IMPACT OF CHRONIC KIDNEY DISEASE ON ADOLESCENTS ON HEMODIALYSIS TREATMENT

IMPACTO DA DOENÇA RENAL CRÔNICA EM ADOLESCENTES EM TRATAMENTO HEMODIALÍTICO IMPACTO DE LA ENFERMEDAD RENAL CRÓNICA EN ADOLESCENTES EN TRATAMIENTO HEMODIALÍTICO

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ABSTRACT

Objective: to understand the social impact of chronic kidney disease in adolescents undergoing hemodialysis. **Method:** this is a qualitative, descriptive study with adolescents from 12 to 18 years old, who underwent hemodialysis in the hospital unit of Renal Replacement Therapy, through semi-structured interviews. Data was analyzed according to the narrative and figure research method. **Results:** three thematic categories were identified: Modifications caused by hemodialysis that interfere in the routine; Adolescent feelings associated with the disease and hemodialysis; Family feelings associated with the disease and hemodialysis from the adolescent's perspective. **Conclusion:** it was concluded that the adolescent undergoes important changes in their daily life, both due to the restrictions necessary to control the disease and physiological changes. Moreover, feelings such as sadness and fear also permeate the care of this patient. **Descriptors:** Renal Insufficiency, Chronic; Renal Dialysis; Social Networking; Adolescent; Family.

RESUMO

Objetivo: compreender o impacto social da doença renal crônica em adolescentes submetidos à hemodiálise. **Método:** trata-se de estudo qualitativo, descritivo, com adolescentes dos 12 aos 18 anos, que realizavam hemodiálise na unidade hospitalar de Terapia Renal Substitutiva, por meio de entrevista semiestruturada. Analisaram-se os dados segundo o método de pesquisa de narrativas e figura. **Resultados:** identificaram-se três categorias temáticas: Modificações causadas pela hemodiálise que interferem na rotina; Sentimentos do adolescente associados à doença e à hemodiálise; Sentimentos da família associados à doença e à hemodiálise na perspectiva do adolescente. **Conclusão:** concluiu-se que o adolescente passa por modificações importantes em seu cotidiano, tanto pelas restrições necessárias para o controle da doença quanto pelas alterações fisiológicas. Revela-se, além disso, que sentimentos como tristeza e medo também permeiam o atendimento a este paciente. **Descritores:** Insuficiência Renal Crônica; Diálise Renal; Rede social; Adolescente; Família.

RESUMEN

Objetivo: comprender el impacto social de la enfermedad renal crónica en adolescentes sometidos a hemodiálisis. **Método:** se trata de un estudio cualitativo y descriptivo con adolescentes de 12 a 18 años que se sometieron a hemodiálisis en la unidad hospitalaria de Terapia de Reemplazo Renal, a través de entrevistas semiestructuradas. Los datos se analizaron de acuerdo con el método de investigación de narrativas y figura. **Resultados:** se identificaron tres categorías temáticas: modificaciones causadas por hemodiálisis que interfieren en la rutina; Sentimientos adolescentes asociados con la enfermedad y la hemodiálisis; Sentimientos de la familia asociados con la enfermedad y la hemodiálisis desde la perspectiva del adolescente. **Conclusión:** se concluyó que el adolescente sufre cambios importantes en su vida diaria, tanto por las restricciones necesarias para controlar la enfermedad como por cambios fisiológicos. También se revela que sentimientos como la tristeza y el miedo también impregnan el cuidado de este paciente. **Descriptores:** Insuficiencia Renal Crónica; Diálisis Renal; Red Social; Adolescente; Familia.

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INTRODUCTION

The period of adolescence is characterized as a moment of transformation, discovery and adaptation into adulthood, and rapid physical and emotional changes influence individual formation. It is known that this phase in healthy young people is complex and even more challenging for those who live with a chronic health condition. A crisis can be triggered by the simultaneity of adolescence with the presence of a chronic disease, characterized by changes and limitations. In this case, the adolescent tends to move away from their daily activities and have difficulty inserting themselves in social groups.¹

Chronic diseases have the highest attention of health professionals, due to the increase in their incidence worldwide, affecting not only the adult / elderly population, but also the youth population. It is revealed that among the chronic diseases that affect the age group of 12 to 18 years is the Chronic Kidney Disease (CKD), whose evolution is progressive and can generate psychosocial impacts. Adolescents on dialysis may suffer from “depression, frustration with medical prescription, sleep disturbance, altered self-image, interpersonal conflicts with relatives, low school attendance due to numerous hospital admissions [...] and consequently lead to limitation of social interactions and escape from communication”.²

It is noteworthy that there is a lack of studies on the prevalence and incidence of CKD in adolescence, despite the fact that Brazil experienced growth from 2002 to 2015, represented by the emergence of new renal units registered and active in the Chronicle Program, accounting for a total of 726 registered renal units. According to data from the 2015 census of the Brazilian Society of Nephrology, 45,073 people undergo some type of dialysis therapy and, of these, 93% are undergoing hemodialysis. The results also show that 0.9% represent adolescents from 13 to 19 years old.³

According to the United States National Kidney Foundation, CKD is defined as the presence of renal structural changes or the presence of a Glomerular Filtration Rate (GFR) <60 ml / min / 1.73m^2 for a period greater than or equal to regardless of cause or specific clinical presentation. According to Kidney Disease Improving Global Outcomes (KDIGO), five-stage CKD is classified according to GFR, with normal and elevated stage 1 (GFR >90 ml / min / 1.73m^2), slightly reduced stage 2. (GFR between 60-78 ml / min / 1.73m^2), moderately reduced stage 3 (GFR between 59-30 ml / min / 1.73m^2), stage 4 (GFR between 29-15 ml / min / 1.73m^2) and stage 5 renal failure (GFR <15 ml / min / 1.73m^2).⁴

Renal replacement treatments are offered to patients in stage 5 CKD, including: continuous ambulatory peritoneal dialysis; intermittent peritoneal dialysis; hemodialysis and kidney transplantation. These treatments partially replace renal function, alleviating the symptoms of the disease and preserving the patient's life, but none of them is curative, including transplantation.⁴

There is hemodialysis as a supportive treatment for renal patients, which generates impacts on the patient's life, making it difficult to adapt. It becomes a situation where anxiety and depressive symptoms are present during the therapeutic process.⁵ In addition, treatment requires the adolescent to attend the health unit about three times a week, and each hemodialysis session can last from two to four hours, and the adolescent may be hospitalized due to complications or complications.

It is verified that every reaction of the renal patient to the therapeutic process of dialysis is a form of adaptive response to feelings of insecurity and loss. Depression is the most common psychiatric disorder among those with end-stage renal disease treated with hemodialysis.⁵

There is room for another type of concern, namely the patient's psycho-emotional aspects and their quality of life, as well as the way health professionals deal with these aspects in their daily lives.⁶ Because of this, it is important for the multidisciplinary team to acquire knowledge about these psychosocial and emotional factors that contribute to the worsening of the condition in dialysis adolescents, as they can serve as a support network and minimize the factors that affect the quality of life. and in the patient's social life.

This study was motivated in view of the psychosocial and emotional implications of CKD and hemodialysis, due to the need to answer the following question: “What is the social impact of chronic kidney disease in adolescents undergoing hemodialysis?”.

OBJECTIVE

- Understand the social impact of chronic kidney disease in adolescents undergoing hemodialysis.

METHOD

This is a qualitative, descriptive study, a method that does not focus on numerical representativeness, but rather on deepening and understanding the social group presented, explaining why, expressing what should be done and identifying the factors that determine or contribute to the occurrence of the phenomena.⁷

The research was carried out at the José de Alencar Children's Hospital, which specializes in the care of children and adolescents, located in

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the city of Brasília, Federal District. The study was conducted specifically in the Renal Replacement Therapy (RRT) sector of the referred hospital, from August 2017 to March 2018, through semi-structured interviews with adolescents treated at the service.

The study included adolescents from 12 to 18 years old (concept of adolescence of the Child and Adolescent Statute⁸), with the diagnosis of stage 5 CKD, undergoing hemodialysis, registered and followed by the RRT unit. Only patients with some kind of cognitive impairment or impairment that make it impossible to understand and answer the research questions were excluded from the sample.

A semi-structured interview was conducted, which was conducted with the help of a script of questions defined by the researchers, with an average duration of ten minutes. The script consists of eight axes: identification; base disease; age; medicines used by adolescents; patient's routine; treatment period; school development; school relationship and how adolescents deal with chronic kidney disease. The interviews were recorded and transcribed in full.

The convenience sample was adopted, composed of all adolescents who met the inclusion criteria during the research period, ie, there were no refusals. The approach and the invitation to participate in the research during the period of the patient's hemodialysis session were performed.

Data was analyzed according to the steps of the narrative research method: pre-analysis (reading of empirical material seeking to map the meanings attributed by the subjects to the questions asked); analysis of expressed and latent senses (identification of sense nuclei); elaboration of the themes (synthesis of empirical material) and final analysis (discussion of the themes).⁹

The medical record was also used as a complementary method for data collection, considering that it is a legal document that allows the capture of information about the patient's

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history and underlying disease. The institution had two medical record formats: physical and electronic (Track Care®) and both were also part of the data collection. It is reported that all participants were authorized to participate by signing the Free and Informed Consent Term (FICT) by the guardians and the consent of the adolescent themselves.

The study was presented to the Integrated and Sustainable Center for Teaching and Research (CISEP) of the health institution for research authorization and data use. Considering the precepts established in resolution 466/2012, which deliberates on research with human beings, this research was submitted to the Ethics and Research Committee of the Health Sciences Teaching and Research Foundation (CEP / FEPECS) of the Secretariat of Health of the Federal District, approving it under opinion 2.166.866. The researchers kept the confidentiality and confidentiality of the data used in the research and, for the non identification of the patients, the letter "A" of adolescent and an order number were used.

RESULTS

The participation of seven adolescents, with an average age of 15 years old, and some clinical and demographic characteristics are presented in figure 1. It is detailed that, from the analysis of the adolescents' narratives, three thematic categories emerged: changes caused by hemodialysis that interfere with routine; adolescent's feelings associated with the disease and hemodialysis and family feelings from the adolescent's perspective associated with the disease and hemodialysis.

Adolescents	Age	Hemodialysis time	Education	Frequency of hemodialysis sessions
A1	16 years	7 months	Does not study	Three times / week
A2	17 years	6 years	Does not study	Three times / week
A3	16 years	5 months	2° Highschool	Three times / week
A4	13 years	5 years	7° Elementary School	Everyday
A5	16 years	2 years	8° Elementary School	Three times / week
A6	15 years	4 months	1° Highschool	Three times / week
A7	12 years	6 months	8° Elementary School	Three times / week

Figure 1. Characterization of the participating adolescents. Brasília (DF), Brazil, 2018. (N=7)

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◆ ♦ **Modifications caused by hemodialysis that interfere with routine**

It is known that, among the changes in lifestyle, the biggest complaint of the interviewed adolescents were dietary restrictions, being the hyposodic diets and reductions in fluid consumption the most punctuated. Such dietary restrictions were pointed out as routine modifiers and causes of suffering.

[...]I cried at first because I had to stop eating the things I liked to eat, hamburger [...] I had to stop eating [...] no, I don't eat anymore, so once in a while, once in the month I eat sandwiches, but I don't eat much because there is so much salt [...] my routine has changed [...]. (A 1)

[...] I felt bad [...] because you can't drink water, you can't take weight [...]. (A4)

Difficulty in adapting and adhering to restrictions was observed during the data collection period in which the participant A4, due to difficulty of water control during the interdialytic period, had its frequency of sessions increased and the number of sessions went up to three sessions per week (intermittent dialysis) for five sessions (daily dialysis), according to information collected from the medical records.

Physiological changes were also mentioned as impeding factors for performing tasks during the period in which the adolescents are at home. Adolescents frequently mention the symptoms of tiredness, pain, dizziness, weakness and sleep after hemodialysis sessions and, due to such limitations, they choose to rest and not participate in social activities that they had previously performed.

[...]in the afternoon, I sleep, because I get weak, bad, then, later... because I get weak, my head gets bad too; because of that I don't go out like that [...] sometimes, because I can't go out much, right, then they call me out: "Oh, let's go out that day?"; Ah, Monday, I can't. Then, Friday I can't either, Wednesday I can't go either, my schedule is full (consultations and hemodialysis session); weekend has something to do, like, I help my mother, right, to tidy up the house lying alone, but it's very rare for me to go out with them (friends), like, going to the movies, shopping [...]. (A1)

[...]I felt weakness [...] chest pain, belly pain, cramps [...]. (A4)

Another important change in the routine of adolescents undergoing hemodialysis was the interruption of school activities during the school year. It is mentioned by the adolescents, in their discourse, that the treatment resulted in school dropout, changing their plans for the future, such as studying for the college entrance exam. In addition, adolescents also report that this low attendance resulted in a termination of school enrollment, as it was impossible to reconcile studies with health care.

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[...]more or less, like, I'm not going to fail this year because I'm doing things at home, but it's not the same, it's like this, doing things at home doesn't help PAS like it would if I had at school, understand? [...]. (A3)

[...]this week last week we went there to talk to the director because I was only going two days a week, then we went there to talk to him and he said: "Okay, I'll lock your registration, then next year to study". Then we talked to the doctor too, sent a report, all right, then locked the registration because of that [...]. (A1)

Restricted activities have been reported during treatment and that sometimes the only distraction for adolescents was watching television or just waiting for dialysis to finish, making treatment monotonous. According to the adolescents interviewed, such monotony was broken when team members interacted with playful activities.

[...]when I come here, I play games, watch TV, move my cell phone, whatever I want [...]. (A5)

[...] no, I do not work at the child's hospital [...]. (A 1)

[...] then I like, when I had the psychology intern and we played checkers, then it was very cool [...]. I liked it, it helps. Anything that helps pass the time I like [...]. (A3)

◆ ♦ **Feelings of the adolescent associated with the disease and hemodialysis**

Another factor that interferes with adherence is the negative feelings that adolescents reported in the interviews regarding hemodialysis due to the disease, which results in a long and complex treatment that imposes restrictions on the patient's life.

[...]I was afraid of what it was like, right, because I had never seen it [...] afraid of feeling sick [...]. (A2)

[...] then, my, for me, it was very difficult to find out that I had a kidney problem [...] until I didn't feel desperate, but I cried at first [...] they kept talking to me, how was going being hemodialysis, at first, I was calm, right, but when she said I was going to have to do hemodialysis, I was kind of sad [...] I felt calm [...] no, I was not afraid. I was quiet after she explained how it was going to be done [...]. (A1)

[...]I felt bad ... because I can't drink water, I can't take weight [...] sad [...]. (A4)

[...] then, I was very sad, I had several plans for this year [...]. (A3)

It was also found that, for other adolescents, hemodialysis was not associated with negative feelings, as feelings of tranquility in the face of change were reported, showing resilience and acceptance during the interview.

[...]it was normal, that in the old days I had no idea what life was like [...] I was calm [...] because for me I think [...]. (A5)

◆ ♦ **Family feelings associated with the disease and hemodialysis from the adolescent's perspective**

It was found that adolescents perceive hemodialysis as a treatment that imposes changes in the routine of the patient and his family, because, besides the routine modifications, there is still the fear of the procedure and complications during the session. In this regard, it becomes possible to perceive the stress, worry and other feelings of the family from the perspective of the adolescent.

[...]but as they did not explain how hemodialysis worked, so she, I think she got scared and asked to put peritoneal dialysis [...]. (A5)

[...] sad only [...] my mother [...]. (A5)

[...] They were sad, worried, what hemodialysis was going to be like, these things [...] they were worried about me feeling sick, taking medicine, these things [...]. (A6)

[...]my mother cried a lot the day I was hospitalized, so the doctor said she had news to give her, then told her, right, that I had a kidney problem. At first, my mother was very upset, very sad, cried a lot, but then it was normal, to accept because of dialysis as well. It was because they said she was going to have to have hemodialysis and she didn't know what hemodialysis was yet, so she was more desperate because she had never heard of hemodialysis [...] they became normal, they only got a little sad when they knew that I would have to do hemodialysis [...]. (A1)

[...]were worried, my mother, my aunt, my grandfather, my cousin, my other aunt were also worried [...]. (A7)

In the speeches of the adolescents, several family feelings related to fear, despair and concern, especially regarding hemodialysis, can be noticed, noting that the disease affects not only adolescents with CKD, but also family members, who They are responsible for continued health care most of the time. It is also seen that the adolescent can capture the feelings that his family experiences during the process of illness and treatment.

DISCUSSION

It was possible to understand by analyzing the perspective of adolescents undergoing hemodialysis, how CKD and hemodialysis modify the routine, interfering in quality of life and causing significant social impact. With the diagnosis of the disease, changes in the adolescent's routine happen abruptly and affect their daily lives, which is permeated by commitments to the necessary treatment, dialysis, diet, tests and medications.¹

It is known that the dietary restrictions imposed by CKD bring difficulties in adaptation and, consequently, the patient's suffering, as can be seen in the adolescents' discourses, expressed by feelings of sadness, frustration and suffering.⁵⁻¹⁰ The adolescent becomes the target of the influence of his entire social environment, and this

makes it difficult to maintain a different eating routine from others with whom he lives, since food is part of his social life too and is present in most social events, bringing, as a consequence, their limitation in social groups. This brings greater difficulty and feelings such as sadness and frustration at not being able to eat according to others in their environment, since control of food restriction is important for the success of treatment, but it is one of the points that cause greater difficulty for adolescents, making it difficult for them to adhere to treatment.¹⁻¹¹

Patients undergoing hemodialysis found it difficult to perform tasks in their daily lives. The restrictions of daily activities are due to several factors and one of these is the set of signs and symptoms that cause organic repercussion in the individual, as people on hemodialysis undergo changes in body volume and biochemical components.⁴ It is explained that people undergoing hemodialysis undergo several changes, the main one being hypotension, and a study with 240 medical records identified the occurrence of this complication in 47.1% of the investigated.¹² Other frequent complications are cramps, which predominate in the lower limbs and most often occur after half of the scheduled dialysis time, and other complications related to hemodialysis may also occur, such as hypertension, arrhythmias, electrolyte imbalance, fatigue, among others.¹²⁻⁴ These changes directly influence the activities of daily living that require cardiorespiratory and muscular effort, causing greater difficulty for adolescents to perform physical activities, as can be observed in the speeches of adolescents. Thus, it is clear from the speeches of these adolescents that such changes prevent the adolescent from maintaining their previous social activities, such as walking with friends and, in some cases, attending school.

Adolescents with chronic conditions, as well as their families, are now known to focus their activities around treating the disease. Adolescents begin to neglect important aspects concerning other spheres of their lives, such as school activities, and this situation occurs due to frequent hospitalizations, generating changes especially in their schooling process.¹⁵ The disease interferes with the therapy and the side effects of medication, when attending classes, demotivating them and hindering their school adaptation, as was the case of adolescent A1, who made clear in her speech the need to leave school due to treatment, causing delay and impairment of learning, and impairment in their social environment. It is further described that, despite not being explicitly verbalized by the interviewees, the literature also points out that the adolescent still goes through internal conflicts that involve telling colleagues about their health

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condition and the fear of receiving differentiated treatment due to the fact that they are living with a chronic disease.¹⁶

In addition to changes in the adolescent's routine, CKD is a disease that can cause changes in psychosocial factors and, consequently, in quality of life (QOL). Studies show that the quality of life evaluated in patients with CKD is lower when compared to the general population or to control groups.¹⁷ It is believed, considering the psychosocial aspects that make up the overall QOL of the individual, that the use of targeted psychosocial interventions have been shown to improve quality of life and lead to better treatment adherence.

It can also be noted that most of the time, the main distraction of the patients in this study was to watch television or just wait for the hemodialysis session to end. Therefore, it can directly interfere with the patient's treatment, since being four hours a day "connected" to a machine can bring feelings of sadness and loneliness, therefore, the performance of distraction activities during the sessions. hemodialysis are an important factor.¹⁸

Hemodialysis treatment is known to be monotonous and restrictive, limiting the activities of adolescents. It is noteworthy, in a study conducted in 2017 at a hemodialysis outpatient clinic in São Paulo, that idle time leads patients to create strategies such as reading, sleeping or watching television, and there is no activity in the hospital for this time. who are on hemodialysis.¹⁸ This same attitude can be observed in the speeches of adolescents, raising the question about the importance of creating distraction activities during hemodialysis sessions and their importance for adherence to treatment.

It is evident that the hospital context is marked by the rigidity of the procedures, and the presence of playful activities represents important values for adolescents undergoing hemodialysis, since they help the adolescent to channel antisocial tendencies, favor emotional balance, relieve individual tensions and foster a sense of integration, lessening the impact of hemodialysis. Through playfulness, interpersonal relations are facilitated, distancing the patient from what he is living, exercising his autonomy, self-knowledge and reducing anxiety; As an example, we can mention a study that measured the benefits of music in patients during the hemodialysis session¹⁹ and in other populations as cancer patients.²⁰ In addition to these benefits, they allow us to reduce the sense of guilt and worthlessness caused by the loss of autonomy that hemodialysis causes, leading to an improvement in mood. This aspect was noticed during the study carried out in a medium-sized hospital in Rio Grande do Sul, which brings playful activities as part of the daily life of

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hemodialysis patients, resulting in discourses of satisfaction and pleasure of patients, highlighting the decrease of idle time on hemodialysis.¹⁸

CKD is a long and complex treatment that imposes restrictions on the patient's life, resulting in negative aspects in relation to the psychic behavior of the patient, causing greater suffering associated with the disease and dialysis treatment.²¹ These feelings can be related to the impact of diagnosis and hemodialysis treatment, as well as generating a deep reflection in patients regarding the consequences of treatment, such as medication use, social adaptation and dietary restrictions, and this can generate fear, doubts and insecurities as seen in the speeches of the adolescents in this research.

In the statements of adolescents, the importance of previous visits to the dialysis treatment unit was observed in order to minimize "the fear of the unknown" that involves entering hemodialysis. It is also allowed the beginning of health education with the patient and the proposition of other strategies such as "support groups for these patients, psychological support and educational programs".¹¹

It is suggested that the presence of negative feelings may also be associated with lack of interaction with peers, at school or during their activities, and this makes isolation a very common consequence and, above all, the attempt not to reveal which are chronic kidney or ashamed of body changes expressed through the arteriovenous fistula (AVF) in the arm or the catheter located in the neck. It is understood that these characteristics evade the normality pattern, arouse the curiosity of others and generate embarrassing situations, causing negative feelings about the disease, treatment and self-esteem.²² For this, one can develop another strategy with them, which would be peer mentoring, having as its main mediator the nurse, which would mediate the interaction between a "more experienced" adolescent who would explain to a "new »Adolescent how hemodialysis would work and what it is like to have chronic kidney disease.

It is proven that hemodialysis causes not only changes in the adolescent's routine, but also in the family routine, because the adolescent always goes to the sessions accompanied by a responsible person (right of companion, according to the Child and Adolescent Statute).⁸ Thus, the change in family routine becomes clear, as some caregivers are unable to work due to constant visits to the health unit and often care is centered on only one caregiver. Thus, there is a common occurrence of stress and other negative feelings, not only for the patient but also for his family, which undergoes changes in routine and reorganization of life.² In addition to routine modifications, there is a fear of the procedure and complications during the

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session, and this happens because the family is a strong emotional support for the patient with chronic disease, serving as a support for the patient's treatment. thus, a target of mental illness due to the consequences of deprivation imposed by the disease and treatment, since at home, the family will have to comply with water and food restrictions, as well as deprivation in family activities, which may expose the adolescent to risks, such as travel, affecting family dynamics.²¹

This family suffering contributed to the constant threat of the incurable disease, which has to face the irreversibility of the disease, causing a family restructuring imposed by the context of the disease and its treatment.²³ At this moment, the family is expected to play the role of responsible caregiver, trying to guarantee all the necessary well-being to their child in this new universe that the disease brings, causing feelings of worry and stress, as can be seen in the speeches above. Thus, greater care is required from professionals, especially nurses, who participate in all this dynamics of treatment, from the procedure to the adolescent and family adherence..²²

CONCLUSION

It was concluded that adolescents undergoing hemodialysis suffer several physical, emotional and social impacts, influencing their adaptation. In this study, it was identified that the restrictions imposed by treatment comprised the main complaints of adolescents, among them, the hyposodic diet and the water intake limit were the most mentioned, and restrictive fluid consumption was the major barrier to adherence to therapy.

Sadness and fear stand out as the feelings of adolescents regarding hemodialysis and CKD. In some reports, sadness was related to restrictions imposed by treatment, which not only change the adolescent's routine, but also the family dynamics, bringing suffering for both the adolescent and the family. Fear was associated with entering hemodialysis therapy and being unaware of it.

It was revealed that adolescents undergoing hemodialysis undergo important changes in their daily lives, both due to dietary restrictions and life routines necessary for disease control and physiological changes. In addition, feelings such as sadness and fear regarding the care of this group of patients are permeated. Thus, it is observed that it is up to the multidisciplinary team to work to minimize the impact of the disease and achieve greater adherence to the necessary restrictions, since serious clinical complications may arise due, for example, to increased fluid consumption.

Strategies already mentioned in the literature are suggested as ways to minimize psychosocial and emotional impacts: support groups,

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psychological counseling and health education, in addition to the greater involvement of professionals through playful activities during hemodialysis, especially with nurse participation. There is a need for further research focusing on nurses in relation to chronic renal adolescents, such as the use of peer mentoring among more "experienced" adolescents in the CKD and hemodialysis therapeutic trajectory, among "novice" adolescents. " Such intervention can be mediated by the nurse, since it is the Nursing team that spends more time with the patient during treatment..

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