

Nursing management of hemodialysis unit in suitability for covid-19 care: experience report

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Gestión de enfermería de la unidad de hemodiálisis en adecuación para la atención del covid-19: relato de experiencia

RESUMO

OBJETIVO: relatar a experiência do enfermeiro gerente da equipe de enfermagem de uma unidade de hemodiálise, na busca de soluções estratégicas para o enfrentamento da pandemia da COVID-19. **MÉTODOS:** Trata-se de um relato de experiência do planejamento de ações realizado pela gerente da equipe de enfermagem de um serviço de hemodiálise no atendimento de pacientes. A experiência ocorreu no período de março a abril de 2020. **RESULTADOS:** Para atender a necessidade de adequação do atendimento de enfermagem na unidade de hemodiálise para o enfrentamento da pandemia, elaborou-se Procedimentos Operacionais Padrão específicos e realizou-se treinamento da equipe sobre a doença, medidas de precaução e os novos protocolos. **CONCLUSÃO:** O enfermeiro gerente da equipe de enfermagem desempenhou um papel importante no enfrentamento da pandemia de COVID-19 ao adequar o fluxo de atendimento e os procedimentos realizados pela equipe com foco na segurança dos pacientes e profissionais.

DESCRITORES: Enfermagem; Liderança; COVID-19.

ABSTRACT

OBJECTIVE: to report the experience of the nurse manager of the nursing team of a hemodialysis unit, in the search for strategic solutions to face the COVID-19 pandemic. **METHODS:** This is an experience report of action planning carried out by the manager of the nursing team of a hemodialysis service in patient care. The experience took place from March to April 2020. **RESULTS:** To meet the need to adapt nursing care in the hemodialysis unit to cope with the pandemic, specific Standard Operating Procedures were developed and staff training was carried out on the disease, precautionary measures and the new protocols. **CONCLUSION:** The nurse manager of the nursing team played an important role in facing the COVID-19 pandemic by adapting the flow of care and the procedures performed by the team with a focus on the safety of patients and professionals.

DESCRIPTORS: Nursing; Leadership; COVID-19

RESUMEN

OBJETIVO: relatar la experiencia del enfermero gestor del equipo de enfermería de una unidad de hemodiálisis, en la búsqueda de soluciones estratégicas para enfrentar la pandemia de la COVID-19. **MÉTODOS:** Se trata de un relato de experiencia de planificación de acciones realizado por el jefe del equipo de enfermería de un servicio de hemodiálisis en la atención al paciente. La experiencia se desarrolló de marzo a abril de 2020. **RESULTADOS:** Para atender la necesidad de adecuar los cuidados de enfermería en la unidad de hemodiálisis para el enfrentamiento de la pandemia, se desarrollaron Procedimientos Operativos Estándar específicos y se realizaron capacitaciones al personal sobre la enfermedad, las medidas de precaución y la nuevos protocolos. **CONCLUSIÓN:** El enfermero gestor del equipo de enfermería jugó un papel importante en el enfrentamiento a la pandemia de la COVID-19 al adaptar el flujo de atención y los procedimientos realizados por el equipo con foco en la seguridad de los pacientes y de los profesionales.

DESCRIPTORES: Enfermería; Liderazgo; COVID-19

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INTRODUCTION

The nurse's work process is composed of two dimensions: care, where the nurse takes care needs as an object of intervention and aims to provide comprehensive nursing care; and the managerial, whose object is the organization of work and human resources in nursing, with the purpose of promoting adequate conditions of care for users and work for professionals.¹

Nursing management must be understood as a tool that assists in the planning, execution and evaluation of care in health services, ensuring quality in patient care.² In this way, the way of managing and organizing the nursing service was designed so that the nurse manager develops skills aimed at the organization of work and human resources, making viable the conditions for the provision of qualified care to the patient and for the performance of the nursing team.³

In hemodialysis services, nursing management needs to plan actions considering the specifics of the service offered and the clientele, considering that the patient with chronic renal failure (CRF) is a potential carrier of decompensated clinical conditions and, therefore, treatment requires specialized care.⁴ This includes the contemplation of direct care demands, quali-

ty control of indicators, continuous offer of training actions for good practices in dialysis services and encouraging the use of health technologies aimed at education for patient self-care.⁵

During the coronavirus pandemic, a major concern of hemodialysis units was aimed at preventing infection by COVID-19. In these units, hemodialysis sessions take place in a collective environment, with patients from various locations who have had previous contact with other people, and this considerably increases the risk of infection in these environments.⁶ In addition, the CRF patient has changes in several body systems, including the immune system, composing an important risk group for COVID-19.⁷

The spread of the coronavirus is fast and led the World Health Organization (WHO) to declare a pandemic in 2020.⁸ Faced with this situation, Brazil declared a Public Health Emergency of national importance, with the objective of carrying out actions to face the pandemic and minimizing the increase in the number of cases, seeking to raise awareness of the population and spread prevention measures to contain and reduce the growth curve of the disease.⁹

As of May 16th, 2020, Brazil has recorded 233,142 cases and 15,633 deaths from COVID-19. The incidence rate of the di-

sease in the country was 1,109.4 cases/ 1 million inhabitants in this period. In the Northeast region, the incidence exceeded the national rate (1,367.9 cases/ 1 million inhabitants) and the State of Maranhão exceeded the regional rate, with 1,638.4 cases / 1 million inhabitants.¹⁰

Faced with the situation imposed by the pandemic and the high incidence of COVID-19 in Maranhão, essential health services had to adapt and adopt strategies to ensure the continuity of care for the population and prevent the occurrence of contamination of the disease. In this perspective, this study aims to report the experience of the nurse manager of the nursing team of a hemodialysis unit, in the search for strategic solutions to face the COVID-19 pandemic.

METHOD

The study is an experience report, which was experienced from March to April 2020, in a hemodialysis unit that is located in a public reference hospital in the northeastern capital. The hospital is intended for specialized care in several areas such as surgical clinics, Intensive Care Unit, diagnostic tests, hemodialysis, among others.

The hemodialysis unit has the capacity to care for 133 patients who undergo three hemodialysis sessions a week, and need to

travel from their homes to the unit to perform the treatment. In addition to external demand, the sector is also responsible for providing care to hospitalized patients who need treatment, either in the hospital's clinics or in the Intensive Care Units.

The unit is composed of a multidisciplinary team, and the nursing team includes 11 assistant nurses and 65 nursing technicians. The team management is performed by a nurse, with 20 years of care experience in the area of nephrology and nursing team management.

To meet the limitations imposed by the pandemic, the Standard Operating Procedures (SOP) for triage of patients before hemodialysis sessions and the care of suspected and confirmed COVID-19 patients were prepared, together with some nurses from the unit, during the sessions, hemodialysis by the nursing team in the dialysis unit and in the Intensive Care Units. The SOPs were designed to guide the team in the care of these patients and then to be implemented in the unit.

In parallel with the elaboration of the SOP's, the unit's nurses carried out team training on COVID-19 and precautionary measures. After approval of the SOP's by the unit's head, the nursing team was also trained for their execution.

EXPERIENCE REPORT

During the pandemic, changes were introduced in the care units and the hemodialysis unit had to adapt, requiring greater flexibility from everyone during this process. Several services offered by the hospital were suspended, which reserved most of the clinical beds and the Intensive Care Unit for the care of patients with COVID-19 and with respiratory failure who required mechanical ventilation. Due to this, there was a considerable increase in the number of patients who required hemodialysis at the institution.

Faced with this public health challenge, facing a contagious and unknown disease, there was a demand for changes in the routine practice of the service. Initially, the Hospital Infection Control Service

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(CCIH) of the institution carried out the first guidelines for protective measures against the disease,¹¹ such as correct hand washing, correct use of Personal Protective Equipment (PPE), clothing and undressing for the care of suspected or confirmed cases of COVID-19. The training included¹² nurses and 65 nursing technicians, lasted one hour and were well accepted by the team.

There was also a need to adapt nursing care to care for patients with COVID-19 undergoing hemodialysis, both in the Intensive Care Units and in the unit itself. The nurse who manages the nursing team began planning actions on how the team would care for these patients, following the rules and protocols of the health authorities^{6,7} and the institution.

After planning, the team manager met with the nurses on the unit to determine that they would be the first on the team to be trained by the institution on COVID-19 precautionary measures^{6,11}, to be multipliers for the other members of the nursing team. In this way, the trainings were organized in a way that contemplated the form of transmission and the precautionary measures of the disease^{6,11}, as well as the SOPs for triage of patients before hemodialysis sessions, and the care of the nursing team in front of the suspected and confirmed patient of COVID-19. In each work shift, a nurse was responsible for training, so that everyone on the team was instructed and prepared.

In addition to the training, the unit's nurses also carried out practical training on hand hygiene, attire with Personal Protective Equipment, including the use and fitting test of the N-95 mask and adequate undressing for the care of this type of case.¹¹ The trainings were performed daily, for a week, and repeatedly until the team felt confident of learning, observing the safety recommendations mentioned above. There were several instructive meetings designated for training to reach 100% of the entire nursing team.

Despite all the training offered by the unit for coping with the disease, providing care to these patients and performing the

procedures to be followed, some professionals were still insecure and apprehensive for fear of becoming contaminated. As the days progressed, many members of the team presented flu-like symptoms, with the need to leave for a period of 14 days, and only after that period they returned to their activities, thus respecting the institutional prevention protocols.

With the departure of many professionals, the service overload emerged for those who stayed in the unit, because due to the illness of these professionals, the hospital did not have other professionals qualified to act immediately, since the hemodialysis service is a specialized area that lacks training and hiring time to meet this demand.¹²

Faced with this situation, the nurse manager of the nursing team made necessary changes to the service schedules, as well as the relocation of nurses and nursing technicians to areas for patients with COVID-19 in the institution, as many patients admitted to the COVID-ICU needed dialysis treatment. Modifications and rearrangements were constant, requiring greater attention from the team manager, so that patients were not left unattended. Therefore, the nurse manager of the nursing team needs to pay attention to the dimensioning of personnel and to devise logistical relocation strategies for these situations.¹³

It was a tense period, there were complaints and dissatisfaction from the team, feelings such as fear of contaminating themselves and family members, insecurity with the disease, anguish and in addition to physical exhaustion were reported. During the COVID-19 pandemic, many people experienced emotions such as fear, anguish and anxiety. Uncertainty and complexity require each person to be aware of feelings and to search for personal resources to better manage them.¹⁴ However, none of the professionals in the unit required psychological follow-up.

The increase in the psychic illness of nursing professionals is evidenced by the social isolation that keeps them away from family members from experiencing the death process and dying of patients under their

care and co-workers as a result of contamination by SARS-CoV-2.¹⁵

Faced with this situation, the institution provided psychological treatment during the COVID-19 pandemic to professionals facing such a situation, especially those who work in direct contact with people infected by the virus. A Hemodialysis unit worked on the front lines when it came to patients who needed hemodialysis treatment in the Intensive Care Units, as well as in the unit itself, when patients returned to the sessions contaminated with COVID-19. A large majority of critically ill patients required this therapy in the institution's Intensive Care Units, requiring the displacement of the specialized nursing professional to perform the procedure. As well as in the hemodialysis unit itself, beds were made available for patients from their homes who were suspected or confirmed to have COVID-19, to carry out treatment in an isolated and safe way for patients and staff.

Another component that had an important impact on the unit during this period was Personal Protective Equipment, mainly surgical masks and N95 or PFF2, due to the risk of being out of stock due to increased consumption worldwide as a means of disease precautions. The use of N95 or PFF2 masks was observed in the unit even without being in contact with individuals with COVID-19 and there was a need for a more controlled dispensing control, so that there was no discontinuity of delivery for the entire team when in contact with patients with COVID-19. For the Pan American Health Organization (PAHO) and the WHO, the lack of information and despair led health professionals to the disorderly use of PPE and the population to buy and stock these products in an uncontrolled way, helping to reduce the supply of these materials.¹⁶

The working conditions and current scenario demand management skills from nurses, so it is essential to prepare the professional to act as a leader¹⁷ in this process in which the management of the nursing team during a pandemic is a challenge, which requires adequate planning and organization of the service. It can be said that

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the hemodialysis unit faced challenges in managing this process of implementing COVID-19 control measures, with regard to the adequacy of nursing care for patients with coronavirus and team training.

The set of measures adopted by nursing management for the prevention and control of COVID-19 promoted greater safety in professionals with regard to the care of patients with the disease and, with regard to the safety of the professional himself, the correct use of Personal Protective Equipment, correct hand hygiene and decontamination. Hand hygiene was one of the most intensified training courses, as hands

are considered one of the biggest vehicles for contamination of the coronavirus. And, according to the WHO, the Pan American Health Organization and government health agencies, this is one of the actions that add to the activities to prevent this new infection. This is because there is sufficient and supported scientific evidence that, if properly implemented, hand hygiene can significantly reduce the risk of transmission of the Sars-CoV-2 virus in society and in healthcare services.^{11,18}

CONCLUSION

The nurse manager of the nursing team at the hemodialysis unit played an important role in facing the COVID-19 pandemic by adapting the flow of care and the procedures performed by the team with a focus on the safety of patients and professionals. The adoption of adequate precautionary measures contributed to controlling the spread of the disease within the unit and intensive training contributed to the provision of quality and safety nursing care, in addition to reducing negative emotions and stress in the work environment.

REFERENCES

- Magalhães FM, Cardoso AM. Relato de experiência: desafios no trabalho da enfermagem na estratégia saúde da família. *Revista Científica da Escol Estadual de Saúde Pública de Goiás (RESAP)*. 2018;4(1):54-65.
- Dias CFC, Rabelo SK, Lima SBS, Santos TM, Hoffmann DR. Management of nursing care in the hospital context: experience report. *Brazilian Journal of Health Review*. 2021;4(2):5980-5986.
- Hortela MS, Almeida ML, Fumicelli L, Zilly A, Nihei OK, Peres AM, et al. Papel do gestor de saúde pública em região de fronteira: scoping review. *Acta Paulista de Enfermagem*. 2019;32(2):229-36.
- Martins JDN, Carvalho DNR, Sardinha DM, Santos APG, Santos MWO, Aguiar VFF. Contribuições da enfermagem na potencialização do processo de adaptação ao paciente com doença renal crônica. *Revista Nursing (São Paulo)*. 2019; 22(57): 3199-3203.
- Moffatt H, Moorhouse P, Mallery L, Landry D, Tennankore K. Using the Frailty Assessment for Care Planning Tool (FACT) to screen elderly chronic kidney disease patients for frailty: the nurse experience. *Clinical Interventions in Aging*. 2018; 7(13):843-852.
- Fuentes AF, Hurtado A, Manzano AMC, Estévez GA, Greloni G, Bedat MCG et al. Recomendaciones para el manejo de pacientes portadores de enfermedad renal frente a la epidemia de coronavirus (COVID-19) [Internet]. *Nefrología Latinoamericana*. 2020;17:1-6. Available from: <https://slanh.net/recomendaciones-para-el-manejo-de-pacientes-portadores-de-enfermedad-renal-frente-a-la-epidemia-de-coronavirus-covid-19/>.
- Willis K, Cheung M, Slifer S. KDIGO clinical practice guideline for the management of blood pressure in chronic kidney disease. *Kidney Int Suppl*. 2012;2:337-414.
- Brasil. Ministério da Saúde. Secretaria de Atenção Especializada a Saúde. Departamento de Atenção Hospitalar, Domiciliar e de manejo clínico da Covid-19 na Atenção Especializada. Brasília; 2020.
- Bitencourt JVOV, Meschial WC, Frizon G, Biffi P, Souza JB, Maestri E. Protagonismo do enfermeiro na estruturação e gestão de uma unidade específica para covid-19. *Texto & Contexto Enfermagem*. 2020; 29: e20200213.
- Cavalcante João Roberto, Cardoso-dos-Santos Augusto César, Bremm João Matheus, Lobo Andréa de Paula, Macário Eduardo Marques, Oliveira Wanderson Kleber de et al. COVID-19 no Brasil: evolução da epidemia até a semana epidemiológica 20 de 2020. *Epidemiol. Serv. Saúde* [Internet]. 2020 Set [citado 2022 Fev 22]; 29(4): e2020376. Disponível em: http://scielo.iec.gov.br/scielo.php?script=sci_arttext&pid=S1679-49742020000400016&lng=pt. Epub 05-Ago-2020. <http://dx.doi.org/10.5123/s1679-49742020000400010>.
- Brasil. Agência Nacional de Vigilância Sanitária (BR). Nota Técnica nº4, de 31 de março de 2020. Orientações para serviços de saúde: medidas de prevenção e controle que devem ser adotadas durante a assistência aos casos suspeitos ou confirmados de infecção pelo novo coronavírus (SARS-CoV-2) [Internet]. Brasília: Agência Nacional de Vigilância Sanitária; 2020. Available from: <http://portal.anvisa.gov.br/documents/33852/271858/Nota+T%C3%A9cnica+n+042020+GVIMSGGTES-ANVISA/ab598660-3de4-4f14-8e6f-b9341c196b28>.
- Queiroz JS, Marques P F. Gerenciamento de enfermagem no enfrentamento da COVID-19 nos serviços de hemodiálise. *Enfermagem em Foco*. 2020; 11 (1): 196-198.
- Araujo AS, Comassetto I. O protagonismo do Enfermeiro na organização de serviços de saúde durante a pandemia da COVID-19. *Research, Society and Development*. 2021; 10(1): e48110112014-e48110112014.
- Ceberio MR. Contexto e vulnerabilidade na crise covid-19: emoções e situações do durante e questões sobre o depois. *Ajayu*. 2021; 19(1): 90-126.
- United Nations (US). Policy brief: COVID-19 and the need for action on mental health. New York: United Nations; 2020. Available from: https://www.un.org/sites/un2.un.org/files/un_poli

REFERENCES

cy_briefcovid_and_mental_health_final.pdf

16. World Health Organization (WHO). Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19). [Internet]. 2020. Available from: https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf

17. Kawakami RMSA, Magalhães AO, Santos ILF, Santos MS,

Santos FA. Experiências de Gestão e Educação de Enfermagem durante a triagem da COVID-19 em uma Clínica Integrada. *Saúde Coletiva (Barueri)*. 2020; 10(59): 4494-4507

18. De Paula DG, Francisco MR, Freitas JD, Levachof RCQ, Fonseca BO, Simões BFT, et al. Higiene das mãos em setores de alta complexidade como elemento integrador no combate do Sars-CoV-2. *Revista Brasileira de Enfermagem*. 2020;73(Suppl 2):e20200316.