

Nursing care for children on the autism spectrum

Abstract

Introduction: Autistic Spectrum Disorder (ASD) is a condition in which the bearer can present a wide range of behavioral signs, varying according to the degree of impairment in social behavior, communication and language. The first signs of this condition usually appear during the first five years of life. Although some people with ASD are able to live independently, others already need a series of care, support and psychosocial interventions throughout their lives.

Objective: To survey the performance of nurses in the face of different procedures in autistic children in health units. Identify the main causes of crises and difficulties in nursing care for autistic children. Raise nursing intervention solutions and strategies to avoid crises in autistic children. **Methodology:** This is an integrative literature review carried out by crossing the descriptors: Autistic Spectrum Disorder; Pediatrics; Nursing. The databases were: LILACS, BIREME, Web of Science and the SciELO electronic library, with the search for articles carried out between August and November 2021. The search resulted in 28 articles, of which 12 were excluded, making a final total of 16 articles.

Results and discussion: Among the main characteristics of the nurse's performance, the exact description of the procedure to be performed on the patient stands out, as well as the complete explanation of all the steps of the procedure, aiming to avoid crises due to the child's surprise during the procedure. Among the main crises in autistic children, the following were raised as the main causes: pain, noise, surprise and the meltdown, the name given to a multisensory crisis, caused by several stimuli directed at these children at the same time. As the main solution to avoid crises, the use of Social Stories was found, which are animated conventions in book or video format, whose objective is to explain in detail to the child what sensations he will have during the performance of a certain procedure and the step by step of the process. itself, avoiding surprises during its realization.

Conclusion: Through this review, it was possible to conclude that Social Stories are the main key to carrying out nursing procedures in autistic children, reducing crises and facilitating nursing care, in addition to avoiding future problems, such as refusal of assistance or the so-called "White Coat Syndrome", whose cause is linked to trauma in childhood. The importance of training and expertise of nurses in this area is highlighted, as diagnoses of autism increase day by day.

Keywords: autistic spectrum disorder, pediatrics, nursing

Volume 9 Issue 2 - 2023

**Isabella do Nascimento Oliveira Gomes,
Andreara de Almeida e Silva**

UNIP/ Institute of Health Sciences, Paulista University, Brazil

Correspondence: Isabella do Nascimento Oliveira Gomes,
UNIP/ Institute of Health Sciences, Paulista University, São José
dos Campos, Brazil, Email ngomes.isabell@gmail.com

Received: May 08, 2023 | **Published:** May 26, 2023

Introduction

The nurse has a role of utmost importance in terms of caring for children with special needs, a group in which autistic children are highly inserted and are active participants. This responsibility includes providing care to this varied group, on an individual basis, respecting their limits and sensitivities, as well as establishing a relationship of trust with the child to be treated, facilitating their understanding of the procedure to be performed and reducing the chances of seizures due to existing hypersensitivity in patients on the spectrum.¹ In Brazil, health professionals, education, parents and family members are characters who have conquered the achievement of the fundamental rights of people with ASD through a specific policy. The National Policy² for the Protection of the Rights of People with Autistic Spectrum Disorder is instituted by Law n° 12,764, of December³ and guarantees the person with ASD the right to a dignified life, physical and moral integrity, the free development of personality, safety, leisure and protection against any form of abuse and exploitation with the relative high of its incidence, several studies have tried to identify the genetic causes of ASD. Some studies point to a relationship of 3 to more than 10 genes, while others point to several specific areas of the genome as a probable contribution to its development.⁴

The term autism emerged from Bleuler's refutation of the nosology of "precocious dementia" created by Kraepelin, contesting that: I- it was not a true dementia; II - did not constitute always early; III- the process of psychic degeneration often took place late. Bleuler coined, in 1911, a term to nosographically designate "dementia praecox": schizophrenia. In this new nosographic category, autism was one of the fundamental symptoms.⁵ For Bleuler, autism was one of the symptoms of schizophrenia; Kanner, three decades later, raised it to the status of a specific childhood pathology. In his clinical study of children, he isolated a set of childhood pathological manifestations and, using Bleuler's term for one of the symptoms of schizophrenia, grouped them under what he named "Early Infantile Autism".⁵ Psychic dissociation was considered the fundamental problem in the identification of autism⁶ being characterized by the diffuse invasion of the primary and secondary processes of the Ego. The first characterizes the personal (unconscious) system; the second is characterized by the perceptual (conscious) synthesis system. With this in mind, the present work has as its main question: "How to reduce seizures in children on the autistic spectrum during nursing care?" Caring for people on the Autistic Spectrum is of paramount importance, as nurses must be ready to care for all layers and differences of a population.^{7,8}

Methods

The present study is a literature review in the Lilacs, Bireme, Scielo and Web of Science databases. Which happened from August to December, which correspond to the second half of 2021. This is a review of scientific literature in the form of a bibliographic review. Its realization has the possibility of instructing nursing professionals about the care aimed at autistic children. To carry out this study, first articles were researched and identified compatible with the objectives that were proposed in the theme. The data that were used to carry out the research, form in virtual libraries with the search system: Scielo - Scientific Library, Scielo Books, Google Scholar, to search for the articles the base was: autistic spectrum, individualized attention and Nursing; The selection of the articles were: published articles in Portuguese, English and French compatible with the objective, published in the aforementioned databases focused on the area of health and nursing.⁹ Data collection takes place between August 2021 and May 2022. The sample consisted of 19 articles. The selected articles were analyzed and organized into two tables containing: name, author, type of study, year and relationship with the theme. Soon after carrying out the survey of the articles, readings

were carried out, exploring the works that address the theme related to the objective of the theme, presenting them in tables.

Thanks:

To God, because without him I would not have overcome all the obstacles along the course to get here.

To my friends and colleagues: Letícia, Mirela, Priscila and Rafaela, for their support, affection and companionship during the 4 years of the course.

To my mother, stepfather and sisters who were fundamental and who always did everything to make the difficult moments easier, in addition to being the motivation for carrying out this work.

To my boyfriend Marco Antônio Custódio Júnior and his family who never denied me support, affection and encouragement, always understanding my difficult moments and absence to carry out this work.

Results

Given in the tables 1-2.

Table 1 Articles used in the discussion of the results according to the role of the nurse in the care of autistic children

Author/ year	Purpose of work
Rodrigues PM, et al. ¹⁰	Apply Dorothea Orem's theory of self-care and reinforce the need the support of the nursing professional.
Frye L. ¹¹	Describe the experience of parents of children with Autism Spectrum Disorder using their own words and identify the resources needed to help them become actively involved in their role as a parent of a child with Autism Spectrum Disorder: upset spectrum autistic.
Franzoi MA, et al. ¹²	Report the music application experience and others therapies as a care technology for these children in a Specialized Center of Care.
Senac RC, et al. ¹³	Analyze practice and knowledge of the Family Health Strategy nurses about of the disorder and how to improve care.
Will D, et al. ²²	Examine how the professionals in primary care nursing note their degree of competence and what barriers they noticed when they serve care primary tests for children with Autism Spectrum Disorder compared to with neurotypical children.
Soelti, et al. ¹⁴	Evaluate knowledge and generate changes in the care provided by nurses to autistic children according to the Self-Care Theory and also teach methods to increase autonomy of patients.
Peterson CC, et al. ⁸	It analyzes the behavior of autistic children in stressful situations and how their hypersensitivity needs time, changes and care to minimize the point of the child calming down, demonstrating autonomy and Self knowledge.
Samson F. ²¹	Evaluates the relationship between mothers of extreme ages with the highest number of autism diagnoses in recent years

Table 2 Articles used in the discussion of results according to the main crises in children on the autistic spectrum

Author/ year	Purpose of work
Barloso K. ¹⁵	Demonstrates the differences between crises in children, as aggressiveness, screaming and crying, and what should be the position of parents in this time.
Bennie M. ¹⁶	Explains the distinctions between a meltdown and tantrums,
Flag review. ²³	part of the crises in aggressiveness. It is episodes violent, instructing families to deal with this crisis in a way not traumatizing for none of the parties.
Trentini M, et al. ⁷	Evaluates the behavior of autistic children during sensory overloads through the Child Behavior Checklist (CBCL) and explores the disorder as a borderline condition for the child development.

Discussion

According to Rodrigues et al.¹⁰ the use of Social Stories for autistic children is a starting point for the child to develop autonomy and be able to carry out their activities smoothly and with as little support as possible. Still in the context of Social Stories, they highlight how they should be applied to the child's daily life, clearly and objectively demonstrating the way in which activities should be carried out, in order to prepare the child to carry them out. Also according to Rodrigues et al, Dorothea Orem's theory of the nursing process is widely used in this context, from the creation of Social Stories to the child's understanding of them and the actions taken from there. Self-care in this theory is defined as the performance of activities that people perform for their own benefit, the nurse must assess the ability and challenges of the child with ASD. According to Frye L.¹¹

nurses are the eyes and ears of the healthcare team and the voice of the family, thus creating a unique link between the patient's family and the medical team. The nursing team should guide parents through the challenges of raising a child with ASD and help them develop resilience to deal with the implications of that upbringing.

Franzoi et al.¹² report the use of music as a valuable tool for the treatment of autistic children, in addition to highlighting the differences between music therapy and music intervention. The first is a music therapist's pivotal therapy, used for treatment or rehabilitation where music has a curative role. The second is a therapeutic method that can be applied by all health professionals, used to create a "rapport" between patient and professional. Senac R et al.¹³ succinctly describe how low is the level of knowledge of nurses about the treatment of children with ASD, insecurity and fragility are

present in the knowledge of nurses, who demonstrated not knowing the disorder and not having experience with people that are part of the spectrum. In addition, the study demonstrates the limited number of courses and training aimed at serving this growing public. Soelti et al.¹⁴ analyze the knowledge of the nursing team about ASD and the approach to the theme during the training of health professionals, using Orem's theory of self-care. In this context, after an interview with several nurses, it was concluded that nursing teams are not prepared to care for autistic children. As an intervention for this fact, the appreciation of the expression of feelings was included in the care of the child, improving interpersonal communication, promoting intra and interpersonal teaching-learning and the cultivation of sensitivity for themselves and for the other, resulting in a more humane and more effective approach in the care of these children.

Peterson CC et al.⁸ analyze the behavior of children with ASD in situations of stress and frustration following a 6-step script and comparing situations with neurotypical and neuroatypical children, showing again the social immaturity in autistic children and the increase in stress in situations of forced socialization and non-logical reasoning. Barloso K¹⁷ describes what stimming is, in the case of a self-stimulus initiated by the autistic child whose objective is to reduce irritation, excitement, nervousness or restlessness. Among the types of stimming, we have flapping, which is a movement of hands and arms, repetitive speech (which can include lines from books, movies, song lyrics), covering or hitting the ears, screaming or grunts, staring to people or objects, lining up toys or other objects, blinking repeatedly, turning lights and appliances on and off, repeatedly tapping fingers, rubbing or scratching hands and objects, rocking back and forth, running aimlessly, jumping repeatedly, sniffing objects, tasting unusual objects, licking hands. Stimming should not be scolded or suppressed, as it is a normal condition of the autistic child, however, certain different behaviors are frowned upon by society. As solutions to the frequent use of stimming, physical activities for energy expenditure, creating a calm and safe environment, or using stims as a reward after challenging activities can minimize this very common behavior.

Bennie M¹⁸ explains the differences between autistic tantrums and temper tantrums, which are common to neurotypical children. Tantrums are common and widely used by children from the age of 2, they always have a goal, be it doing something, not being able to do what you want or not being able to communicate what you want. Tantrums usually need an audience, it is normally intended for the person able to offer the child what he/she wants/needs at that moment. A meltdown, name given to an autistic crisis, is caused by a very large number of stimuli at the same time, an overload of sensory, emotional and information stimuli. Its signs are similar to that of a tantrum (crying, screaming). To minimize the damage caused by stress, a solution is used to reinforce the child's safety during the crisis, lead a calm routine. Giddins E¹⁹ defines a "meltdown" as the loss of control of behavior, manifested in several ways, and can be expressed verbally: screaming, crying; or physically: kicking, attacking, biting. Meltdowns are not the only way for an autistic person to express this overload, some express this discomfort by refusing interaction, isolation, moving away from situations that may seem uncomfortable or challenging, this escape being the best option. For the crisis to end, it is suggested that the child be given time and space, since after an overload, it takes time to recover from trying information. Calmly, a collection of information should take place, aiming to understand the child's state, but it is more than expected that the answer to these questions will take time to emerge. Opening up space, lowering sounds, bright lights and electronics can also be an option.

Givigi R et al.¹¹ discuss the changes noted in the behavior of autistic children during the COVID-19 pandemic, dealing with an isolation that totally changed the social relationships of children with autism. With the restriction of activities imposed by the pandemic, it was noted that most autistic children wanted to leave the house, and ended up resorting to electronic devices, digital games such as games on tablets and consoles became common. At the same time, negative changes were noted in the behavior of children in the EA during this period, such as low tolerance for interaction and isolation. Bandeira G²⁰ explains that during a deregulation crisis, the entire capacity for self-regulation and self-management, especially in children. In this way, we can follow the curve of the deregulation crisis, demonstrating that the chances of success in crisis intervention decrease as the crisis reaches its peak. The first key point is the routine. Any self-regulation skills should be practiced at these times, so that the child can apply them in times of stress. The second point is to pay attention to the early signs of stress, a moment marked by increased stereotypies, flapping, increased voice volume or greater sensory sensitivity; at this time, it is critical to direct the child's attention away from stressors. The third point is to observe the apex of the crisis, at this moment it is essential that there are not many complex questions to the child, she must be protected from objects that could hurt her and the parent must be a calm presence offering only reassurance and protection. The fourth point is the control of the crisis, the caregiver must resist the temptation to question or scold the crisis because of the crisis and yes, wait for the moods return to normal, children may feel tired or drained after a crisis.^{20,21}

According to Trentini M et al.²² following the CBCL questionnaire (Child Behavior CheckList), which assesses dysfunctional behaviors and classifies the information obtained as clinical, non-clinical or borderline. This questionnaire is recommended and widely used in screening and anamneses, as it is able to track several problems, in addition to ASD, helping professionals to plan psychological assessments. It should be used with caution and common sense, as it is not a diagnostic instrument.²³

Conclusion

Through this review, it was possible to conclude that Social Stories are the main key to carrying out nursing procedures in autistic children, reducing crises and facilitating nursing care, in addition to avoiding future problems, such as trauma, refusal of care or the "White Coat Syndrome", whose cause is linked to childhood trauma. The importance of training and expertise of nurses in this area is highlighted, as diagnoses of Autism Spectrum Disorder grow day by day. We also conclude the importance of identifying a crisis before it reaches its peak, causing physical and emotional damage to the child and family, thus making it possible to anticipate episodes and ensure good care for these children.

Acknowledgments

None.

Conflicts of interest

The authors declares that there are no conflict of interests.

References

1. Reibnitz KS, Prado ML. Innovation and education in nursing. *Florianópolis*. 2006;3:240.
2. Daniel Carvalho, Pollianna Galvão, Ana Flávia, et al. National policy for the protection of the rights of persons with autistic spectrum disorder. *Creative Education*. 2012.10(3):3.

3. Ministry of health. secretary of health care. department of strategic programmatic actions. guidelines for rehabilitation care for persons with autism spectrum disorders (asd). Brasilia: ministry of health; brazil. ordinary federal law no. 12,764. 2014.
4. Gupta, Abha R, Matthew W. Autism and asperger syndrome: an overview. *Braz J Psychiatry*. 2006;28(1):3–11.
5. Quintin EM, Bhatara A, Poissant H, et al. Processing of musical structure by high-functioning adolescents with autism spectrum disorders. *Child Neuropsychol*. 2013;19(3):250–275.
6. Marfinati, Abrão. Diagnostic and statistical manual of mental disorders. *American Psychiatry Association*. 2014.
7. Almeida FS, Giordani JP, Yates DB, Trentini CM. Assessment of emotional and behavioral aspects of children with autism spectrum disorder. *Aletheia*. 2021;54(1):1–9.
8. Peterson CC, Wellman HM, Slaughter V. The mind behind the message: advancing theory of mind scales for typically developing children, and those with deafness, autism, or asperger syndrome. *Child Dev*. 2012;83(2):469–485.
9. Nettina SM. *Nursing practices*. 9th edn. Rio de Janeiro: Guanabara Koogan, 2012.
10. Rodrigues PM, Maria Cicera, Mércia Zeviani. Self-care of a child with autism spectrum by means of social stories. *Esc Anna Nery*. 2017;21(1):e20170022.
11. Givigi RCN, Silva RS, Menezes EC, et al. Effects of isolation during the COVID-19 pandemic on the behavior of children and adolescents with autism. *Rev Latinoam Psychopathol*. 2021;24(3):57.
12. Carpenete JA. Investigating the effectiveness of a developmental, individual difference, relationship-based (dir) improvisational music therapy program on social communication for children with autism spectrum disorder. *Music Therapy Perspectives*. 2017;35(2):160–174.
13. Rock RM. *Mental health nursing*. 2nd edn. Rio de Janeiro: Senac Nacional. 2005;192.
14. Will D, Barnfather J, Lesley M. Self-perceived autism competency of primary care nurse practitioners. *The Journal for Nurse Practitioners* 2013;9(6):350–355.
15. Soelti, SB, Fernandes IC, Camilo SO. The knowledge of the nursing team about autistic disorders in children in the light of the theory of human care. *ABCS Health Sci*. 2021;46:e021206.
16. Samson F, Hultman CM, Kolevzon A, et al. Advancing maternal age is associated with increasing risk for autism: a review and meta-analysis. *J Am Acad Child Adolesc Psychiatry*. 2012;51(5):477–486.
17. Barlosso K. Autism stimming and hand flapping: what are the key cause and behaviors. 2021.
18. Bennie M. Tantrum vs Autistic Meltdown: what is the difference?. 2016.
19. Y Aoki, T Blum, G Colangelo. Flag review. *Hep Lat*. 2021.
20. Mello, Morin, A. The difference between tantrums and meltdowns. *Autism Support*. 2017.
21. Pinto RNM, Torquato IMB, Collet N, et al. Childhood autism: impact of diagnosis and repercussions on family relationships. *Rev Gaucha Enferm*. 2016;37(3):61572.
22. Lai G, Pantazatos SP, Schneider H, et al. Neural systems for speech and song in autism. *Brain*. 2012;135(3):961–975.
23. Risch N, Spiker D, Lotspeich L, et al. A genomic screen of autism: evidence for a multilocus etiology. *Am J Hum Genet*. 1999;65(2):493–507.