Revista de Enfermagem
do Centro-Oeste Mineiro
2020;10:e3084
DOI:10.19175/recom.v10i0.3084
www.ufsj.edu.br/recom

RECOM
REVISTA DE ENFERMAGEM DO CENTRO-OESTE MINEIRO

Experience Report

VIVÊNCIAS DO CUIDADO DE ENFERMAGEM EM UNIDADE DE DIÁLISE: RELATO DE EXPERIÊNCIA

EXPERIENCE IN NURSING CARE IN DIALYSIS UNIT: EXPERIENCE REPORT

EXPERIENCIA DEL CUIDADO DE ENFERMERÍA EN LA UNIDAD DE DIÁLISIS: INFORME DE LA EXPERIENCIA

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RESUMO
Objetivo: Relatar a experiência vivenciada por uma discente de enfermagem ao cuidar de pacientes renais em hemodiálise. **Método:** Estudo descritivo do tipo relato de experiência realizado em uma unidade de diálise na região Nordeste do Brasil. **Resultados:** Os profissionais de enfermagem desenvolvem assistência direta aos pacientes, antes, durante e após a sessão de hemodiálise, com ênfase na monitoração dos sinais vitais e na prevenção de complicações. **Conclusão:** A discente vivenciou o processo de trabalho da equipe de enfermagem no cuidado ao paciente renal, atuando na prevenção e atendimento das principais complicações decorrentes do procedimento dialítico, visando a reduzir danos e a elevar a qualidade assistencial.
Descritores: Insuficiência renal crônica; Diálise renal; Enfermagem em nefrologia; Cuidados de enfermagem.

ABSTRACT
Objectives: To report the experience of a nursing student in the care of renal patients on hemodialysis. **Method:** descriptive study of the type of experience carried out in an analysis unit in the Northeast region of Brazil. **Results:** nursing professionals provide direct assistance to patients before, during and after the hemodialysis session, with emphasis on monitoring vital signs and preventing complications. **Conclusion:** the student experienced the work process of the nursing team in the care of the renal patient, acting in the prevention of and assistance to the main complications resulting from the dialysis procedure, aiming at reducing damages and raising the quality of care.
Descriptors: Renal insufficiency; Chronic; Renal dialysis; Nephrology nursing; Nursing care.

RESÚMEN
Objetivos: informar la experiencia del estudiante de enfermería en el cuidado de los pacientes renales en hemodiálisis. **Método:** estudio descriptivo del tipo de experiencia realizada en una unidad de diálisis en la región Noreste de Brasil. **Resultados:** los profesionales de enfermería hacen asistencia directa a los pacientes antes, durante y después de la sesión de hemodiálisis, con énfasis en monitorear los signos vitales y prevenir las complicaciones. **Conclusión:** el alumno experimentó el proceso de trabajo del equipo de enfermería en el cuidado del paciente renal, actuando en la prevención y atención de las principales complicaciones derivadas del procedimiento de diálisis, con el objetivo de reducir los daños y mejorar la calidad de la atención.
Descriptores: Insuficiencia Renal Crónica; Diálisis Renal; Enfermería en Nefrología; Atención de Enfermería.

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How to cite this article:
Costa BCP, Duarte FHS, Lima MA, et al. Experience in nursing care in Dialysis Unit: Experience Report. Revista de Enfermagem do Centro Oeste Mineiro. 2020;10:e3084. [Access_____]. Available in:_____. DOI: http//doi.org/10.19175/recom.v10i0.3084

INTRODUCTION

Chronic Kidney Disease (CKD), resulting from injury to the renal parenchyma and/or decreased kidney function, for a period equal to or greater than three months, can affect individuals in all age groups, but it is more frequent in elderly people. Among the diseases that most damage the kidneys, systemic arterial hypertension (SAH), diabetes mellitos (DM) and glomerulonephritis[1-2] stand out. The average annual number of new patients entering dialysis in Brazil has increased steadily from 2012 to 2017[3].

Hemodialysis (HD) is the most frequently used form of CKD treatment, and consists of a blood filtration process to remove toxic nitrogenous substances and excess water. Thus, patients are connected to a hemodialysis machine, for a variable period of time, which can reach up to four hours, at a frequency of three days a week. The prescription of this treatment is made, according to the patient's need, after a thorough evaluation carried out by a doctor, a specialist in nephrology[3]. The procedure is performed, predominantly, by the nursing team and asks for specific knowledge that makes it possible to carry out interventions immediately when necessary[4]. Despite offering improvements to the patient's quality of life, hemodialysis causes several damages, from a distortion of the body image, due to the use of a catheter or Arteriovenous Fistula (AVF), to psychological damages, to the family group, with personal repercussions and social. Failure to accept the problem and the necessary changes in lifestyle negatively influence treatment adherence[5].

In this sense, it is necessary to think about the performance of the nursing professional who has a fundamental role, throughout the procedure. Nursing care aims to identify and monitor the adverse effects of hemodialysis and prevent complications arising, in addition to developing educational actions to promote health. The complications that occur during the hemodialysis session can vary from occasional to severe and fatal, with fluctuations in blood pressure, headache, fever, chills, nausea and vomiting being the most common. The nurse is responsible for coordinating the nursing team, identifying the needs of each patient, implementing protocols in their care that prioritize patient safety and working together with the health team to provide the patient's well-being before, during and after the end of the procedure[1].

The practice of the Nursing Process (NP), through the Nursing Care Systematization (NCS) provides nurses with the organization and systematization of their care for evidence-based care, in addition to guiding clinical reasoning and decision making, giving quality to care and favoring the provision of safe patient care[6].

The experiences of the students, during graduation, are relevant for the improvement of the professional future, justifying the importance of actions and projects of university extensions that bring students closer to reality, stimulating the development of the critical and reflective sense, in addition to skills and competences to know how to be, do and live together. With this understanding, the aim of this study was to report the experience of a nursing student in caring for renal patients on hemodialysis.

METHODS

Descriptive study of the experience report type, which allowed the description of the activities experienced by a nursing student when caring for patients seen in a dialysis service, under the *Sistema Único de Saúde* (SUS, Unified Health System), for the care of chronic renal patients on dialysis, located in the Northeast Region of Brazil. This experience report was made possible, through the participation of undergraduate students in the eighth period of the Undergraduate Nursing Course, from a federal public university, in an extension project entitled "experiencing nursing care in a dialysis unit".

The activities were developed, from March to October 2017, with the participation in day shifts on Saturdays, from 7 am to 7 pm, making a total of 12 hours a week, totaling an hourly load of 120 hours. The registration of activities by the students was carried out at each shift, by filling in a field diary with a description of the activities observed and performed.

The development of the project resulted from the partnership between university professors and health service professionals, since all activities developed by students were supervised by nurses in dialysis rooms. It is worth mentioning that the actions reported in this study were experienced, concomitantly, to the realization of a research that allowed the access of students to the service, approved by the Research Ethics Committee of *Hospital Universitário Onofre*

Lopes (Universitary Hostpital Onofre Lopes) under Opinion n. 233.953.

RESULTS AND DISCUSSION

The actions in the dialysis unit were preceded by a technical visit to get to know the entire physical structure of the service, explaining the flow of patients, during care and presentation to the multiprofessional team. The duties and performance of the nurse specialist in nephrology in the hospital service for chronic and acute chronic patients were observed. One of the problems observed was related to the number of patients per shift, the time was reduced between the departure of patients from one shift and the entry of the next, due to the strict time of return of patients who live in the state and depend transportation provided by city halls. It was noticed that the need for agility gave an accelerated and stressful work rhythm to all the professionals of the nursing team.

The nurse's duties and care activities included direct care, guidance and education for patients and family members, especially with regard to doubts related to CKD and its treatment, the need for care, handling and maintenance of catheters and arteriovenous fistula. Because, the nurse is responsible for the evaluation and maintenance of accesses in hemodialysis, the interpretation of laboratory tests and also, for making decisions together with the medical team, in addition to being able to prevent, identify and treat complications presented by patients before, during and after the procedure [7].

The development of educational activities with the patient, in addition to guidelines related to the care of the AVF, such as not making great efforts and not compressing the arm of the AVF, as well as, not measuring blood pressure and not puncturing for collection of tests, among others. Research carried out in the Northeast of Brazil, identified gaps in knowledge of renal patients and highlighted the need for educational actions aimed at preserving access [8].

Communication between the nurse and the client is essential to establish an effective and efficient relationship of trust, and in the case of the AVF, care must be reinforced, constantly, by the nursing team, since care is carried out at home. Knowledge is essential for the adoption of self-care practices with access routes to HD[5,8].

It is worth mentioning that the nurse's duties with the renal patient, aim at the fulfillment of the rights ensured by Ordinance No. 1.168, which institutes the National Policy for Attention to Kidney Disease in Brazil, published in June 2004[9]. The nurse has a fundamental role to provide effective and quality care, he is the professional responsible for coordinating the nursing team, being generally the first to provide assistance in the face of the main complications that can happen during a hemodialysis session.

The existence of NCS implanted in a computerized system and the availability of computers in hemodialysis rooms facilitate the implementation of nursing diagnoses for patients, since, by clicking on the defining characteristics identified, the program lists the possible diagnoses. The main activities carried out during the study period were listed in Chart 1, divided into two categories: care and management activities.

Chart 1 - Distribution of the main care and management activities experienced by the student in the Dialysis Units.

ASSISTANCE ACTIVITIES	
Checking of the emergency cart when starting the 1st shift.	Checking of the medications available in the sector and record all of them in medical records.
Organization of patients for weighing before starting and at the end of the procedure.	Pressure measurement.
Installation of the system on the machines.	Assistance in changing the dressing of patients using catheters.
Monitoring of vital signs before, during and after the procedure and recording in the medical record.	Organization and opening of sterile material for the installation of the patient in the hemodialysis machine.
Puncture of arteriovenous fistula.	Programming the machine to start the procedure according to the medical prescription.
Connection of arterial and venous lines in the catheter used by the patient.	Evaluation of lines and capillaries installed, regarding the integrity and identification of the patient.
Evaluations of the parameters programmed in the machine.	Carrying out the nursing visit to each patient individually after the beginning of the procedure.
Performing physical examination on each patient.	Record of evolution and nursing prescription in the patient's record.

Identification of the main nursing diagnoses for patients with chronic kidney disease.	Assistance in the care of patients with complications that occurred during the hemodialysis procedure.
Returning blood to the patient to "disconnect" him from the machine.	Putting on a compressive dressing after removing the needles.
Removal of the used system and placement of it for disinfection.	Control of the number of times the capillary was used.
Record of occurrences during the shift.	Participation and discussion of assistance dynamics.
Assistance in the placement of a *Permcath* catheter in the patient.	Shift from shift to the next to take over the sector.
MANAGEMENT ACTIVITIES	
Assignment of the technical team.	Organization of the patient chart, according to the days that each patient will dialysis.
Protocolization of patient serologies in the system.	Control of the number of times the capillary was used.
Request for maintenance of machines according to the indicated frequency.	Ordering inputs for the responsible sector.
Ordering clothes and sheets from the laundry sector.	Call of the general services assistant, responsible for disinfecting the room.
Clearing the room for the next shift, after disinfecting the machines and armchairs.	Organization and separation of material for the next shift.

Source: research data, 2017.

The experience in the dialysis unit brought to the student a new perspective beyond what had been observed, during the expository and dialogued classes of the undergraduate nursing course, making it possible to observe the work dynamics in a private clinic specialized in hemodialysis.

The work dynamics in this sector is complex, requires technical skill and agility, functioning as an orchestra in perfect harmony, always respecting the individuality and particularity of each patient undergoing treatment for CKD. During the study period, it was observed that patients had difficulties to adequately adhere to the treatment, as many were elderly and dependent on their families. Studies carried out with renal patients revealed that among these factors, the disease's non-acceptance, the lack of care with the venous access and the non-compliance with the prescribed duration for dialysis treatment stand out[10-11].

Research with renal patients on hemodialysis identified greater physical suffering in patients who used a catheter as an access route for treatment. They reported difficulties such as fear of hurting the neck and bathing, since the catheter should not be wet at all, due to the risk of infection [8].

Body image disturbance was one of the nursing diagnoses identified in patients who were undergoing hemodialysis and were using a jugular vein catheter, they reported being ashamed and afraid of prejudice from people who physically distanced themselves from the patient. This diagnosis was also identified in patients who had a recent AVF and who needed larger dressings to protect access.

Research that investigated the domain of safety and protection in renal patients identified that among the risk diagnoses was the fear of infection, due to invasive procedures, which denotes the importance of the role of nurses and other members of their team, especially with the adoption of the correct hand washing technique, proper use of personal protective equipment, inspection of manipulation of access routes for hemodialysis, among other measures, such as disinfection of the machine and armchairs between treatment shifts[12].

Regarding infection prevention, the dialysis service uses specific protocols to prioritize patient safety, such as the description of aseptic procedures and techniques, availability of materials and reuse of lines and capillaries, as recommended by RDC No. 11/2014[13]. This experience provided the observation of the activities performed to comply with the technical regulation for the operation of the dialysis services contained in the Resolution of the Collegiate Directorate No. 11/2014 and Ordinance No. 389/2014 of the Ministry of Health, the work dynamics of each team, the protocols that are used for patient safety, the scales for assessing critically ill patients and the use of aseptic techniques, requiring a differentiated and objective assistance methodology, offering treatment according to the need and health condition of each patient[14].

A perceived fact, through living with renal patients, was how much they are sympathetic to each other in relation to difficulties with family problems, changes in lifestyle and difficulties in maintaining affective and marital relationships, after start of treatment. There is a real exchange of experiences and mutual encouragement, reinforcing the need to adhere to treatment in order to have a better quality of life. These aspects become even more important when considering results obtained in research that evaluated the quality of life of kidney patients with different types of instruments, as the results revealed the existence of stress and psychological suffering, due to the feeling of becoming a burden for their families[15].

In order to provide adequate nursing care and under the supervision of the sector nurse, the student had the opportunity to use the theoretical basis acquired previously, as well as to implement the NCS, applying the five stages of the NP: investigation, diagnosis, planning, implementation and evaluation[16-17]. The main Nursing Diagnoses (ND) observed during the study period were: Excessive fluid volume, Body image disorder, Acute pain, Nausea, Risk for infection, Risk of unbalanced fluid volume and Risk of electrolyte imbalance.

These results are in line with research that evaluated 350 published articles between 2004 and 2014 and identified that the most common nursing diagnoses in renal patients were: risk of infection, excessive fluid volume, low situational self-esteem, ineffective protection, impaired dentition, acute pain, disturbed sensory perception, insomnia, spiritual suffering[17].

As a priority diagnosis, it had excessive fluid volume, these patients often complained of pain and nausea during the dialysis process. The related factors for this ED are: excessive fluid intake, excessive sodium intake and compromised regulatory mechanism. The defining characteristics found in this group were: change in blood pressure, change in mental status, change in breathing pattern, edema, weight gain in a short period, intake greater than elimination and oliguria[17].

The interval between hemodialysis sessions potentiates the excessive volume of fluids, however, during hemodialysis sessions, patients also developed complications, due to the reduction in fluid volume. Accordingly, research with 50 renal patients in a hemodialysis program identified that ED, risk of deficient fluid volume, was associated with failures in regulatory mechanisms (100.0%) and with the loss of fluids through abnormal routes (92.1%)[18].

The identification of these diagnoses allows the nurse to develop a specific care plan that covers patient care, making quick decisions and developing a Unique Therapeutic Plan, together with the Medical team. However, it is necessary to highlight that the nurse must use clinical reasoning as a complex cognitive process, to assess and know the patient in their singularity, understand their needs and/or care demands, in view to planning and implementing effective actions[19 - 20].

CONCLUSION

Understanding all the processes that occur in the body, during a HD session, of the functioning of the hemodialysis machine circuits and the main complications that may occur during the use of this therapy, is essential for the nurse to provide efficient and of quality assistance to the patient, and must be able to coordinate the nursing team in the face of the main complications with clinical reasoning and speed in decision making, in order to reduce possible damage.

Participation in the extension project made it possible for the student to get closer to the work process of the nephrologist nurse, in the care units for chronic renal patients undergoing hemodialysis. This experience made it possible to identify problems, list nursing diagnoses, set goals and interventions aimed at the real and potential needs of patients. This approximation of students with materials and equipment, provided not only knowledge, but enhanced the development of technical skills to perform specific procedures in the field of Nursing in Nephrology.

Thus, experiencing the work process of the nursing team for renal patients, understanding the dialysis procedure, evaluating, planning and implementing actions aimed at raising the quality of care for these patients, was very enriching and contributed to the process of training the graduate student in nursing, in addition to strengthening the bond and partnership between teaching and service.

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Note: Research originated from the extension project entitled experiencing nursing care in a dialysis unit.

Received in: 05/09/2018
Approved in: 16/10/2020

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