



Clinical trial as a learning tool

<https://doi.org/10.56238/homeIIsevenhealth-144>

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ABSTRACT

Chronic Kidney Disease (CKD) is a disease that progressively compromises the function of the kidneys, impairing all renal function, and ultimately the homeostasis of the body. This is a descriptive study, an experience report regarding the experiences of students in the 3rd year of the

nursing course at the State University of Mato Grosso do Sul (UEMS), during the supervised practical activities of the discipline of Nursing in Adult Health and of the Elderly I, in a public hospital institution, single SUS service, located in the city of Dourados/MS, on the importance of the Clinical Study as a learning tool, considering a patient with CKD, where it was possible to plan and promote care considering the nursing process and experiencing comprehensive care.

1 INTRODUCTION

The renal system is a fundamental part of the proper functioning of the body, the kidneys perform extremely important functions, aiming at homeostasis, they are: excretion of undesirable products of metabolism, regulation of water balance, maintaining the ideal concentration of electrolytes, regulation of blood pressure, regulation of the body's acid-base mechanism, production of erythrocytes and gluconeogenesis process. When the renal system fails, several functions are triggered as a compensation mechanism, but without proper treatment the severity of the case can evolve into Chronic Kidney Disease (CKD) (GUYTON, 2017).

CKD is a pathology that causes gradual and irreversible loss of kidney function, being a highly progressive disease if not discovered early and often requiring dialysis treatment. CKD is more commonly diagnosed in elderly patients, often related to diabetes mellitus and uncontrolled hypertension. A he pathophysiology of the disease occurs due to two groups of damaging mechanisms: the first is the consequence of an underlying etiology and the second is the series of gradual mechanisms involving hyperfiltration and hypertrophy of the nephrons, a common consequence of the reduction of renal mass. The injury results in a progressive and irreversible loss of kidney function, occurring slowly or quickly (PIRES, MARIUBA, NASCIMENTO, 2021; PAULINO et al., 2022).

Due to CKD being a progressive and irreversible pathology, it has significant consequences on the patient's daily life, such as harmful effects on the psychological, physical, social and economic of the disease carrier. As a result of the disease being known because of the high mortality rate and impairment in everyday activities, patients end up idealizing a reality presented and make it their own, and for this reason there is a high risk for the development of anxiety, depression, social withdrawal



and self-concept and impaired self-esteem. Given this, psychological monitoring of patients with CKD is essential, as living with chronic kidney disease is an adaptation process that requires challenging changes for the patient and the family, thus requiring all support so that this process is as welcoming as possible (PIRES, MARIUBA, NASCIMENTO, 2021; JESUS et al., 2019).

Some treatments can be considered for CKD, such as diabetes and hypertension control if detected, peritoneal dialysis, hemodialysis among others. Hemodialysis is usually chosen as the last therapeutic option, it is an extracorporeal procedure that works in reproducing kidney function, artificially filtering the blood to remove excess fluids and toxic substances from the body, providing survival to the patient. Dialysis treatment should be associated with the control of underlying diseases, change of habits, such as physical activity possible within the patient's tolerance, restricted diet, specific nursing and medical assistance (PIRES, MARIUBA, NASCIMENTO, 2021).

Thus, the systematization of care must be adopted for all patients in their different pathologies, especially for the patient diagnosed with CKD. This patient needs to be seen holistically, that is, assistance needs to reach the psychological, physical and social factors, in which CKD can cause drastic changes. Understanding in theory which approaches should be raised for a renal patient is simpler than when we encounter practice in real life.

The clinical case is an active method of teaching, where theoretical knowledge is put into practice, aiming to provide the student with a broad knowledge within the needs of the reality of the hospital environment (SINGHAL, 2017). This technique centered on the student, as a problem solver, makes it possible to master the previous knowledge of the group in the face of the clinical environment displayed, but also to verify the learning difficulties, producing new meanings and potentialities. Furthermore, the importance of expanding specific skills for self-learning is evident. It is very advantageous in the teaching of basic and pre-clinical disciplines in the health area, guiding a preparation with the help of everyday events and future professional practice. In addition, it provides for the discussion and anticipation of future competences and skills, favoring new theoretical and practical perspectives, favoring the student to produce an understanding of practice the moment he comes into contact with the theoretical content. (HOKAMAL; HOKAMAL; BATISTALL, 2018).

In accordance with the whole approach with the patient and the whole study that we carried out of the clinical case, it made us observe that the care in the identification of problems related to complications that culminate in CKD begins in the Basic Health Units (UBS), where nursing has a central role, but many signs and symptoms need specific assistance that can only be developed in a Hospital Unit.

In view of this, the objective of this work was to report the experiences of undergraduate nursing students, who developed a clinical case in hospital practice, in which they assisted a patient diagnosed with CKD in dialysis treatment.



2 METHODOLOGY

This is a descriptive study, experience report in relation to the experiences of the students of the 3rd year of the nursing course of the State University of Mato Grosso do Sul (UEMS), during the supervised practical activities of the discipline of Nursing in Adult and Elderly Health I of the medical clinical subarea, in the assistance to a patient diagnosed with DCR, in a public hospital of care to the Unified Health System (SUS), located in the municipality of Dourados / MS.

It was developed by third-year students in the academic period from November 22 to December 3, 2022 in a Public Hospital Unit.

3 RESULTS AND DISCUSSION

The development of the clinical study comes from the search for processes that enable the correlation between theory and practice, which aims to promote critical-reflective actions on the clinical, social, economic and cultural conditions of this patient. In development of the CE, we carry out the nursing process is applied for the best development of assistance and care to the patient, developing competence inherent in the profile of a holistic nurse.

We will be reporting the development of a CE in a patient diagnosed with CKD where care planning was initiated according to the Systematization of Nursing Care (SAE).

The SNC was developed to organize the Nursing Process (NP) in stages, they are, I - Nursing History / Anamnesis: in which it consists of data collection, identification of patterns and communication and recording of the data obtained, this step aims to investigate the patient's health situation, identifying possible problems and the need for interventions; II - Nursing Diagnosis: Stage in which the information obtained in the anamnesis is interpreted to make decisions about the concepts/definitions of the nursing diagnoses of the patient in question. The diagnoses are not always focused only on the patient's pathology, often they are linked to family and community issues; III - Nursing Planning: These are nursing actions or interventions aimed at the expected results to be achieved; IV - Implementation: execution (putting into practice) the actions or interventions prescribed by the team in Nursing Planning; and finally, V - Nursing Evaluation: This step determines what were the improvements in relation to the interventions made, and whether changes and adaptations are necessary regarding the assistance provided in the nursing process that concerns planning. Although SAE is divided into stages, its development is not isolated or linear, but rather, in a related way, one stage is linked to each other, students need to have the complete view of how SAE works in practice, and this can be very well developed in the clinical case (SANTOS, DIAS, GONZAGA, 2017).

The first phase performed was anamnesis, i.e. data collection and/or interview and later complete physical examination. Data collection can be performed in different ways, namely: subjective, objective, historical and current data. These can be obtained using: interview, observation, physical



examination, results of diagnostic tests, review of medical records and the collaboration of other professionals. The anamnesis takes place throughout the patient's stay in the hospital. It is important that the nurse knows how to conduct a good interview, without embarrassing the patient and his relatives, in a dynamic and non-mechanized way, knowing how to explore the paths that the patient himself indicates during the conversation (SANTOS, DANTAS, SILVA, TORRES, 2018).

In a patient with DCR, it is important to know this patient's life habits, such as, for example, his knowledge in relation to pathology, if he makes dietary restrictions as needed, such as fluid restriction and what is the appropriate volume to ingest, what is the diet, if such restrictions are a nuisance in the life of this patient, all these aspects should be raised during the anamnesis (OLIVEIRA et al., 2020).

After the anamnesis comes the physical examination is a crucial step in the investigation of the problems that led the patient to hospitalization, for a good physical examination must be taken into account scientific knowledge with emphasis on anatomy, physiology, semiology and semiotechnique; in addition to the scientific technique it is necessary that the nurse has skills such as: observation, active listening, empathy, understanding, among others that provide understanding of the normal or altered state of the patient, and that guides the decisions of the nurse in the continuity of the PE. Patients with CKD may present some physical changes, signs and symptoms, which can be observed in the physical examination (ADAMY et al., 2016).

The physical examination should be carried out in a cephalopodal oriented and orderly manner, where all body parts and functions such as body mobility, circulation, oxygenation, hydration, eliminations and vital signs (SSVV), are observed and evaluated by the nurse. The physical examination is performed sequentially and in stages consisting of: inspection, palpation, percussion and auscultation. The physical examination was performed sequentially, as follows: I - Head/Neck and neurological function: consists of mental status assessment, cranial nerves assessment, sensory, motor, cerebellar function and reflexes; II - Skin assessment: such as hydration, presence of lesions; III - Thoracic and pulmonary assessment: upper, lower respiratory system and breathing; IV - Cardiovascular assessment: cardiac auscultation, inspection, palpation and percussion of the chest; V - Abdominal assessment: inspection, palpation, auscultation; VI - Female or male genitalia; VII - Breast assessment: inspection and palpation and finally VIII - Pain assessment. The SSVV should also be monitored and evaluated if they are within normal standards, they are: Blood pressure (BP), Heart rate (HR), Respiratory rate (RR), Temperature (T) and O₂ saturation (SpO₂) (CURADO, 2017).

In the patient with CKD, during the physical examination, it is important to check the presence of a shunt, or the presence of a catheter for double lumen dialysis, how this dressing is being done, as there is a high incidence of infection by these devices, if the patient performed the venous fistula procedure, if he has other devices such as indwelling or relief bladder probes, how much urine is eliminated, if he has edema in the lower limbs very common in patients with CKD, in order to



subsequently raise the nursing diagnoses and the necessary interventions (OLIVEIRA et al... 2020), 2020).

The nursing diagnosis is a step in the nursing process in which it is indispensable for an adequate evolution of the patient outlining the possible problems that should be addressed with a more thorough look, usually considering the patient's pathology, in the case of CKD it is important to raise the diagnoses observing the needs focused on the aspects in which the disease influences, such as food, the use of medication, some physical restrictions, psychosocial condition, among others. The definition of nursing diagnosis according to Lepak (2018) is about this step being a clinical judgment in the face of a human response, and takes into account the entire health condition of the patient's life, so the family, society and the community are also included in this process.

Thinking of diagnosis as part of the nursing process, it is important to emphasize that it must be in full compliance with the other stages of the process, thus the SNC is essential to systematize all stages and facilitate the organization of the service, maintaining the necessary organization so that the diagnoses as well as the other phases of the NP are the guides for the exquisite planning of nursing about the implementation of care, aiming to meet the needs of each patient in their individuality. (MOREIRA et al., 2021).

To facilitate nursing practice in relation to diagnoses, classification systems are used to direct the clinical reasoning of the nursing professional in relation to the patient's condition and its possible nursing diagnoses (ND). The North American Nursing Diagnosis Association (NANDA) taxonomy is the best known and used in the field of nursing diagnoses, in which it is used as a reference for the survey of ND, which allows individualized care planning considering the patient's needs, as well as the pathophysiology of the disease. (SERRA et al., 2019) (MOREIRA et al., 2021).

In view of this, it is possible to observe that this stage of the process is extremely important in nursing care for the evolution of the patient, but it is crucial that the first stage of the process, data collection, is carried out successfully so that the diagnoses meet the need of each one. With regard to CKD, the patient's pathology, it is necessary to define diagnoses that are related to the case of each individual with the disease, so for this to occur, data collection is necessary to obtain relevant information. In several studies that target patients with CKD address issues involving nursing diagnoses and the most frequent found are: risk of electrolyte imbalance, risk of unstable blood pressure, risk of unstable glycemia, anxiety and unbalanced nutrition. Observing these diagnoses it can be said that most are related to the physiological factors of the individual, but there is also the possibility of diagnoses being associated with psychological and social factors.

In line with this whole process, according to Santos (2018), all nursing planning are interventions that seek the results that need to be achieved due to the proposed treatment. As a result, based on the knowledge we acquired when studying the etiology and pathophysiology of CKD and aware of the



physical, emotional and social impacts that the disease can generate in the lives of individuals, the assistance provided was divided into two moments: the first focused on physical and emotional care.

As a result, planning and nursing interventions occurred through the nursing diagnoses that were raised during data collection, namely: risk of infections, risk of vascular trauma, urinary retention, excessive fluid volume, unbalanced nutrition, fear and anxiety and low self-esteem. With this, the interventions performed would be to ascertain water control, acid-base control, urinary elimination control, double lumen access, hydroelectrolytic control, electrolyte monitoring, promotion against infections, water monitoring, self-care assistance, medication administration, in addition to providing emotional support for the patient, in which we try to be mediators of the problems that were identified through data collection.

The second moment occurred from the entire health education process that the team developed with the patient during the care provided. Based on the premise of Ribeiro, (2018), the nurse at all times of his assistance, must be a health educator, demonstrating clearly and objectively how the patient has to exercise his self-care for better adherence to treatment and prevent any complication.

All the assistance developed was aimed at minimizing the risks of future complications of the health condition that could be triggered, but this would only be possible if the patient continued her treatment effectively, as proposed. In the case of CKD and its specificities, much of our actions were aimed at minimizing the fear, anguish and insecurity that belonged to the patient. She was very afraid of dying due to the severity of her health condition. Therefore, based on the literature and what we had acquired in our academic journey over these three years of walking, we were able to somehow reassure and appease the feeling that the patient presented at the moment, always inviting the patient to express her feelings.

4 FINAL CONSIDERATIONS

In accordance with the clinical study process, we conclude that this learning tool allows the development of nursing care in a systematic way, divided into phases, in order to guide and optimize the work of the nursing team and provided knowledge relevant to the assessment, survey and problem solving, as it allowed to explore and build theoretical and practical knowledge.

In a clear and objective way, all the integrated aspects of the clinical study provided an analysis of the situation of "being a professional", "being a patient", "knowing how to provide care", allowing continuous growth within the university journey and subsequent work career loaded with reflection.



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