


## Vascular accesses and infusional therapy: An experience report

 <https://doi.org/10.56238/sevened2024.012-052>

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### ABSTRACT

**Introduction:** The practice of intravenous infusion is necessary worldwide, benefiting millions of individuals daily in health recovery interventions at all levels of care (GORSKI et al, 2021). The opportunity to carry out the supervised practices of vascular access and infusion therapy, in a hospital environment that has an exclusive and specialized service for the evaluation of venous catheters and conditions for performing infusion therapy, with trained professionals and state-of-the-art material resources, adds value in the formation of knowledge, enabling the student to know a specific service for this purpose. contributing directly to the training of a differentiated professional. **Objective:** To report the experience and activities developed in the Vascular Access and Infusion Therapy Team of a Hospital Complex. **Methodology:** This is a Qualitative Research, with a descriptive approach, of the experience report type. The study was developed during the supervised post-graduate internship practices, in a Vascular Access and Infusion Therapy Team, of a hospital complex in Southern Brazil, carried out from February to June 2022. The team has clinical nurses and a supervising nurse, these trained professionals are responsible for care practices related to vascular catheters and infusion therapy throughout the institution. **Results:** During the period of supervised practices, several activities studied in the theoretical contents were transposed to practice, dialoguing with multiprofessional knowledge, allowing the construction of unified theoretical/practical knowledge, such as: Inspection of puncture sites, catheter stabilization investigations and corrections, care such as evaluation of dressing conditions, signs of complications in puncture sites and catheters, identification of dressings and validity of devices, among others. **Final Considerations:** When we perform our nursing actions, we naturally draw parallels between the realities of the known environments, referring to questions and the search for information that improves our care, that elevates nursing care, making it possible to level or seek to replicate positive experiences, searching for more appropriate resources, even if, many times, the realities of some services provoke feelings of utopia. The understanding of the functioning of a Venous Access Team, of the possibilities of implementing this specialized service, motivates the search for improvements in our daily care, considering that it is possible to build a team capable of meeting this need, conquering its professional space through statistical data and daily samples of productivity and relevance to health. **Contributions/Implications for Nursing/Health:** The experience in the Vascular and Infusion Therapy Team allowed me to observe and reflect on issues such as possibilities of improvement in some nursing processes in my own work environment, from the availability of materials that can be better managed between nursing services and pharmacy/warehouse, reducing waste of supplies and generating financial savings to the institution, as well as perspectives for planning the time spent on processes.

**Keywords:** Intravenous infusions, Vascular Access Devices, Patient Safety, Central Venous Catheters.

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## INTRODUCTION

The practice of intravenous infusion is necessary worldwide, benefiting millions of individuals daily and in interventions for health recovery at all levels of attention (GORSKI et al, 2021).

The opportunity to carry out supervised vascular treatment and infusion therapy in a hospital environment that has a specialized and exclusive service for the evaluation of venous catheters and conditions for carrying out infusion therapy, with trained professionals and material resources of point, adds value in the formation of knowledge, enabling the student to know a specific service for this contributing directly to the training of a distinguished professional.

By experiencing this reality, it is possible to draw a balance between the concepts learned and the classroom with the experiences in the field of practice. Based on this assumption, the objective is to report the experience and activities developed in a Vascular Access and Infusion Therapy Team of a Hospital Complex in the South of Brazil, inherent to the Supervised Practices of the Specialization course in Vascular Accesses and Infusion Therapy, held from 02/19 to 06/17, 2022.

The hospital complex has 9 hospitals of various specialties such as: medical, surgical and maternal-infant clinics; reference in cardiology; in neurology and neurosurgery; in clinical pulmonology, thoracic surgery, and chest radiology; in oncology; and in Pediatrics; It has an exclusive center for transplants, maternity and women's center.

The Vascular Access and Infusion Therapy Team has its physical structure located in a room on the 3rd floor of the Hospital of one of the hospitals in the hospital complex, with an equipment of 14 care nurses and 1 supervisor nurse. These trained professionals are responsible for care practices related to vascular catheters and infusion therapy throughout the institution.

The project of the Vascular Access and Infusion Therapy Team of the institution began on 08/03/2015, and became a Basic Management Unit (UGB) in the entity on 05/01/2016.

## METHODOLOGY

This is a Qualitative Research, with a descriptive approach, of the experience report type. The study was developed during the supervised post-graduate internship practices, in a Vascular Access and Infusion Therapy Team, of a hospital complex in Southern Brazil, carried out from February to June 2022. The team has clinical nurses and a supervising nurse, these trained professionals are responsible for care practices related to vascular catheters and infusion therapy throughout the institution.

The experience in the Access Team allowed me to observe and reflect on issues such as possibilities of improvement in some processes offered in my own work environment, from the availability of materials that can be used in the field of This can be better managed between nursing and pharmacy/warehouse services, reducing waste of inputs and generating financial savings for the



institution, as well as perspectives of time planning spent on processes.

One of the resources used by the Team in the management of time and processes is through the Trello application, which interconnects the work of all the nurses in the Team, based on the requests. The trend of the hospitals' nursing equipment through the Tasy program used in the institution, and both the app and the program are simultaneously and constantly fed according to the sequence of trends evaluated by the Team.

Multiprofessional interaction is intrinsically felt in the exercise of nursing and this space of e-stagion becomes notorious as we develop a work that dialogues with different professionals during its stages of evolution.

The request for intravenous access is an example of a work process that requires a complementarity between medicine and nursing as a prerequisite from the evaluation of the need for central venous access to the your continuity of treatment by and this way. The areas of health knowledge are interconnected, and involve from the nurse of the responsible sector, to the availability of supplies by the pharmacy, to the release of the device for use, according to the analysis performed by the radiology service, to verify the positioning of the central catheter, building a dynamic and cyclical care.

During the period of the supervised practices, several activities studied in the theoretical contents were transposed to the practice, allowing the construction of unified theoretical/practical knowledge, such as: Inspection of puncture sites, Investigations and corrections of catheter stabilization, care such as evaluation of the condition of the dressing, signs of complications at the puncture sites and catheters, identification of dressings and validity of devices, among others.

Among the practices experienced, I elucidate the analysis of the functioning of the venous devices and the verification of the real need for their maintenance, performing a clinical case study of the patient and therapeutic plan, as well as Possibility of recovery of the access route and definition of the use of the clearance threshold as indicated.

These and other actions enrich the work of economy of hospital resources and the preservation of the venous network of the patients. Another example of activity observed during the period of e-stagion was the implementation of the thyroid colon with Alteplase in the central venous catheters in neonate, paediatric and adult patients, which only in the context of the cost of the medication used, the Team evidenced through scientific articles, results and statistics of care, recording the cost-benefit.

The experience in the internship field allowed me to perform venipunctures that are difficult to access with the aid of a user; difficult venipunctures with the use of a vein viewer VEIN viewer; insertion of PICC catheters with the use of US and guided by the Sherlock tool, which indicates whether the catheter is in the correct direction, at the same time. heart, requesting an evaluation of the



cardiac tracing, which showed malpositioning of the chord with the undulation of the P wave.

During the practices, I performed venous access dressings with the use of a CHG plate and sealing of catheters with Tauloridin, blood collection for laboratory tests in patients with difficult access, I observed the evaluation and procedure of Hypodermoclysis; Thebservei and assisted in Prescriptions of materials for puncture and dressing procedures; I participated in the elaboration of records such as evolutions, notifications, planning of appointments; I participated in nursing procedures for the entire population tended by the Team (neonate, pediatric, adult and elderly), such as: difficult venipunctures ; US-guided PICC ; venous access dressings.

Some experiences stand out in our memory, and they can be associated with personal singularities, and these touch us in a unique way, referring to what considerations, reflections on care, on the role of nursing and where it can be. We would improve the process of caring, becoming more and more qualified professionals without the loss of our essence.

On one of the days of the supervised curricular practice, there was a request for the evaluation of the conditions of venous access to an elderly patient, who was in the emergency sector and was considered to be difficult to access venous.

We evaluated the patient's path , history, medical and nursing evolutions, preventive exams and therapeutic plan, and observed that there was a record that the patient had a range of orientation, mental confusion and aggressiveness tag.

When we arrived at the sector, in the midst of the scenario of multiple visual information that is already expected from a health care sector, with its service capacity filled, we talked to the nurse of the sector, identified our patient, the patient who was in the hospital. He was on a stretcher, and when we went to him and they found that he was crying, groaning, communicating verbally, complaining about the way he was being restrained and cold.

The elderly man was inadequately restrained , lying on the upper limb, twisted backwards, which had an extensive hematoma from his hand, progressing to the upper limb. This arm contained a compressive wound that would have been caused by the elderly man himself tearing off a peripheral venous access from this limb.

At that time, this patient needed more attentive care, better bed accommodation , and presents supervision. We accommodate the elderly, cover them with a blanket, offering better comfort, explain the precedence, calming the measure of the possibility.

We evaluated the patient's lower limb, noticed multiple hematomas and a weakened venous network as a result of clinical quadri ro and advanced age, we used ultrasound, and peripheral venous access was not indicated for this patient under these conditions. We informed the physician in charge of the patient and she requested puncture and jugular, but the nurse of the Vascular Access Team argued that this would not be an adequate solution to the planned therapy, and it was



not appropriate for the patient. a long-lasting and quality stroke, suggesting a short-term stroke, with the whole trend subsequently evolving.

The assistance of the Vascular Access Team should have been requested at the right time, as soon as the patient's clinical condition was observed, providing adequate care, since it would have adopted a specific conduct, aiming at the safety of the patient. speeding up your healing process. This care would inhibit the exhaustion of the venous network of the elderly, avoid multiple punctures to which they were submitted, alert them to the care of fixation and management in the complacency of the patient who experienced unnecessary suffering when withdrawing your venous access. The planning of the actions is to anticipate the actions, which is a substantial impact on the care of the integrity of the venous network of the patients.

## CONCLUSION

When we carry out our nursing actions, we naturally draw parallels between the realities of the known environments, referring to questions and the supply of information that enhances our assistance, which elevates care. It is possible to improve or improve the replication of political experiences, seeking more adequate resources, although the realities of some services often evoke feelings of utopia.

The whole period of theoretical classes, and especially that of the practical classes, was fundamental for the building of knowledge, meaning the experience built, providing restlessness for the improvement and adequacy of my Nursing assistance in the care of the preservation of the venous network of patients, which are essential routes for most of the prescribed drug treatments.

The understanding of the functioning of a Venous Access Team, of the possibilities of implementing this specialized service, motivates the search for improvements in our daily tendency, bearing in mind that it is possible to build a team capable of to meet this need, conquering their professional space through statistical data and daily demonstrations of productivity and relevance to health.



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