Objective: To identify the challenges, dilemmas and satisfactions presented by nursing professionals in hemodialysis services during the care of renal patients. Method: Institutional ethnography was used, and 18 semi-structured interviews were conducted with nine members of the nursing staff. Conventional content analysis was performed. Results: For the nursing staff, care presents challenges such as the complex physical and emotional condition of patients, the management of technology for care, and coping with the suffering and death of patients with whom they have established a close relationship. The dilemmas are related to providing care for patients who refuse to receive it, and the personal and family costs involved in treatment in contrast to the limited quality of life of some patients. The main satisfactions are collaborative work, the sufficiency of resources and the confidence and recognition for performing independent work. Conclusion: The findings of the study are associated with the presence of professional burnout and interference in the ability to build satisfactory interpersonal relationships, lower job satisfaction and quality of care.

ABSTRACT

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INTRODUCTION

The purpose of renal replacement therapy with hemodialysis (HD) is to keep renal patients in optimal conditions and improve their quality of life during the transition to transplantation or death. Health professionals and the patients’ family must work as a team for providing quality care to these patients. In hospital care, the nursing staff is the axis that brings together the set of actions for providing comprehensive care to renal patients. Nurses in HD units are responsible for identifying patients’ needs, integrating and organizing care during replacement therapy, so that it can be offered with quality, warmth and effectiveness. The role of nursing professionals in the HD unit is complicated mainly by their multiple roles, namely: care technology expert, specialized caregiver, educator, facilitator, and emotional counselor. They must integrate these roles for developing a particular therapeutic relationship with each patient, which is a complex task. During nursing care of renal patients undergoing hemodialysis, there is influence of working conditions, such as the hospital infrastructure, human resources, the service organization, the number of patients and the work shifts. All these factors make nursing care in HD units more demanding than in other areas of hospital care. Hence, the nursing personnel may feel exhausted, because work causes stress, feelings of helplessness and sometimes incompetence.

Many studies have addressed the effects of nursing professionals’ work in the HD unit. Some report that staff of these units cope with important stressors in the labor environment, which are related mainly with the technologically complex work and patients’ conditions that produce different levels of professional burnout. Some studies show how the work environment in HD units is particularly difficult, intense and stressful, because it requires a high level of experience and knowledge from nurses in order to provide comprehensive care. In spite of stressors in their daily work, several investigations have identified that nursing professionals feel exhausted, because work causes stress, feelings of helplessness and sometimes incompetence.

For improving the quality of nursing care in the technical, emotional and spiritual aspects of renal patients undergoing HD, it is important to know nurses’ satisfaction with the work environment, and stressors that could generate exhaustion and frustration. Such aspects are little explored in Mexico, particularly from a qualitative approach. The objective of this study was to identify the challenges, dilemmas and satisfactions presented by nursing professionals in hemodialysis services during care of renal patients in a Public Specialty Hospital.

METHOD

TYPE OF STUDY

This work is part of a qualitative evaluation of the care to renal patients undergoing hemodialysis. Therefore, the interviewees, data collection techniques, data analysis and the context of the study are similar to another section of the previously published study. For this part of the study, the method was used the method of institutional ethnography.

Participants were selected through intentional sampling from the group of nursing professionals assigned to the HD unit. Inclusion criteria were their voluntary participation in the study and working for more than one year in the service.

DATA COLLECTION

The data collection for this part of the study was performed from January to April 2016. Semi-structured interviews were conducted with a script. There were 18 interviews in total, two for each participant, with an average duration of 45 minutes. They were carried out in a private place of the clinic, audio recorded with the interviewees’ consent, and transcribed by researchers. The interviews ended after achieving thematic saturation of data. Participant observation was also used by three researchers involved in day-to-day activities of the HD unit. The purpose was knowing and considering the various activities involved in nursing care, and the characteristics of patients who receive care in order to confirm the information obtained in the interviews. Field, methodological and analytical notes were produced for field work records and data analysis.

DATA ANALYSIS

A conventional content analysis was conducted. The subjective interpretation of texts was performed through systematic steps of coding and identification of topics. An inductive method was followed for a circular and permanent interpretation process, which was developed consecutively with the collection of information and participation of all researchers. The steps were: 1) literal and systematic transcription of interviews; 2) each researcher read all transcripts in detail and performed an initial coding for identifying the relevant topics of the text; 3) the different encodings were categorized in order to integrate a unique code scheme and; 4) the consistencies and variability in the narrations were identified in order to find the basic ideas shared by interviewees. The results were discussed among researchers until reaching a consensus. The Atlas Ti 6.0 program was used for data analysis.

ETHICAL ASPECTS

The project was approved on February 10, 2014 by the Research Ethics Committee of the institution where the study was conducted. Participants gave their oral informed consent and were included in the study voluntarily. Their anonymity was guaranteed by identifying participants with a letter P in the testimonies followed by an ordering number (P1, P2...).

RESULTS

STUDY SCENARIO

The study was conducted in the HD unit of a specialty clinic in a city in central Mexico. The characteristics of the unit are presented in Table 1.
Participants were six women and three men, nine out of the 24 nursing professionals who worked in the HD unit in the morning, afternoon, and evening shifts, as well as in double shifts (this shift is from 7 AM to 7 PM on Saturdays, Sundays and holidays). The average age of participants was 35 years, two were nursing technicians, four were nursing undergraduates, and three were nurses specialized in critical care, surgical nursing and nephrology\(^1\).

Nursing staff activities for the care of patients and administrative and educational tasks observed in the different shifts are shown in Chart 1.

### Chart 1 – Nursing Activities in the Hemodialysis Unit – City of central Mexico, 2018.

| Care activities during hemodialysis procedure | Pre | Trans | Post |
|----------------------------------------------|-----|-------|------|
| Administrative activities                    |     |       |      |
| • Daily development of the machine blog and water treatment supply. Report of the operation and/or failures in monitors with the respective report, if necessary. |     |       |      |
| • Review of records, updated results of viral panel serology, medical indications. |     |       |      |
| • Records in nursing forms.                  |     |       |      |
| • Reports for social services, if required.  |     |       |      |
| • Weekly schedule of patients.               |     |       |      |
| • Daily productivity record.                 |     |       |      |
| • Preparation of medication request for the patients. |     |       |      |
| • Prepare the schedule of activities.        |     |       |      |
| • Prepare the activities weekly.             |     |       |      |
| • Prepare application, registration, and inventory of hemodialysis material (supply kits, dialyzer, blood lines, bicarbonate, among others). |     |       |      |
| • Prepare monthly productivity report.       |     |       |      |
| • Record of complications and follow-up to requested laboratory studies. |     |       |      |
| Educational activities                       |     |       |      |
| • Programming the initial theoretical-practical hemodialysis course for new nurses and for nurses of social services. |     |       |      |
| • Provide guidance and training to nursing students. |     |       |      |
| • Provide specific guidance to patients and/or family members in situations when it is deemed necessary. |     |       |      |
| • Schedule academic sessions on a topic for the nursing staff in service, such as Anticoagulation in hemodialysis, Management of vascular accesses, etc. |     |       |      |

Source: Developed based on field notes of the participant observation in the Hemodialysis Unit.
According to HD unit nurses, when performing their professional functions, the care of renal patients involves great challenges, some dilemmas and satisfactions, too. The findings are described based on the scheme of codes that emerged from data specified in Chart 2.

**Chart 2 – Coding scheme – City of central Mexico, 2018.**

| Perspective on care of the renal patient in hemodialysis | Challenges | Dilemmas | Satisfactions |
|--------------------------------------------------------|------------|----------|--------------|
| • Work in the HD unit                                  | ➔ Comorbidity | ➔ Ethical | ➔ Satisfying needs |
| • Organization of care                                 | ➔ Complications | ➔ Professional | ➔ Comprehensive care |
| • Satisfactory experiences in the HD unit               | ➔ Complications | ➔ Professional | ➔ Independent and interdependent work |
| • More difficult experiences in the HD unit             | ➔ HD adverse effects | ➔ Professional | ➔ Work recognition |
| • Coordination for general care to renal patients in HD | ➔ Close contact | ➔ Professional | ➔ Sufficient resources |
|                                                          | ➔ Emotional state | ➔ Professional | ➔ Teamwork |
|                                                          | ➔ Deterioration | ➔ Professional |               |
|                                                          | ➔ Multiple needs | ➔ Professional |               |

**Challenges**

- Characteristics of the disease
  - Age
  - Emotional state
  - Deterioration
  - Multiple needs

- Characteristics of the patient
  - Close contact
  - Emotions

- Attachment to patients
  - Specific skills
  - Provide emotional support
  - Combine technology and humanized care

- Specialized demands
  - Lack of multidisciplinary coordination
  - Lack of family coordination

- Difficulties of comprehensive care
  - Multiple tasks
  - Techniques
  - Administrative

- Lack of time
  - Care to resistant patient
  - Prolong pain and suffering
  - Convey hope and encouragement in the face of poor prognosis

- Ethical
  - Difficult decisions
  - Provide information or not
  - Desire to help and not being able to do it

- Professional

**Satisfactions**

- Personal and professional
  - Satisfying needs
  - Comprehensive care
  - Independent and interdependent work
  - Work recognition
  - Sufficient resources

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**The challenges of nursing care in the HD unit**

Chronic kidney disease (CKD) involves a set of syndromes with physical and emotional manifestations, multiple needs and problems requiring intensive and specific care for each patient. In this regard, nurses report the disease characteristics are a great challenge for care in HD units. Together with the typical disease alterations, the hemodialysis treatment brings adverse physical, emotional and social effects. The nursing staff consider that the more deteriorated and complicated the state of a patient the greater their workload in the HD unit for providing the necessary assistance. They express it this way:

*Patients deteriorate, some of them are still young (between 40 and 50 years old). They are consumed, their evolution is bad until they die, they come to the HD unit with complications, in poor conditions, which implies more care, more responsibility and of course, this increases our workload (P. 7).*

The common emotional disorders presented by renal patients are another challenging condition for nurses. In the advanced stage of CKD, when patients cannot get on the waiting list for a transplant, a rapid deterioration affects them emotionally, hence, depressive and anxious manifestations are frequent. Patients often mention to nurses they only survive because they are connected to the HD machine. Sometimes they are aggressive, resistant to treatment or completely passive and indifferent to their environment. Nonetheless, most patients do not receive continuous psychological support. Even though they are referred to the department of psychology, they do not attend regularly. As expressed by a participant:

*Some patients arrive in a bad state and tell us “I came, I came so you’ll connect me to the machine and I’ll survive one more day, I do not know why they keep bringing me here (to the HD unit)” (...) For them, it is hard to face what is happening, and many of them do not attend, or their relatives do not take them to the psychology appointment to which they are referred for receiving support (P.3).*
Before such expressions, nurses state they sometimes do not know how to act and what to say to patients. Although they always listen and help patients in whatever possible ways, they do not consider themselves fully qualified to intervene, because the behavior and emotional changes of these patients exceed their professional limits. This is reflected in what one of the interviewees said:

*Sometimes it gets complicated (care) because we do not know how to relate to them, some have one need, others have another need, mainly emotional, the truth is, sometimes we do not know how to help them (P6).*

The nursing team emphasize the importance of the emotional bond with patients. This makes their work easier and for patients, it is easier to deal with treatment and their frequent visits to the clinic. Nurses also have the challenge to face their own emotions produced by the closeness and attachment to patients, since they live with them for long periods and engage in close relationships. Hence, patients’ afflictions seem to affect the nursing staff as well, as one of the participants stated:

*We get to know them thoroughly because we are with them for three hours, three times a week for several years. Then, we perceive their deterioration until they no longer recognize us, or die after suffering a lot, all of this hurts us a lot (P12).*

Most nurses perceive the demand for specialized skills for acting in the HD unit as a challenge. The interviewed personnel showed mastery in handling the technology, but the difficulty lies in the necessary combination of interpersonal and technical-specialized skills, and knowledge. Integrating technology as “part” of care and not as care itself is the challenge. The different activities in the HD unit involve a greater effort to stay close to patients and interact with them, despite the time needed for the use of technology and administrative tasks. One of the interviewees expressed:

*If you do not get close to patients, you do not know what is happening to them and you cannot help them, they will also be more anxious to come to the HD unit and may even stop attending. But the truth is, there are many activities to do and sometimes it is not easy to comply with everything at once (P1).*

Involving those who care for patients at home has become a huge challenge. The lack of time and a systematic and permanent program to educate the family about home care makes patients’ adherence to treatment harder and creates difficulties during HD sessions. One of the interviewees stated:

*We have many tasks in the HD unit, so orientation and communication with family members is difficult, we cannot know if they are following treatment at home, if they are eating well, how they care for the catheter and so on (P3).*

**The dilemmas in the care of renal patients in HD**

In everyday language, a dilemma is a situation that can be solved through two solutions, but neither is completely acceptable. By choosing one of the options, the person who decides is not entirely satisfied, remains in doubt and questions him/herself between two alternatives.

One of the usual dilemmas faced by the nursing team in the HD unit is to grant care despite patients’ resistance to receive it. Many times, nurses perform their functions with a clear resistance from patients to receive care. This leads them to think about the ethical implications of granting a treatment without a total conviction of the person receiving it. Although patients sign a consent form for replacement therapy, throughout the process, many of them express that treatment extends the pain and suffering and would rather not receive it. It is clear for the nursing staff that even with patients’ reluctance to treatment, they must encourage them and transmit enthusiasm although knowing about their poor prognosis. This situation generates discomfort in nurses and it is a dilemma to decide what is best for their patients. Some nurses feel guilty for prolonging the patient’s suffering. The ethical dilemma is to keep life at high costs for patients and their families, and they also express doubts about the quality of life of some of their patients. One of the interviewees expressed the following:

*Many patients come to treatment with an attitude of resistance, they are nervous, afraid, sometimes they are aggressive and what can we do? They (patients) do not have a good prognosis and yet, we must encourage them. We listen to them and support them with words. They lead a very difficult life, very restricted and without hope. That is difficult for us (P2).*

On the other hand, the nursing staff gets to know the family problems of some patients closely, as well as their economic difficulties and certain cases of abandonment or mistreatment by relatives. Faced with this situation, they do not know what to do to help patients, because other professionals are responsible for intervening and their scope of action in this aspect is limited. Given the close relationship and trust established between patients and nurses, it seems that patients expect something more from the nursing staff. This generates feelings of incompetence and stress because professionals want to intervene and know that this is not in the scope of their professional competence. As reported by one of the interviewed professionals:

*Some patients do not have anyone, anyone means no one, they eat what they can, when they go to the HD, they come in dirty clothes, bad conditions, here we do the hemodialysis, but that is not everything. Their care implies family involvement, providing support, affection, having someone who waits for this patient, some have been abandoned, others are mistreated, and this is because the family does not know how to face the burden implied in the care of these patients at home; and we would like to do something, but we cannot (P4).*

Faced with this dilemma, nurses consider essential that the institution organizes social support strategies for these patients and their relatives, who are also affected by the burden of care at home and often do not know how to deal with it.

Another dilemma mentioned by nurses is in some situations, the need for decision making independently and in limited coordination with other professionals (Nephrologist, Internal Medicine Physician, Vascular
Nursing care for renal patients on hemodialysis: challenges, dilemmas and satisfactions

Surgeon), because of their excessive workload. This was expressed by some of the nurses:

The ideal would be collaborative work among professionals, as a multidisciplinary team, given the complexity of renal patients' needs. However, in certain situations, we must make decisions, we cannot wait for an opinion or agreement on them, excessive workload is overwhelming for all of us (P.10).

Satisfaction provided by work in the HD unit

The nursing staff referred the satisfaction of being able to provide comprehensive care without limiting themselves to machine handling and physical care procedures. Despite their multiple activities, they have been able to combine specialized technical care and the establishment of a close relationship with patients. As stated by one of the professionals:

We always do things for patients' satisfaction, we look for ways to meet all their needs. Most of us do not limit ourselves to the handling of HD machines, we provide comprehensive care and that is very satisfactory (P.12).

The nursing staff feel satisfaction for having the trust of specialists and the clinic authorities in their professional capacity for independent work. The recognition that nursing care is the axis in the satisfaction of complex needs of renal patients in HD and the possibility of decision making independently and interdependently are highly satisfactory for interviewees. One of them expressed the following:

In the HD unit, we make decisions regarding many situations that arise during care and we decide when to request the intervention of specialist physicians. It is satisfactory to have a feature of professionalism recognized (P.15).

Working with sufficient material resources is satisfactory for the nursing staff, especially considering the increased care demand in the HD unit. The key is in a timely planning of care in order to make the necessary material resources requirements for avoiding shortages.

Having the necessary makes our work easier, and we can make progress in preparing patients for the following session, it is a matter of organizing the available resources (P.13).

For nurses, organizing their team activities to fulfill the functions in the HD unit is satisfactory mainly because there is a close coordination among the nursing staff in the same shift. The workload is heavy, they have an average of three patients per nurse simultaneously, or six patients during the shift for direct care and close monitoring, to which are added other administrative activities. This was narrated by a nursing team member:

Working as a team is satisfying, allows greater safety, comfort, tranquility and confidence for patients during their sessions (HD) and of course, we work more efficiently and without much stress (P.8).

DISCUSSION

The findings of the study show the challenges and dilemmas faced by nurses of the HD unit in the care of renal patients that constitute work stress and professional burnout. From the perspective of study participants, this work environment is a very satisfying option for professional development in nursing.

One of the main challenges of care is the complexity of renal patients, who are in delicate or severe condition. They are attended on an outpatient basis and have particular features, namely their multiple dysfunctions and a rapidly accentuated deterioration that significantly affects their physical, emotional and social status (P.17). These aspects make the satisfaction of patients' specific needs and demands difficult for the nursing staff, which complicates care (P.18).

In addition to the complexity of patients' physical state, nurses often feel confused and uncomfortable with patients' depressive or aggressive behavior, their doubts and reluctance to treatment. This is in line with findings of other authors (P.19-20) regarding the behavior of patients in HD, which generate feelings of pity, anger and frustration in the nursing team. Professionals make a great effort to establish therapeutic relationships with patients for meeting their needs.

The physical, emotional and family conditions of each patient and the particular care they require represent a significant increase in the nursing staff workload, and professionals strive to guarantee the quality of care (P.19). The workload are the tasks or activities normally under responsibility of nursing. They can be directly associated with the number of patients under nursing care and with professional demands, since these activities require specialized care and time restrictions for performing all of them. Some studies (P.22-23) agree that time management for the satisfactory provision of specialized and quality care is one of the most common stressors in the nursing team.

The care of patients in hemodialysis requires a high qualification from professionals working in a HD unit, a greater concentration and integrated actions. These work demands and challenges have been documented as the cause of high levels of stress in the dialysis units (P.24).

This study shows that the interrelation between nursing staff and patients is an important challenge given the close and prolonged bond established between them. Despite being a therapeutic relationship, it is not exempt from generating affective dependence that can have emotional effects on both actors. Staff members of HD units are at risk of suffering stress, mainly anxiety, in the face of the imminent death of their patients, unresolved grief, and symptoms of depression and exhaustion such as sleep disorders, fatigue, anxiety, sadness, bad mood and difficulty to concentrate (P.29).

The overwhelming stress and anxiety can occur when the nursing team observe patients' pain and suffering on a daily basis, and experience their loss when someone dies. This may occur due to a lack of knowledge, skills and support necessary both to provide support to patients and address their own feelings in the contact with patients (P.26).

Normally, HD nurses do not receive specific training for coping with patients with emotional disorders, death and interaction with people at the end of life. Hence, the HD
Nursing care for patients in complex or terminal conditions commonly involves dilemmas. One of the main ones is performing care in the face of resistance or ambivalent expressions of patients receiving HD treatment. Another dilemma is assessing patients' suffering without discussing openly with them about their prognosis, feelings and decisions regarding the continuity of treatment. Many times, nurses have to act against patients' desire and even against their own personal convictions. Nurses often feel guilty and impotent because they consider themselves incapable of changing patients' situation and alleviating their suffering[27]. Those who have addressed the issue[28] affirm there is no good or definitive solution in a dilemma, and the choice is not between doing good or bad, but rather choosing between the lesser of two evils. Facing contradictory aspects of a situation can cause internal tensions and uncertainty in the nursing staff. However, this uncertainty can stimulate them to face the event and discover appropriate actions for patients' benefit. When facing dilemmas, it is relevant to avoid remaining passive and controlled by the context and circumstances, and instead, reflect and use the space of power for influencing a situation in order to promote and achieve change[20].

The dilemmas referred by nurses participating in the study have an ethical character and raise the debate between preserving life at all costs and preserving life with dignity. Obviously, the perception of life with dignity varies depending on people, their beliefs and life conditions. Therefore, it is essential to investigate each patient and their family about their own perceptions, feelings and decisions regarding the disease and treatment. Nonetheless, terminally ill patients and their family members must have access to a palliative care unit in order to receive specific care, which will make the performance of patient care duties easier for the HD unit nursing team[20].

Despite the challenges and dilemmas perceived by the nursing staff, job satisfaction prevails. This is particularly important given the association between the satisfaction of health professionals and that of their patients.

Participants of this study expressed the possibility of performing functions independently as a job satisfaction, although in some cases it could be a dilemma. The autonomous performance provides satisfaction to the nursing personnel, and this can contribute to maintain work stress at average level[29]. The collaborative work among nursing team members promotes a satisfactory work environment, and there is evidence that collaborative characteristics of the professional work environment represent a positive environment generator of satisfaction and wellbeing in nurses[30]. This contributes greatly to take responsibility for the workload with all its challenges and dilemmas by assuming a positive attitude and a satisfactory performance. Under this premise, “the International Council of Nursing urges all governments and nursing organizations to analyze and establish policies that guarantee healthy work environments, promote continuing education, the development of levels of autonomy and recognition, as well as permanent incentive programs”[31]. This is combined with emotional support strategies and containment spaces, where the nursing staff can express themselves and continuously discuss their feelings, opinions and experiences.

**CONCLUSION**

The findings of the study on challenges and dilemmas in nursing care can be associated with the presence of professional burnout and interfere in the ability to build interpersonal relationships, decrease job satisfaction, and consequently the quality of care.

The work satisfaction referred by participants is a great strength. It can be enhanced with education and periodic sessions of support and containment for lowering the psychological stress for both the new staff and those working for a long time in the UHD. Undoubtedly, maintaining the wellbeing and satisfaction of nurses at work will be reflected in the quality of care and benefit patients.
RESUMO

Objetivo: Identificar os desafios, dilemas e satisfações que os profissionais de enfermagem da área de hemodiálise apresentam durante o cuidado com o doente renal. Método: Foi utilizada a etnografia institucional, foram realizadas 18 entrevistas semiestruturadas com nove integrantes do pessoal de enfermagem. Foi realizada análise de conteúdo convencional. Resultados: Para o pessoal de enfermagem, o cuidado representa desafios como: a complexa condição física e emocional dos doentes, o manejo da tecnologia para o cuidado e o enfrentamento do sofrimento e morte dos doentes com quem estabeleceram uma relação próxima. Os dilemas têm a ver com a prestação do cuidado para pacientes que se negam a receber o tratamento que o tratamento envolve em contraste com a limitada qualidade de vida de alguns pacientes. O trabalho colaborativo, a suficiência de recursos, bem como a confiança e o reconhecimento para desempenhar um trabalho independente, são as principais satisfações. Conclusão: Os achados do estudo podem estar associados à presença de desgaste profissional e interferir na capacidade de construir relações interpessoais satisfatórias, diminuir a satisfação laboral e a qualidade do cuidado.

DESCRITORES
Unidades Hospitalares de Hemodiálise; Cuidados de Enfermagem; Satisfação no Trabalho; Esgotamento Profissional; Enfermagem e Nefrologia

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