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# Self-care of a child with autism spectrum by means of Social Stories[a]

## *Autocuidado da criança com espectro autista por meio das Social Stories*

## *Autocuidado del niño con espectro autista mediante las Social Stories*

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## Abstract

**Objectives:** To apply the nursing process of the self-care theory by Dorothea Orem and use Social Stories as a learning tool combined with the self-care theory to children with autism spectrum disorder. **Methods:** A qualitative descriptive study, single case of a child with Asperger syndrome, was carried out at the child's home, based on the theory of Dorothea Orem, with the use of the Social Stories. Data were collected by means of semistructured interviews, anamnesis and nursing interventions. **Results:** Three weekly interventions to encourage self-care and evaluations with the mother regarding the child's development were carried out. The child evolved from the partially compensatory system to the supportive-educative system due to the increase in self-care capacity to take a bath, brush his teeth, and clean himself after intestinal elimination. **Conclusion:** The association of the Orem's theory with Social Stories was considered an effective strategy to encourage the child's self-care.

**Keywords:** Autistic Disorder; Self Care; Nursing; Nursing Process.

## Resumo

**Objetivos:** Aplicar o processo de enfermagem da teoria do autocuidado, de Dorothea Orem, e utilizar a *Social Stories* como ferramenta de aprendizagem aliada à teoria do autocuidado pela criança com Transtorno do Espectro Autista. **Métodos:** Estudo qualitativo, descritivo, caso único de uma criança com Síndrome de Asperger. Realizado no domicílio, fundamentado na teoria de Dorothea Orem, com utilização da *Social Stories*. Coleta de dados feita por meio de entrevistas semiestruturadas, anamnese e intervenções de enfermagem. **Resultados:** Realizaram-se três intervenções semanais para o estímulo ao autocuidado e avaliações com a mãe acerca da evolução da criança. Constatou-se a evolução da criança do sistema parcialmente compensatório para o sistema de apoio-educação, devido ao aumento da capacidade de autocuidado no banho, na escovação dos dentes e na higienização após as eliminações intestinais. **Conclusão:** A associação da teoria de Orem com a *Social Stories* apresentou-se como uma estratégia efetiva no estímulo ao autocuidado pela criança.

**Palavras-chave:** Transtorno Autístico; Autocuidado; Enfermagem; Processos de Enfermagem.

## Resumen

**Objetivos:** Aplicar el proceso de enfermería de la teoría del autocuidado de Dorothea Orem y utilizar las *Social Stories* como herramienta de aprendizaje aliada a teoría del autocuidado al niño con Trastorno del Espectro Autista. **Métodos:** Estudio cualitativo, descriptivo, caso único de niño con Síndrome de Asperger. Realizado en domicilio, fundamentado en teoría de Dorothea Orem, utilizando las *Social Stories*. Datos recolectados mediante entrevistas semiestructuradas, anamnesis e intervenciones de enfermería. **Resultados:** Se realizaron tres intervenciones semanales de estimulación del autocuidado y evaluaciones con la madre sobre evolución del niño. Se constató tal evolución, del sistema parcialmente compensatorio al sistema de apoyo educativo debido al incremento de capacidad de autocuidado en baño, cepillado de dientes e higiene luego de evacuación intestinal. **Conclusión:** La asociación de la teoría de Orem con las *Social Stories* se mostró como estrategia efectiva en el estímulo del autocuidado en el niño.

**Palabras clave:** Trastorno Autístico; Autocuidado; Enfermería; Procesos de Enfermería.

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## INTRODUCTION

Autism spectrum disorder (ASD), considered a pervasive developmental disorder, includes: autism, Asperger syndrome, and pervasive developmental disorder not otherwise specified. It is characterized by difficulty in social interaction, isolation, lack of interest in others and communication, repetitive and restricted patterns of behavior, activities, and interests.[1-4]

Data provided by the Centers for Disease Control and Prevention in the United States showed that the number of children with ASD continues to increase, with one case in each 68 children, which is equivalent to 14.7%/1000, most with late diagnosis. The United Nations affirm the great impact of the autistic disorder on children, families, and society. Based on this perspective, Brazil is estimated to have about 2 million people in this condition.[5-7]

Generally, children with an ASD diagnosis present difficulties in complex abilities in different contexts, such as positioning themselves, relating to people, understanding social situations, speaking, reading, writing, as well as in establishing their independence, by means of basic abilities such as self-care, since their autonomy is sometimes limited.[1,8]

The autonomy of these children and their capacity for self-care might be more compromised when their parents, by lack of knowledge and understanding, do not stimulate them early, tend to infantilize them, are unaware of their potential, and overprotect them.[1,8]

Therefore, producing knowledge about the use of strategies that stimulate children with ASD to develop abilities for self-care might contribute to a new perspective of nursing care for a population so much in need of specialized care.[6,9]

Therefore, nurses must consider the ASD's complexity, range of the possible causes, still uncertain therapeutics and with low responses, be prepared to intervene with the children and their families, be involved in innovative studies on care, as well as adopt a theoretical approach to nursing that enables children with ASD to provide care for themselves according to their potential and limitation, so that they can exercise autonomy in their daily lives.[10,11]

In this respect, the Dorothea Orem's self-care theory was adopted in this study and applied to a child with ASD, which provided a new form of nursing care, led to changes in the child's life, changes in parents' understanding that this child is able to take care of himself, even with things that are difficult for the child, and provided them with new learnings on how to deal with their child's particularities in his process of development and growth.[12,13]

In this context, the Social Stories were used, which are considered a social learning tool that supports the safe and significant exchange of information among parents, professionals, and children with ASD from diverse ages.[14]

This study is important because it tries to fill a gap in the production of knowledge regarding the teaching of self-care to children with ASD from a nursing's perspective, presenting new possibilities of nursing care. In addition, it contributes to the innovation of nursing practice along with children with ASD and their parents, based on the Dorothea Orem's self-care theory, and uses Social Stories, which is a learning tool not yet used in nursing care in Brazil.

Therefore, the aim of this study was to apply the nursing process of Dorothea Orem's self-care theory and use the Social Stories as a learning tool combined with the self-care theory to children with ASD.

## METHODS

A descriptive and prospective qualitative study was carried out with a single case of a child diagnosed with Asperger syndrome, which is characterized by a higher level of intellectual development, language's development, deficits in socialization, restricted interests, such as routines, rituals, and singular forms of speaking, difficulty in sharing ideas and interests, and understanding what others feel or think.[15-17]

The theoretical and methodological framework used was based on the Dorothea Orem's self-care nursing theory composed of three theoretical constructs related as follows: theory of self-care, theory of self-care deficit, and theory of nursing systems.[12,13]

Dorothea Orem defined self-care as the practice of activities that individuals perform on their own behalf to maintain life, health, and well-being. In this concept, nurses evaluate self-care capacity and demands of children with ASD.[12,13]

Self-care deficit for this theoretician can be evidenced when self-care demand outstands self-care capacity regarding body hygiene, elimination, solitude and social interactions, risk prevention, promotion of human activity, activity and rest, intake of water and food, among others. In this context, nurses identify deficits and intervene through helping methods.[12,13]

The nursing system, in turn, is based on self-care needs and capacity of individuals to perform self-care activities. In this circumstance, nursing will be required to assist individuals in managing self-care.[12]

With the purpose of teaching self-care from the perspective of Dorothea Orem to the child of this study and help his parents acquire capacity to contribute to the development process of the child, Social Stories were strategically used, which is a technique developed by Carol Gray in 1991, that presents a short story written in the first person singular, with images that describe a social situation, ability, or event in terms of relevant signs and appropriate social responses.[14]

The Social Stories technique stimulates the independence of the child in the performance of self-care activities, daily life, and social positioning, as it separates a difficult social situation in understandable stages to help individuals with ASD understand the whole of a situation, and describes where the activity will be performed, when it will occur, what will happen, and why the child behaves in a certain way.[14,18,19]

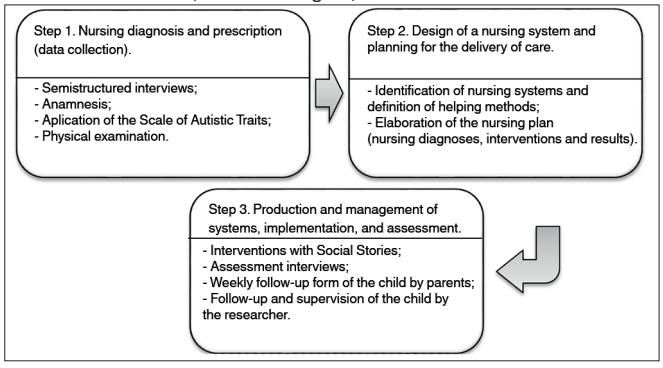
The study was carried out at the child's home, located in a capital city in the Northeast of Brazil. Home care provided the development of a healthier and easier environment for the intervention process. In this context, it was observed that the parents developed new abilities, based on the way they began to understand and deal with their child, which favored the child's good behavior and social adaptation.[20]

The study was carried out from August to November 2014. The inclusion criteria were: being a child with ASD from any gender; being a child from 6 to 12 years old; having basic understanding of reading and self-care deficit; receiving care at a Psychosocial Care Center for Children and Adolescents (CAPSi, as per its acronym in Portuguese). The exclusion criteria were: presenting resistance to the undertaking of interventions; having cognitive or psychomotor impairment that prevents the understanding of the approach.

Only one researcher was responsible for the undertaking of interviews and nursing interventions to favor the development of the bond between the child and his parents. The study was supervised by a nursing professor from the mental health area and a psychologist of the institution, who was a reference therapist of the child and his family.

Stages of the Orem's nursing process (NP), divided into three steps, were followed for the development of the study: Step 1. Nursing diagnosis and prescription: data collection and determination of the reason why nursing is needed; Step 2. Design of a nursing system and planning for the delivery of care; and Step 3. Production and management of nursing systems, implementation and evaluation of the interventions, as illustrated in Figure 1.[12]

**Figure 1.** Stages of the Nursing Process applied in the study, Maceió - Alagoas, 2014. Source: authors, Maceió - Alagoas, 2016.




Step 1. Nursing diagnosis and prescription: Nursing diagnosis and prescription were carried out, originated from two semistructured interviews recorded with the mother to learn the history of the child, including information on his development, self-care demands and capacity, limitations and potentialities, activities of daily living, self-care deficits, and behavior of the parents to give him autonomy. Physical examination of the child was undertaken; anamnesis and application of the Scale of Autistic Traits with the mother.[21] It is worth mentioning that diagnoses, results and nursing interventions were carried out with the use of the International Classification for Nursing Practice 2.0 (ICNP).[22]

Step 2. Design of a nursing system and planning for the delivery of care: based on nursing diagnoses, the results expected and nursing interventions were defined. The interventions occurred in six stages: 1. Application of Social Stories; 2. Functional workshop, with elaboration of boards, posters, and other handicrafts; 3. Supervision of self-care actions; 4. Memorization with videos, songs, games, or printed activities; 5. Talks and guidance with parents and the child; and 6. Mother's evaluation of the child's self-care capacity after the intervention.

Step 3. Production and management of systems, implementation and assessment: three interventions regarding body hygiene were carried out at the child's home, one per week, with average duration of two hours. Records were carried out in the field diary and four assessment interviews were recorded with the child's mother after each intervention, to identify changes in the performance of self-care activities, limitations, and to guide subsequent interventions.

As nursing interventions were carried out, the parents were guided to stimulate and evaluate the child's evolution and respond to the following question at the end of the week: how did the child behave after the application of the Social Stories in the previous week?

In addition, the parents responded to the weekly assessment tool with ten questions, in which the five first ones presented four possible responses: never; sometimes; almost always, and always, and the others were descriptive: 1. Have you daily applied the Social Stories whenever you are responsible for the child? 2. Does the child remain attentive to the application of the Social Stories? 3. Does the child show interest or search for the Social Stories? 4. Has the child shown resistance to the application of the Social Stories? 5. Has the child shown any kind of evolution in the application of the Social Stories? 6. How many times did you apply the Social Stories? 7. Which difficulties have you noticed when applying the Social Stories? 8. How do you think we can ease or overcome these difficulties? 9. What are the potentialities identified in the child? 10. Which evolutions did you notice in the child?

The present study was approved by the human research ethics committee of the Federal University of Alagoas (CEP/UFAL) on July 17, 2014, under protocol no. 718.774. Previous authorization of the person legally responsible for the child was obtained through the signing of an informed consent form. The signing of the informed consent form by the child was not possible because his understanding might be compromised by the ASD. The child's mother signed a use of image consent form for photographic records of the interventions.

## RESULTS

The results are presented following the dynamics of Orem's nursing process application, with analysis in the light of the self-care theory.

### Nursing diagnosis and prescription: data collection

A.F.A.C. 11 years old, male, *pardo*, 4th grade student in regular school, born in a city in the Northeast of Brazil. Diagnosed at the age of 3 years and 2 months with Asperger syndrome, which integrates the ASD. The mother noticed something different when she held him for the first time, because he was quiet and had a distant gaze. He slept the whole day, shook his head a lot when he was awake, and did not like physical contact, looking in the eyes, kisses, and hugs. At the age of three years, he was agitated, started to scream when watching a scene of a children's film, and broke objects in the house; in this period, he was taken to a specialist and was diagnosed with Asperger syndrome. Then, he was referred to a CAPSi and, consequently to a special education center of the state. He stopped using diapers at the age of 4 years, continued to make his excrements in his clothes until the age of 6 years. He started speaking at the age of 5 years, then, started presenting echolalia. He sleeps under medications, makes use of carbamazepine three times a day and risperidone at night. He cannot remain at the table while he eats, getting up several times. He does not brush his teeth or wash his hands by himself; presented lack of capacity to take a bath and partially lost the notion of his body's parts; he uses the bathroom, but he is not able to clean himself. Anthropometric measures: weight: 45 kg, height: 1.49 cm, BMI: 20.27. He has difficulty in social interaction; sudden change of mood; compulsive laughs; temporary tantrum and anger, and motor and verbal excitement; he is resistant to changes. He averts direct gazes, presents difficulty in attention and concentration; seeks convenience and prefers that others do the work for him. He presents mutism; immediate and delayed echolalia; emits stereotyped sounds. He constantly jumps; does not recognize danger; and even when stimulated, he sometimes does not move. He covers his eyes and ears, wheels objects, and walks dragging his feet. Abilities identified: he has memorized the flags of all countries; he can say the day of the week of future years, of any date when asked; presents good motor coordination and interest for cell phones, computers, and others.

Based on this, Table 1 shows diagnoses and nursing interventions, and the Social Stories was elaborated respecting the child's needs and singularities.

### Production and management of nursing systems

It must be emphasized that the following three interventions described were illustrated by means of two groups of images, identified as "A" and "B". The images described in group "A" represent Social Stories that were created to guide the child in the adoption of self-care capabilities. Group "B" presents pictures of the intervention's stages.

### Nursing intervention 01 - Taking my bath

In the first interview for data collection, the mother mentioned that her child was not capable of taking a bath alone, showed a lack of knowledge regarding the parts of his body to be cleaned and their respective names, (first and second nursing diagnoses presented in Table 1). Intervention was initiated, as presented in Figure 2, with the construction of a poster entitled: "My Body" (Group B: stage 1), which showed the drawing of a boy (front and back), with arrows pointing to the parts of his body.

The child's skill in knowing flags of all countries was used as a strategy so that he recognized the parts of his body. A caption was created for this purpose, associating each part of the body with the name of a country's flag, and the child was asked to place each flag in the body's part corresponding to the caption's indication.

To initiate the intervention, the child was invited to play and sit on the floor. When opening the material, displaying the flags and the caption's picture, the child read all the material; and at this time, researcher, child, mother, and father were sitting on the floor, attentive to the explanations provided. The process initiated along with the child, with the identification of the first flag corresponding to the body's part presented in the poster. The child did all by himself with great agility (Group B: stage 2).

After this, a book of Social Stories was presented to him, (Group B: stage 3), which contained the arrangement of the body's parts already named. After that, Social Stories regarding the bath (Group A) were presented and explained to the child, describing in pictures the necessary guidings for this stage: "I can take a bath by myself, 1. I will open the shower, 2. I will get wet, 3. I will wash the hair, 4. I will wash the arms, 5. I will wash the armpits, 6. I will wash the upper body, 7. I will wash the legs, 8. I will wash the penis, 9. I will wash the bottom, 10. I will wash the feet, 11. I will get wet, 12. I will dry." The child read the Social Stories and often repeated the phrase "I can." The mother asked the reason why and the child responded: "Because I am already a little man and I have a few hair".

The use of the phrase "I can" and "I will" by the child was a significant evolution, considering his difficulty in using pronouns, always using the third person singular. A copy of the Social Stories of the bath was prepared to strengthen the intervention (Group B: stage 4), covered by a waterproof paper that was placed in the bathroom, under the shower, so that child was able to see it to guide himself. After that, the mother was asked to take him to the bathroom and explain the reason why that poster was there.

After that, a video with a little mouse taking a bath was shown, and the child watched it attentively (Group B: stage 5). Giving continuity to the intervention, the child received several drawings, crossword puzzles, filling, painting, and cutting activities on the subject in question, so that he could learn the content in a free way (Group B: stage 6).

At the end, the child was once more explained about the importance in taking a bath by himsef, and his parents were guided for incentive and evaluation of the adaptation to Social

**Table 1.** Nursing diagnoses, prescriptions and design of the nursing system and planning, based on Orem's theory, with terminology ICNP 2.0

| Self-care requisites | | | CAC > DACT = DFAC | Nursing diagnosis - Nursing results | Nursing systems - Methods of helping | Nursing interventions |
|---|---|---|---|---|---|---|
| Universal | Development | Health deviation | | | | |
| | | | | | Supportive-educative. | |
| X | | | X | Child with ability to bathe itself at a decreased level.<br>-<br>Child with ability to bathe itself in at an increased level. | - Guiding and directing;<br>- Providing physical and psychological support;<br>- Providing and maintaining a supportive environment to personal development; and<br>- Teaching. | Stimulating the child's autonomy when bathing itself. |
| | | | | | Supportive-educative. | |
| X | | | X | Child with confusion about body structure.<br>-<br>Child with confusion about body structure at a decreased level. | - Guiding and directing;<br>- Teaching. | Teaching body structures to the child. |
| | | | | | Supportive-educative. | |
| X | | | X | Child with ability to perform self-care of brushing teeth at a decreased level.<br>-<br>Child with ability to perform self-care of brushing teeth at an increased level. | - Guiding and directing;<br>- Providing physical and psychological support;<br>- Providing and maintaining a supportive environment to personal development; and<br>- Teaching. | Stimulating the child to perform autonomy in self-care with teeth. |
| | | | | | Supportive-educative. | |
| X | | | X | Child with ability to perform a compromised intimate hygiene.<br>-<br>Child with ability to perform an improved intimate hygiene. | - Guiding and directing;<br>- Providing physical and psychological support;<br>- Providing and maintaining a supportive environment to personal development; and<br>- Teaching. | Stimulating the child to perform autonomy in cleaning after defecation. |

CAC: self-care capacity; DAC: self-care demand; DFAC: self-care deficit. Source: authors, 2014.

**Figure 2.** Nursing intervention - Taking my bath. Group A: Social Stories, Group B: Intervention stages. Source: authors, Maceió - Alagoas, 2014.

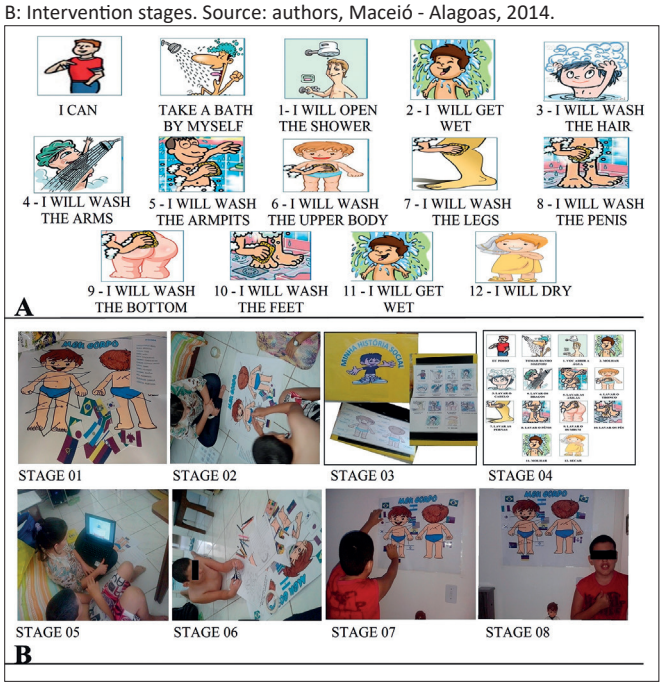
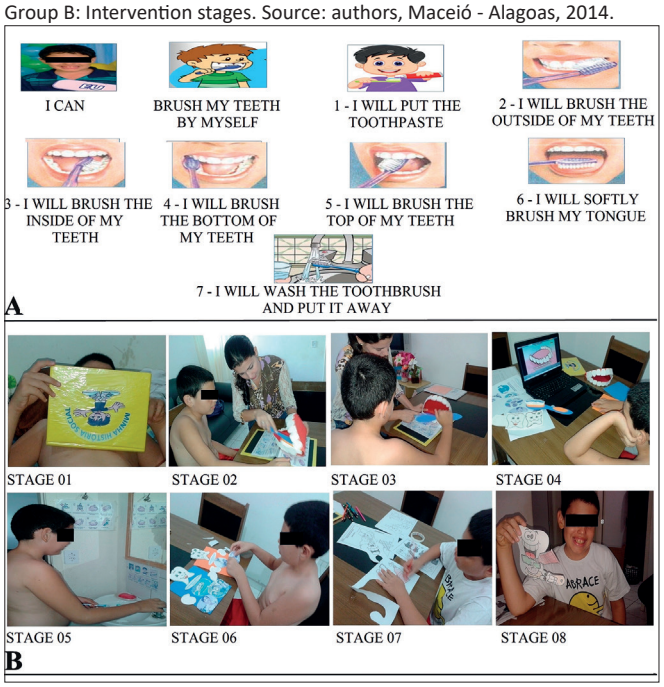



**Figure 3.** Nursing intervention - Brushing my teeth. Group A: Social Stories. Group B: Intervention stages. Source: authors, Maceió - Alagoas, 2014.




Stories. The child showed that he liked the activity and placed it in his room (Group B: stages 7 and 8).

It is worth mentioning that the child stood up and showed difficulty in concentrating during the whole intervention; however, even with these difficulties, the intervention was effective due to the participation of the child and his parents.

One week after the intervention, with the purpose of evaluating the application of the Social Stories regarding the bath, the mother said in the interview:

> *It was really nice. I took him to the bathroom, showed him the pictures, and I made him recall all that process that you [...] asked him and showed him everything, and then, he remembered, "I can"! He kept repeating, "I can! I will" [...] on the first day it was a little bit difficult [...] when it was Monday morning [...] I woke up earlier to take him to school, so he had a long time [...] he read everything, until the 12nd, then he did everything pretty well, and it was easy during the week. I did not expect such results [...] pictures, association [...] very nice, I liked it very much, and your work is wonderful (Mother).*

## Nursing intervention 02 - Brushing my teeth

Nursing diagnosis: Child with ability to perform self-care for brushing his teeth in a decreased level. And the nursing intervention proposed: Stimulating the child's autonomy in self-care with teeth. The second intervention, as shown in Figure 3, worked with the way of brushing teeth and the reason for doing so.

First, the Social Stories were used (Group A): "I can brush my teeth by myself, 1. I will put toothpaste on the toothbrush, 2. I will brush all back of my teeth, 3. I will brush the inside of my teeth, 4. I will brush the bottom of my teeth, 5. I will brush all top of my teeth, 6. I will softly brush my tongue, 7. I will wash my toothbrush and put it away" (Group B: stage 01).

After that, the correct way of brushing was explained and shown, with a mouth mold and a toothbrush (Group B: stage 02). Then, the child brushed the mouth mold (Group B: stage 03). As a form of memorization, a cartoon video was shown, in which steps of brushing the teeth was explained in detail (Group B: stage 04).

In the next stage, after placing the Social Stories in the bathroom, the child brushed his teeth under supervision, following the step described in the Social Stories (Group B: stage 05). Consequently, in the next stage, the second learning activity was carried out, where the child elaborated reminders, entitled: What makes my teeth clean and healthy and what makes my teeth dirty and decayed (Group B: stage 06).

In this stage, the third learning activity was carried out, in which the child received several activities: Crossword puzzles, mystery word puzzles, drawings to color, and dolls to build (Group B: stages 07 and 08). At last, in this stage, evaluation of the previous intervention and guidance on the current intervention's reinforcement were carried out with the child's mother.

The mother reported that the child was a little resistant to brush his teeth, and became agitated for having to brush his teeth by himself. However, the mother emphasized that the child could do it with persistence and patience.

> *He is a little bit resistant to brushing his teeth, he picks up a lot of toothpaste, then he picks it up, puts here, [...] this way and it is done, it takes seconds. Then, I come back, ask him to follow the steps, to look, to follow the*

*first step. Then, he gets annoyed, takes my hand, "hey you want more, with help, with help" [mother imitates what her child says]. "No, look here, I can", then, he does not want to listen, takes himself apart, gets upset, puts his hand in his ear. Then, if I do not brush his teeth, he does not relax. He is having difficulties (Mother).*

Three weeks after the intervention, the mother reported that the child brushed his teeth, following all steps, relaxed, without any resistance:

*This morning, he put toothpaste on the toothbrush and brushed his teeth, very independently, he followed every step. The only problem is the quickness. I ask him to take a little bit longer to do it [...] and then, he does it correctly (Mother).*

## Nursing intervention 03 - Learning to clean myself after using the bathroom

Since the first interview with the mother, she mentioned that it was a great challenge to teach the child to clean himself after using the bathroom, and this observation was the base of the nursing diagnosis and intervention: Child with ability to carry out a compromised intimate hygiene activity; with the purpose of stimulating the child's autonomy in cleaning himself after defecation.

Because it is a difficult intervention, it was determined that it would be the last intervention, due to the need for establishing a stronger bond with the child. Therefore, the father of the child mentioned that he did not believe that his child could clean by himself, whereas the mother believed that he would able to do it someday, but she thought that it would be a great challenge, classifying this intervention as "the final challenge".

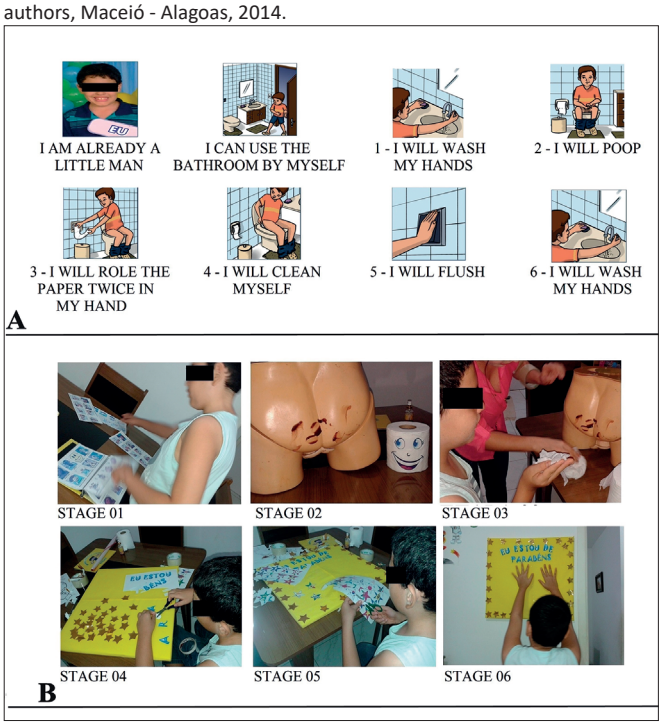
This intervention comprised five stages, as shown in Figure 4. In the first stage, the Social Stories were presented to the child (Group A): I am already a little man and I can use the bathroom by myself; 1. I will wash my hands; 2. I will poop; 3. I will roll the paper twice in my hand; 4. I will clean myself; 5. I will flush; and 6. I will wash my hands. (Group B: stage A). From the first moment, it could be seen how difficult it would be, since the child presented continuous nausea after reading the word poop.

Due to the child's reaction after reading the word poop, talking to him, reading the Social Stories together, explaining the reason for cleaning himself, and calming him were required, and he was told to breathe deeply and slowly when feeling sick, until nausea was gone.

After the talk, the child was explained that for the second stage, a pelvis of an infant mannequin, toilet paper, and a little bit of chocolate hair conditioner would be used to simulate poop (stools). All material were presented to the child, so that he could explore them, thus reducing his anxiety (Group B: stage 02).

Following the steps of the Social Stories, the correct form of cleaning himself was shown, encouraging him to proceed with the

**Figure 4.** Nursing intervention - Learning to clean myself after using the bathroom. Group A: Social Stories, Group B: Intervention stages. Source: authors, Maceió - Alagoas, 2014.




cleaning (Group B: stage 03). It is worth mentioning that the whole hygiene process was interrupted by episodes of nausea, and it was necessary to stop and do the breathing exercise. However, the child was able to perform the activity.

Due to the complexity in the process of changing a habit, offering incentive and recognition of the child's initiative was paramount. For this purpose, in the third stage, a board was constructed with the child, which was entitled "Congratulations to me", (Group B: stage 4) where the child, whenever cleaning himself, would gain a star, and because of the attraction of the child for flags of all countries, stars with the flags were made (Group B: stage 05) as rewards for achievements after going to the bathroom. After that, the board was placed in the child's room (Group B: stage 06).

Regarding the evolution of the child, the mother mentioned:

*For him, the first day was very easy, he [...] first [...] stayed in the bathroom saying that he knew how to clean himself, that he would win the little star. The first day was easy, and when he cleaned himself, he won a star, and it was a celebration. The second day [...] he was a little bit more traumatized, he felt like vomiting, he felt sick several times, and then he breathed, breathed, and made it, [...] he vomited a little bit [...] However, he made it. Today was also very easy, [...] he is to be congratulated, and he is choosing the little stars, he picks up the little stars. Today it was the Mauritania's star, "Congratulations to you" (the mother imitates what the child says). It is a great joy, very good!*

## DISCUSSION

The Orem's nursing process was followed when performing self-care with the child with Asperger, which made it possible to systematize data collection, with the purpose of making nursing practice openly assertive, and especially, to value the own knowledge of nursing as far as is used and transmitted in care and research.[23]

It is worth mentioning that the care plan outlined was flexible, individualized, and based on development, age, and potentialities, with viable goals to be achieved, subject to changes according to the child's particularitities.[10]

Regarding the Orem's nursing system theory, it was evidenced that the child of this study fitted in the partially compensatory system of nursing, since he could only perform his activities with his parents' help. Therefore, the nursing system chosen to intervene by means of the Social Stories was the supportive-educative, which is a key system to meet self-care demands, since nurses assist people to become their self-care agent, so that they effectively adjust to the defined therapeutic behaviors.[24]

The application of the self-care theory enabled to establish diagnoses, interventions, and results that, when considering the Orem's steps proposed and including the Social Stories in the context of the child, achieved its engagement in self-care.[25]

Regarding encouragement to the child's autonomy, the Social Stories are effective, as they enable to explore the meaning of behavior, based on the perspective of a child. They lead to several benefits, which include improvements in social interactions, as well as, in educative contexts;[26] however, there is little consensus in the literature about the effects of Social Stories, as well as little scientific material produced in Brazil on the subject.

The affirmation concerning the benefits can be corroborated in this study, through the child's evolution after weekly interventions with the Social Stories, allied to playful activities. As observed, the use of pictures is an effective resource in the teaching and learning of a child with Asperger, since they attract attention and facilitate memorization, serving as visual scripts. The child in question no longer fitted in the partially compensatory system, in which his mother performed self-care activities together or for him, but in the supportive-educative system, in which he acquired ability and motivation to take care of his own body.

The use of playful resources for learning strengthened the child's autonomy, creativity, motor coordination, concentration, patience, and capacity to work in group, as goals were established and met successfully.

## CONCLUSION

After the interventions, an increase in the child's self-care capacity was found, as he became an active individual in the provision of his self-care. Therefore, the child started to carry out his hygiene in an independent form, as follows: taking a bath, brushing his teeth, and cleaning himself after defecation.

It is worth mentioning that the family was essential in the process of autonomy acquisition by the child with ASD, since the evolution perceived in the child was a result of dedication and interest of his parents in the adoption of the Social Stories.

This initiative is expected to encourage further studies based on the consolidated knowledge of a nursing theory, with methods, tools, approaches, or techniques available in the literature.

This study has as limitation the lack of studies using the self-care theory with the Social Stories applied to children with ASD, which makes it difficult for a comparative analysis; and for using a single case and requiring expansion of the sample.

As a contribution, it illustrates possible forms of care at home, with capacity to value the child's self-care potential, in which the association of the Orem's theory with the Social Stories was presented as an effective strategy for the child's self-care encouragement, contributing to the innovation of nursing care.

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[a] Extract of the Nursing Program's conclusion paper entitled: *Cuidado de Enfermagem no domicílio a criança com espectro do autismo através da social stories* (Nursing care at home to children with autism spectrum by means of social stories), based on the Dorothea Orem's theory, presented at the School of Nursing and Pharmacy of the Federal University of Alagoas (UFAL) in 2014.