional research, data were collected over a specific period of time, and the research was carried out with the eligible participant only once, with the need for more specific studies to prove the hypothesis generated. Another limitation of the study was the convenience selection, not allowing the generalization of the results found for this population.

Conclusion

This study showed, based on the perception of the companions, that playing as an adjuvant tool for physiotherapeutic conducts in the pediatric ward is important in the treatment of hospitalized children, because it improves mood, acceptance and compliance, which makes care more integral and human. The use of this instrument also provided, according to the interviewees, a significant

improvement in the child's interaction and interest in the environment during and after the intervention. Based on the results of this research, it is expected that physical therapy professionals will realize the importance of playing as an essential humanization strategy in the hospital environment. It is also expected that hospitals adopt and allow the use of this strategy in pediatric wards, as a facilitator and adjuvant means in physical therapy treatment for greater adherence to treatment. Also, it is expected that the companions use this strategy to become more integrated in the treatment as active agents of change. We highlight the need for further exploration of the theme through research aimed at analyzing the perception of family members and/or companions in the use of play as a tool to assist in treatment, especially in the Physical Therapy field.

Authors' contributions

Santos SBB participated in the conception of the research question, methodological design, construction of the data collection instrument, collection and analysis of research data, interpretation of results, and writing of the scientific article. Andrade MCB participated in guiding the entire research, contributing to the conception of the research question, methodological design, construction of the data collection instrument, collection and analysis of research data, interpretation of results, writing of the scientific article.

Conflicts of interest

No financial, legal, or political conflicts involving third parties (government, private companies and foundations, etc.) have been declared for any aspect of the submitted work (including but not limited to grants and funding, advisory board participation, study design, manuscript preparation, statistical analysis, etc.).

Indexers

The Journal of Physiotherapy Research is indexed in [DOAJ](#), [EBSCO](#), [LILACS](#) and [Scopus](#).



References

1. Queiroz ACO. Perception of the accompanier on a ludic project in a regional hospital. Part [Internet]. 2018;1(31):115-27. Available from: <https://periodicos.unb.br/index.php/participacao/article/view/20154>
2. Sousa LD, Gomes GC, Silva MRS, Santos CP, Silva BT. Family in the paediatrics unit: nursing team's perception about the caring dimension. *Cienc enferm*. 2011;17(2):87-95. <http://dx.doi.org/10.4067/S0717-95532011000200010>
3. Silva MKCO, Ferraz LCC, Farias MB, Januário JKC, Vieira ACS, Moreira RTF, et al. The use of play in the pediatric hospitalization scenario. *Rev enferm UFPE on line*. 2019;13:e238585. <https://doi.org/10.5205/1981-8963.2019.238585>
4. Aranha BF, Souza MA, Pedroso GER, Maia EBS, Melo LL. Using the instructional therapeutic play during admission of children to hospital: the perception of the family. *Rev Gaúcha Enferm*. 2020;41:e20180413. <https://doi.org/10.1590/1983-1447.2020.20180413>
5. Santos AC, Jesus ALS, Sampaio ACRI, Mazarro CJS, Raimundo RJS. The role of the toy in physiotherapy: contributions of psychomotricity to pediatric physiotherapy care. *Rev Inic Cient Ext*. [Internet] 2022;5(1):778-88. Available from: <https://revistasfasesa.senaaires.com.br/index.php/iniciacao-cientifica/article/view/344>
6. Antão C, Rodrigues N, Sousa F, Anes E, Pereira A. Hospitalization of the child: parental feelings and opinions. *Revista INFAD de Psicología* [Internet]. 2018;2(1):125-33. Available from: <https://www.redalyc.org/articulo.oa?id=349856003013>
7. Fujisawa DS, Manzini EJ. Professional training in the physiotherapy: the use of play activities in the treatment of children. *Rev bras educ espec*. 2006;12(1):65-84. <https://doi.org/10.1590/S1413-65382006000100006>
8. Azevedo-Santos IF, Santos MJG, Souza TC, Alves VC, Barreto LCLS. Perception of physiotherapy students about the humanized treatment of hospitalized children. *Journal of Health Connections* [Internet]. 2020;10(3):98-110. Available from: <http://periodicos.estacio.br/index.php/journalhc/article/view/8528>
9. Hockenberry MJ, Wilson D. *Wong Fundamentos de enfermagem pediátrica*. 9a. ed. Rio de Janeiro: Elsevier; 2014
10. Piva EK, Cardoso JVC, Schwartz LNM. Ludicity and physiotherapeutic treatment of children with autism: a literature review. *Revista Brasileira de Educação e Inovação da Univel (REBEIS)*. [Internet]. 2022;1(2). Available from: <https://periodicos.univel.br/ojs/index.php/rebeis/article/view/150>
11. Franco LF, Bonelli MA, Wernet M, Barbieri MC, Dupas G. Patient safety: perception of family members of hospitalized children. *Rev Bras Enferm*. 2020;73(5):e20190525. <https://doi.org/10.1590/0034-7167-2019-0525>
12. Ferreira FA, Silva SRM, Santos MCS, Silva AM, Freitas RSC, Gouveia MT, et al. Perception of the hospitalized child's companion in relation to therapeutic toys. *Rev enferm UFPE on line*. 2018;12(10):2703-09. <https://doi.org/10.5205/1981-8963-v12i10a236309p2703-2709-2018>
13. Moreira-Dias PL, Silva IP. The use of the toy during the treatment of children with cancer: perceptions of the multidisciplinary team. *RBC*. 2018;64(3):309-15. <https://doi.org/10.32635/2176-9745.RBC.2018v64n3.28>
14. Silveira KA, Lima VL, Paula KMP. Stress, pain, and coping in hospitalized children: relations with family stress. *Rev. SBPH* [Internet]. 2018;21(2):5-21. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1516-08582018000200002&lng=pt&nrm=iso
15. Vandembroucke JP, Von Elm E, Altman DG, Gøtzsche PC, Mulrow CD, Pocock SJ, et al. Strengthening the reporting of observational studies in epidemiology (STROBE): explanation and elaboration. *PLoS Medicine*. 2007;4(10):e297. <https://doi.org/10.1371/journal.pmed.0040297>
16. Menezes MS, Maia IBC. Family participation in the hospitalized child care process. *Serv. Soc. & Saúde*. 2020;19:e020005. <https://doi.org/10.20396/sss.v19i0.8661082>
17. Biasibetti C, Hoffmann LM, Rodrigues FA, Wegner W, Rocha PK. Communication for patient safety in pediatric hospitalizations. *Rev Gaúcha Enferm*. 2019;40(esp):e20180337. <https://doi.org/10.1590/1983-1447.2019.20180337>
18. Sari FL, Marcon SS. Participation of the family in physical therapy treatment of children with cerebral palsy. *Rev Bras Crescimento Desenvolvimento Hum*. 2008;18(3):229-39. <https://doi.org/10.7322/jhgd.19886>
19. Chiavon SD, Brum CN, Santos E, Sartoretto EA, Zuge SS, Gaio G, et al. Use of the therapeutic play for children who experiences the hospitalization process: a narrative review. *BJHR*. 2021;4(1):382-98. <https://doi.org/10.34119/bjhrv4n1-031>
20. Ribeiro WA, Coutinho VVA, Eduardo CRB, Silva Neto PF, Pereira BVO, Costa VS, et al. Contributions of therapeutic play in the care process for hospitalized children: a study of the literature. *Res. Soc. Dev*. 2020;9(7):e1000974706. <http://dx.doi.org/10.33448/rsd-v9i7.4706>

21. Barroso M CCS, Santos RSFV, Santos A EV, Nunes MDR, Lucas EAJCF. Children's perception of venipuncture through therapeutic toy. Acta Paul Enferm. 2020;33:e-APE20180296. <https://doi.org/10.37689/acta-ape/2020AO0296>

22. Barroso M CCS, Cursino EG, Machado MED, Silva LR, Depianti JRB, Silva LF. The therapeutic play in nursing graduation: from theory to practice. Rev pesq cuid fundam. 2019;11(4):1043-47. <http://dx.doi.org/10.9789/2175-5361.2019.v11i4.1043-1047>

23. Souza I, Ribeiro MM, Lemos LR. Utilização da gameterapia como ferramenta de inovação para a fisioterapia nos cuidados paliativos em crianças com leucemia. Rev Liberum Accessum. [Internet]. 2022;14(2):43-53. Available from: <http://revista.liberumaccesum.com.br/index.php/RLA/article/view/159>

Appendices

Appendix 1. Informed consent form (to be continued)

INFORMED CONSENT FORM

This research will follow the Criteria of Ethics in Research with Human Beings according to Resolution n 466/12 of the National Health Council.

You and your child are being invited to participate in the research: Playing as a strategy in the physiotherapeutic care of hospitalized children under the perception of the companion: a descriptive cross-sectional study, under the responsibility of the researcher. The objective of the study is to report the family and/or companion's perception regarding the importance of using play as a resource in the physiotherapeutic treatment of children hospitalized in the Pediatric Ward of the Hospital Geral Roberto Santos.

As benefits of this research, we emphasize that by identifying the importance of using play as a resource in physiotherapeutic treatment, it will be possible to bring more accurate data for the use of play in physiotherapeutic care, as well as discussions in the academic and professional environment about the approach, aiming at improving care and service to hospitalized children. It is justified the need to evaluate the perception of the family member and / or companion in relation to the importance of the use of play as a resource in the physiotherapeutic treatment of children hospitalized in the Pediatric Ward, since there are few researches aimed at quantitatively analyzing the perception of parents and / or companions in the use of play as an adjunctive tool of treatment, especially in the area of Physiotherapy. If you accept, you will be interviewed and will answer a structured research instrument through direct questions with multiple choices, composed of blocks of sociodemographic questions, social activities of the child before hospitalization, time of initiation of care with the physiotherapy team, behavior of the child during hospitalization. Also, physiotherapeutic care, adherence/acceptance to treatment, emotional reaction and interest of the child after the physiotherapeutic intervention with the use of play. This interview will be carried out in person by the student of the undergraduate course in physiotherapy using the digital platform Google Forms to record the answers. The **risks** related to the research carried out are considered minimal, as they refer to the possible embarrassment or fear of the interviewees in answering questions about the service offered to them.

In order to **minimize these risks**, your participation is voluntary and there will be no expense or remuneration resulting from it. If you wish, you and your child may withdraw from participation at any time without any explanation or penalty. In addition, the interview will be supervised by the counselor and physiotherapist responsible for the study. The **confidentiality of** your information and your **anonymity** will be maintained. You will receive a copy of this Informed Consent Form signed by you and the researchers. If you have any questions or have any problems, you can contact the researcher. We clarify that the data will be kept for 10 years and burned after this period. In case of doubts about ethical issues of the study, you may contact the Research Ethics Committee - CEP of Hospital Geral Roberto Santos, Rua Saboeiro, s/n - Cabula, Salvador-Ba, 41180-780.

Below are the details to be filled in if you choose to participate in the survey:

IDENTIFICATION DATA

Participant Name: _____

Identity Document N°: _____ Sex: F () M ()

Date of Birth: / /

Address: _____ Complement: _____

Neighborhood: _____ City: _____ ZIP CODE: _____

Telephone: () _____ - _____ () _____ - _____

I declare that after having been duly clarified by the researcher about the objectives, benefits and risks of my participation in the research "Playing as a strategy in the physiotherapeutic care of hospitalized children under the perception of the companion: a descriptive cross-sectional study" and having understood what was explained to me, I agree to participate under my own free will, as a consenting volunteer. I further declare that my participation is free of charge and I am aware of the existence of minimal risks arising from the assessments. In this case, I declare that I am aware of the researchers' strategies to remedy such risks. I am aware that the results obtained will be presented and

Appendix 1. Informed consent form (conclusion)

published in scientific events and articles as long as my identification is not made and I will sign this document in two copies, one for the researcher and the other for me.

Salvador, ____/____/____.

Signature of participant or guardian

Signature of Researcher

Signature of Witness



Source: the authors (2022).

QUESTIONNAIRE

Dear Sir or Madam:

With the present study we intend to report the perception of family and/or companion in relation to the importance of the use of play as a resource in the physiotherapeutic treatment of children hospitalized in the Pediatric Ward of the Roberto Santos General Hospital.

The questions that make up this instrument must be answered with the utmost sincerity and truth; there are no right or wrong answers. Your answers will not be used for any purpose other than the present study. We emphasize that your voluntary participation in this study is essential for its success. If you do not agree to participate or wish to withdraw at any time, this will not cause any harm to you.

- **Demographic Data**

Child

Name (not required):

Age:

Sex: F M

Skin Color: White

Black

Brown

Escort

Name(not required):

Degree of kinship:

Age:

Sex: F M

Skin Color: White

Black

Brown

Education: incomplete primary education

elementary school Complete

Secondary school incomplete

High school completed

Incomplete higher education

Higher education completed

• **Social activities of the child before hospitalization**

Before hospitalization what leisure activities did the child do? (more than one option can be chosen)

Had good interaction with toys and family members

Studied

Played in the street/ with friends

Performed sports activities (soccer, swimming, volleyball, basketball, tennis...)

Performed artistic activity (drawing, painting, dance, theater, music...)

• **Hospitalization (secondary data)**

Time of admission to the Pediatric Ward _____

• **Child's behavior during hospitalization**

How have you perceived the child's mood during hospitalization? (more than one option can be chosen)

Fear

- Joy
- Sadness
- Crying
- Aggressiveness
- Irritation
- Did not show any of these emotions

- **Physiotherapeutic care with the use of play**

Have you ever followed any care provided by physiotherapy? Yes No

How many times have you followed the care of the physiotherapy team with the use of play? 1

2

3

more than 3

How did the child accept the procedure performed by physiotherapy using play?

Bad

Regular

Good

Great

During and after physiotherapeutic care using play, did you observe any of these emotions in the child? (more than one option can be chosen)

Fear

Joy

Sadness

Appendix 2. Questionnaire (conclusion)

Crying

Aggressiveness

Irritation

Did not show any of these emotions

What did you think of the child's interest in talking and playing after the physiotherapy care with the use of play? (communication and play, alone or with other people)

Bad

Regular

Good

Great

Source: the authors (2022).