

# Systematization of Nursing Care for Pediatric Users with Congenital Vascular Disease: Experience Report

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**Abstract**— *Objective: to report the experience of applying Nursing Care Systematization to pediatric users with Congenital Vascular Disease. Methods: This is a descriptive study, like an experience report. The sample selection followed the non-probabilistic criterion, where the participant was included in the study for convenience. Nursing Care Systematization was applied to a minor who was admitted to the Metropolitan Hospital in the city of Belem/PA - Brazil. The precautions were taken care by nurse and governess stage, along with academics from the 9th span the of the Bachelor of Nursing course at a private Higher Education Institution. He carried out the monitoring of the child span the 02/10/2020 to 04/03/2020. In order to construct the present report, six moments were obeyed: in the first moment, the trainees' history of the child was known, in the second moment, the Nursing Problems were listed, in the third moment, the Affected patterns, the fourth time, scored to the Diagnostic the Nursing as the North American Nursing Diagnosis International (NANDA-I), the fifth time, outlined if the expected results, Finally, the sixth time - the Nursing Prescriptions. Results: Patient remains hospitalized, under the care of the team, stable, bandaging the operating room every 4 days, waiting to perform an embolization action that is still in the process of releasing material. Conclusion: The application of the Nursing Assistance Systematization enabled a unique and specific planning to meet the user's demands, through the nursing problems encountered, giving quality to the development of care and user satisfaction.*

**Keywords**— *Nursing, Nursing Care, Chid, cardiovascular disease, Child Health.*

## I. INTRODUCTION

The use of the Systematization of Nursing Assistance (SAE) by professional nurses is essential to improve the management of care and super air the present weaknesses and s in institutions health, in addition to r a methodology that contributes to one better process management, as it allows quality assistance through systematic care<sup>[1]</sup>.

Nursing professionals use SAE as an instrument to provide care, because in addition to being regulated in Brazil, it confers quality in care management and an organized and structured planning to deal with the demands of users<sup>[2]</sup>.

However, the care and management practice nurses permeates through a complex process to be r and Alizada, given the intuit the to promote, maintain or restore a person's quality of life, family and community is influenced of the service organization health by the various ways in which professionals perform their assistance and thus, weaken the line of care and full implementation of SAE<sup>[3]</sup>.

In this scenario, SAE is used as a specific nursing action and it is essential for strengthening health care for the user. The nursing process (NP) is then a scientific method designed to improve care for the human being in an integral way<sup>[4]</sup>.

The statistical index of death in babies with congenital heart disease corresponds to 24% due to birth defects every year. The Confederate diseases rem instability in the first days of life for newborns (NB), but DIAGNOSTIC the and prompt treatment are essential to avoid serious problems with hemodynamics and injuries to other organs, as well d and confer a good prognosis and reduce morbidity and mortality rates<sup>[5]</sup>.

The nursing care developed for the child with congenital cardiac malformation must be performed, in view of a well-structured and imminent care plan, in view of the aggravating condition that the disease confers on the children, due to rapid clinical deterioration, heart failure and crises hypoxia<sup>[6]</sup>.

This research is justified because of the large role d nursing to help the family in the prevention of disease, the relief sentiment the suffering as well as to protect and promote the best quality of health. And nursing team also promotes health conditions more compatible with life without major regrets preserving the growth and development the cardiac child<sup>[7]</sup>.

Thus, the objective of this study is to report the experience of applying Nursing Care Systematization to pediatric users with Congenital Vascular Disease.

## II. METHODS

This is a descriptive study, like an experience report. The sample selection followed the non-probabilistic criterion, where the participant was included in the study for convenience. SAE was applied to a minor who was admitted to the Metropolitan Hospital in the city of Belem / PA / Brazil, in the care of vascular surgery due to the suspicion of Hemangioma, long-standing left foot ulcer and severe anemia, probably due to the loss blood. According to information collected by the parent, the minor undergoes treatment and follow-up at the Hospital Santa Casa de Misericordia in the city of Belem / PA, Brazil, has a history of showing active bleeding in the left foot, with improvement after compressible dressing.

Applied to SAE for assistance and preceptor nurse stage, along with academics from the 9th span the course of Bachelor of Nursing of an education institution who were experiencing stage oversees the in that hospital. He carried out the monitoring of the child in the Edo Period the from 10.02.2020 to 04.03.2020.

To construct the present report, it was necessary to obey six specific moments to better detail the experience. In the first moment, the trainees' history of the minor was known, presented by the assisting nurse and internship preceptor. The students had the opportunity to pass r the first nursing visit with the user, realized walk the care nursing already prescribed for the customer as well as set new goals and contribute to the SAE less.

Then in the second moment, listed to the nursing problems (PE) found during the passage m of view and listed for SAE, with intuit the offer a service suitable with resoluteness and that meets user demands.

It held in THIRD date, the proper preparation of Affected Standards (PA), in a systematic way to manage the best possible care to the user, as well as act in u ma li n ha care full and resolute.

Were applied on the fourth time, the Diagnostic the Nursing (DE) DE as the North American Nursing Diagnosis International (NANDA-I). To continue in smaller nursing process, the fifth time, outlined to the Expected Results (ER) according to each problem encountered during the care of the bedside.

Finally, in the sixth moment, the necessary interventions and Persistent Nursing and Nursing Prescriptions (PE) were scored.

## III. RESULTS

Please be informed that during the stay in the stage of setting and monitoring the users were held to the relevant care, in order to promote the process of teaching and learning of the students, but above all, offer satisfaction to user through nursing care. The SAE of the minor is then reported:

### DESCRIPTIVE HISTORY

Minor (A .PSSB), 10 years old, weighs approximately 50 kilos, female, admitted to the Metropolitan Hospital of Urgency and Emergency on 01/06/2020 from UPA Marituba, under the care of the vascular surgery team due to the suspicion in hemangioma , ULC was on the left foot longstanding and severe anemia, probably due to blood loss . Its parent reported that the youngest has had a vascular malformation since birth. She started with a red spot on her left foot and was diagnosed with Hemangioma. After the age of 5 he started to develop a blister in his limb and from the age of 7 that blister broke and developed an ulcer, but when he broke it, he triggered hemorrhage in the difficult place to stop, with improvement after a compressive dressing. As the worsening of the clinical picture, the lowest one stopped studying in the 2nd grade. Family medical history: Hypertension and Diabetes mellitus. Allergic to Ibuprofen. Complementary exams were performed: Magnetic Resonance Imaging (Porto Dias- presented at admission), Angiotomography (Metropolitan) and Angiography (Hospital das Clinicas). After medical evaluation, she was diagnosed with arteriovenous malformation (AVM) and left foot ulcer. He underwent antibiotic therapy with Ceftriaxone and Clindamycin (D10) and followed by drug treatment with propanolol 40 mg (VO), tramadol 50 mg (EV), dipyrone (EV), deltramethrin (TO) and ketoprofen 100 mg (EV). Complains of moderate pain (5-6 according to pain scale) in the left foot and lumbar region when trying to move around in bed or ambular, but on the day the dressing is performed, the pain is more intense (9-10 - as pain scale) and with that it presents irritability and aggressiveness, that is, there is a variation in your mood (SCI). Impaired physical mobility, makes use of a wheelchair. Her dressings are performed in the operating room for 4/4 days, where she is submitted to spinal anesthesia and sedation. Vital Signs: normotensive (120x80mmHg), normothermic (36.2°C), nomocardio (82 bpm), eupneic (18rpm) and SPO<sup>2</sup> 96%. On general physical examination: pale, damp scalp and the presence of pediculosis, with no signs of edema and phlebitis, with deviation of the spine in the lumbar region and a compressive dressing on the left foot. Chest: symmetrical. Pulmonary auscultation: presence of breath sounds and absence of adventitious

sounds. Auscultation heart: normocardio with presence of heart sounds phonetically normal in 2 times (BCNF). Abdomen: painless on palpation. Abdominal auscultation: hydro-air noises present. Performs their personal hygiene, but has a deficit of self-care, guidance is provided. Tolerates oral diet offered. Physiological functions of elimination: present and spontaneous.

#### FIRST NURSING EVOLUTION

Date: 11/02/2020 to 16hs. Minor conscious and oriented in time and space, verbalizes, breathing in ambient air, restricted to the bed. Vital signs: normotensive (120x80 mmHg), normothermic (36.2°C), eupneic (18rpm), normocardio (82 bpm), satisfactory peripheral perfusion (SPO<sub>2</sub> 98%). Maintains AVP in MSE (10/02/20) salinized. On physical examination: wet, leathery skin with the presence of pediculosis, clean and complete external ear cavity, isochoric pupils, pale, full oral cavity with the presence of dirt, incomplete dental arch, and a tongue with a rough finish. Absences of infarcted ganglia. Thorax: symmetrical. It has a deviation in the spine in the lumbar region. Pulmonary auscultation: presence of breath sounds and absence of adventitious sounds. Auscultation heart: normocardio with presence of heart sounds phonetically normal in 2 times (BCNF). Abdomen: painless on palpation. Abdominal auscultation: hydro-air noises present. He keeps a compressive dressing on his left foot, performed in the operating room on 02/10/2020 and with a schedule for exchange on 02/14/2020. Tolerates oral diet offered. Physiological functions of elimination: present and spontaneous. Waiting for an angiography report of the left lower limb. It is still under observation by the nursing team.

#### SECOND EVOLUTION OF NURSING

Date: 02/18/2020 at 3pm. Minor conscious and oriented in time and space, verbalizes, breathing in ambient air, restricted to the bed. Vital signs: normotensive (100x60 mmHg), normothermic (36.4°C), eupneic (20rpm), normocardio (99 bpm), satisfactory peripheral perfusion (SPO<sub>2</sub> 96%). Maintains AVP in MSE (18/02/20) salinized. On physical examination: scalp clean and with the presence of pediculosis, external ear cavity whole and clean, isochoric pupils, pale, oral cavity integrates with the presence of dirt, incomplete dental arch, savory tongue. Absences of infracted ganglia. Chest: symmetrical. It has a deviation in the spine in the lumbar region. Pulmonary auscultation: presence of breath sounds and absence of adventitious sounds. Auscultation heart: normocardio  
Abdomen: painless on palpation. Abdominal auscultation: hydro-air noises present. He keeps a compressive dressing on his left foot, performed in the operating room on

02/14/2020 and is in preparation to perform a dressing change today. Maintains zero oral diet. Physiological functions of elimination: present and spontaneous. Awaits authorization to release material to perform embolization at the Hospital de Clinicas Gaspar Vianna Foundation. Follows in observing the care of the staff of Nurse.

#### IV. DISCUSSION

For each nursing problem encountered, a Nursing Diagnosis was applied, proceeding with the classification of the affected pattern, as well as the SAE and proceeding with the Expected Result and the appropriate nursing interventions act. Thus, there is the following Assistance Plan:

1°PE: Restriction to the bed. PA: Physical mobility. DE: Impaired physical mobility. RE: with the support wheelchair, the patient will circulate in areas permitted clinical pediatric to 2 times a day; remain performing their personal hygiene and physiological functions with the help of the bath chair. IE: Stimulate leaving the bed with the aid of a wheelchair twice a day, (according to the clinical picture) - for 30 minutes to 1 hour. 10: 00h and 15: 00h. Perform physiotherapy in bed - Morning.

2nd EP: Restricted to the bed. PA: Physical mobility. DE: Risk of falling; ER: falls do not occur during your stay in the hospital. IE: Attention - Maintain high gradations whenever manipulated; guide a companion to assist her whenever the child leaves the bed.

3rd EP: Invasive Device. PA: Peripheral Venous Access (AVP). DE: Risk of infection. RE: Do not develop an infectious condition during your stay in the hospital. IE: Attention - Salinize the AVP before and after administration of medications with 0.9% saline. • Perform an AVP change every 96 hours; keep cover clean and clean - Morning (after spray bath).

4th EP: Pressure injury (LPP) in the Left Lower Limb (MIE). PA: Left foot injury. DE: Impaired skin integrity characterized by an LEM injury, related to bed restraint. ER: The lesion regressed as a result of vascular treatment; do not develop LPP while in hospital. IE: Prepare the patient for 4/4 days to perform dressing in BC - Morning; cover the dressing before spraying it to keep it dry - Morning; forwards patient to perform dressing in the surgical block of 4/4 days - Afternoon; moisturize MIE and bony extremities with effusion to prevent LPP - Morning, Afternoon and Night.

5th EP: Inadequate hygiene. PA: Self-care deficit. DE: Self-care deficit, characterized by the presence of dirt, related to poor hygiene. ER: guide the patient and the

companion on how to perform and adequate hygiene at the time of the sprinkler bath - Morning; perform physical examination after spray bath - Morning.

The patient remains hospitalized, under the care of the team, stable, bandaging the operating room every 4 days, waiting to undergo embolization, which is still in the process of releasing material.

## V. CONCLUSION

Research has gaps in knowledge in relation to the selected theme to be a rare case, hindering the development of actions by health professionals, in particular to apply the systematization of care in nursing.

The application of the Nursing Care Systematization enabled a unique and specific planning to meet the user's demands, through the nursing problems encountered, giving quality to the development of care and user satisfaction.

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