Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

# MEANING AND DIMENSIONALITY OF STATE OF COMFORT IN PATIENTS WITH CHRONIC HEMODIALYSIS KIDNEY DISEASE

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## ABSTRACT

**Objective:** to understand the meaning and dimensionality of state of comfort from chronic hemodialysis patients' perspectives.
**Method:** this is a qualitative study conducted with 30 patients from a hemodialysis clinic from May to June 2018. A semi-structured interview with guiding questions was used. Data were analyzed according to Bardin's content analysis method, supported by Kolcaba's theoretical framework.
**Results:** five subcategories for being and feeling comfortable emerged: psychological well-being; Silent environment; Good quality of care; No health changes; Reduction in the frequency/duration of hemodialysis. Regarding dimensionality to achieve comfort, there were three subcategories according to the adopted states. Regarding dimensionality, relief is achieved when a patient is disconnected from the machine, does not attend any session or does not present clinical manifestations of hemodialysis complications. In calm, visible discomforts are linked to change of routine, abandonment of work activities, financial difficulties and poor family support, and psychospiritual issues that weaken in their daily life, making them vulnerable to discomfort. In transcendence, absence of symptoms, attachment to religion, faith or spirituality and resilience to the new routine figured as indexes. States do not act individually, they are related to the experiences of contexts.
**Conclusion:** comfort has meaning of relief from discomfort, state of having met basic human needs, mental and physical well-being, physical, mental and environmental comfort, and final state of nursing therapeutic actions, which permeate the contexts and states of relief, calm, and transcendence. These elements combine with each other to generate unique responses.

**DESCRIPTORS:** Nursing. Patient comfort. Chronic kidney disease. Nursing theories. Philosophy in nursing. Nursing research.

**HOW CITED:** Freire SML, Silva RA, Melo GAA, Aguiar LL, Caetano JA, Santiago JCS. Meaning and dimensionality of state of comfort in patients with chronic hemodialysis kidney disease. Texto Contexto Enferm [Internet]. 2021 [cited YEAR MONTH DAY]; 30:e20200037. Available from: https://doi.org/10.1590/1980-265X-TCE-2020-0037.

## SIGNIFICADO E DIMENSIONALIDADE DO ESTADO DE CONFORTO EM PACIENTES COM DOENÇA RENAL CRÔNICA HEMODIALÍTICA


### RESUMO

**Objetivo:** compreender o significado e a dimensionalidade do estado do conforto, na perspectiva do doente renal crônico hemodialítico.
**Método:** estudo qualitativo, com 30 pacientes de uma clínica de hemodiálise, de maio a junho de 2018. Utilizou-se da entrevista semiestruturada com perguntas norteadoras. Dados analisados segundo o método de análise de conteúdo de Bardin, sustentados pelo referencial teórico de Kolcaba.
**Resultados:** emergiram cinco subcategorias para o estar e sentir-se confortável: bem-estar psíquico, ambiente tranquilo, boa qualidade no atendimento, sem alterações de saúde e redução na frequência/duração da hemodiálise. No tocante à dimensionalidade para o alcance do conforto, verificaram-se três subcategorias, conforme os estados adotados. Em relação à dimensionalidade, o alívio é alcançado quando o paciente é desligado da máquina, não comparece a alguma sessão ou não apresenta manifestações clínicas de intercorrências hemodialíticas. Na calma, desconfortos visíveis atrelados à alteração da rotina; abandono das atividades laborais; dificuldades financeiras e suporte familiar deficiente; e questões psicoespirituais que enfraquecem no dia a dia, tornando-os vulneráveis a desconfortos. Na transcendência, a ausência de sintomas, apego à religião, fé ou espiritualidade e resiliência à nova rotina figuraram como índices. Os estados não agem individualmente, estão relacionados às experiências dos contextos.
**Conclusão:** o conforto tem significado de alívio do desconforto; estado de ter atendido às necessidades humanas básicas; bem-estar mental e físico; conforto físico, mental e ambiental; e estado final das ações terapêuticas de enfermagem, que perpassam pelos contextos e estados de alívio, calma e transcendência. Esses elementos se combinam entre si para gerar respostas singulares.



**DESCRITORES:** Enfermagem. Conforto do paciente. Insuficiência renal crônica. Teoria de enfermagem. Filosofia em enfermagem. Pesquisa em enfermagem.


## SIGNIFICADO Y DIMENSIONALIDAD DEL ESTADO DE CONFORT EN PACIENTES CON ENFERMEDAD RENAL CRÓNICA EN HEMODIÁLISIS


### RESUMEN

**Objetivo:** comprender el significado y la dimensionalidad del estado de confort, desde la perspectiva de los pacientes en hemodiálisis crónica.
**Método:** estudio cualitativo, con 30 pacientes de una clínica de hemodiálisis, de mayo a junio de 2018. Se utilizó una entrevista semiestructurada con preguntas orientadoras. Datos analizados según el método de análisis de contenido de Bardin, apoyados en el marco teórico de Kolcaba.
**Resultados:** surgieron cinco subcategorías para estar y sentirse cómodo: bienestar psicológico, ambiente tranquilo, buena calidad de atención, sin cambios de salud y reducción en la frecuencia/duración de la hemodiálisis. En cuanto a la dimensionalidad para lograr la comodidad, hubo tres subcategorías, según los estados adoptados. En cuanto a la dimensionalidad, el alivio se logra cuando el paciente está desconectado de la máquina, no asiste a una sesión o no presenta manifestaciones clínicas de complicaciones de la hemodiálisis. En la calma, malestares visibles vinculados al cambio de rutina; abandono de actividades laborales; dificultades económicas y escaso apoyo familiar; y problemas psicoespirituales que se debilitan a diario, haciéndolos vulnerables al malestar. En la trascendencia aparecieron como índices la ausencia de síntomas, el apego a la religión, la fe o espiritualidad y la resiliencia a la nueva rutina. Los Estados no actúan individualmente, se relacionan con las vivencias de los contextos.
**Conclusión:** comodidad significa alivio de la incomodidad; estado de haber satisfecho las necesidades humanas básicas; bienestar físico y mental; comodidad física, mental y ambiental; y estado final de las acciones de enfermería terapéutica, que transcurren por contextos y estados de alivio, calma y trascendencia. Estos elementos se combinan para generar respuestas únicas.



**DESCRIPTORES:** Enfermería. Comordidad del paciente. Insuficiencia renal crónica. Teoría de enfermería. Filosofía en enfermería. Investigación em enfermería.

## INTRODUCTION

The act of comfort permeates the history of nursing, since Florence Nightingale's first reports in Notes on Nursing, when she mentioned that: "[...] The relief and comfort obtained, in fact, are nothing more than a sign, that the vital forces were aided by the removal of something that oppressed them" [1:132]

In nursing literature, it is observed that this concept has been the target of many studies,[2–3] present in nurses' daily practice, and added to various aspects of conceptions and theories. One of these theories is Katharine Kolcaba's Theory of Comfort, recognized as the main scholar of the term comfort.[4]

In this sense, this author constructed and developed a medium-range theory that has comfort as the main element, being considered a basic need of a human person, an essential result of nursing care, universally desirable and relevant in various professional taxonomies and nursing theories.[5] For Katharine Kolcaba, it is essential to act intervening in patients' discomfort and to be able to assess the results obtained after the activities performed.[6]

Through the Theory of Comfort, Katharine Kolcaba idealizes it as a result of nursing care, achieved through strengthening basic human needs, relief, tranquility and transcendence, defined as states of full satisfaction, remedied in four holistic contexts of human experience: physical (bodily sensations or homeostatic mechanisms); psychospiritual (meaning of individuals' lives, internal self-consciousness, which includes self-esteem, self-concept, sexuality, in addition to relationships with a supreme being); sociocultural (interpersonal, family and social relationships; financial aspects); environmental (external environment, conditions and influences, which encompass infrastructure).[4]

Thus, in this medium-range theory, for nursing interventions to be successful, it is necessary that nurses take care of patients' unmet needs, in order to provide and promote maximum comfort, envisioning that the sick need comprehensive and holistic care, since they present desires and aspirations that go beyond physiological aspects or somatic needs, coming from the states.[4]

With this, relief is defined as a state in which a patient satisfies a specific need, and to satisfy it, it is necessary to act on the global factors that generate discomfort. Calm is a state of tranquility, to achieve it, it is necessary to meet the needs related to lasting and continuous situations of well-being. In turn, transcendence is defined as a higher situation of comfort, and to conquer it, constant measures of education and motivation are urgent.[4]

Thus, in order to ensure the lowest level of abstraction of this medium-range theory, through stability, Kolcaba,[4] in later studies, proposed an instrument that was able to measure comfort, entitled General Comfort Questionnaire (adapted and subjected to cross-cultural validity, content and psychometric validity in Brazil)[5,7–8] that allows assessing aspects of comfort in two main grids. The first grid assesses whether basic human needs for relief, calmness and transcendence have been met, i.e., the intensity to which these needs were met. The second grid checks comfort in four dimensions: physical, environmental, social, psychological, and spiritual.

Thus, it is investigated that the experiences of comfort can coexist in these four contexts. Therefore, the theory brings the combination of the elements of the two grids, thus producing twelve cells that will allow identifying the needs of comfort and intervening improving patients' state of comfort. Thus, Kolcaba proposes that studies be conducted in order to assess significance, internal consistency of assumptions, empirical adequacy and pragmatic adequacy, through the use of this theoretical framework.[4]

When moving to the experimental field, it is verified that patients with Chronic Kidney Disease (CKD) undergo exposed discomforts after its diagnosis and at the moment when the symptoms manifest themselves, implying the need for dialysis process.[9]

During the intervention period, patients undergoing dialysis may have impaired comfort due to a number of factors, such as anxiety, loss of autonomy, travel to hemodialysis units, limitation to perform activities of daily living, lack of support by family members.[8]

Therefore, this study is relevant, because the population that needs hemodialysis treatment grows in Brazil; with this, there is a need to identify the items or aspects that permeate comfort, since these can result in impairment and damage to patient comfort levels.

The scarcity of studies on comfortable living, from hemodialysis patients' perspective, is notorious.[10] The focus has been, most of the time, given to the quality of life of these customers, forgetting that comforting is also providing quality of life. Being comfortable is considered a momentary and transitory sensation, based on nursing interventions. Therefore, it is necessary to elucidate the view of these patients to the concept on screen and draw a line of care in nursing involving professional and patient in well-being promotion.

Therefore, it presented as a fundamental question: how does the meaning and dimensionality of state of comfort occur, from the perspective of patients with CKD undergoing hemodialysis? Thus, the objective was to understand the meaning and dimensionality of state of comfort, from the perspective of patients with CKD under hemodialysis.

Therefore, it is expected that this study can support clinical nursing practice and direct actions to ensure comfort promotion to patients with CKD, involving the dimensions, whether at the level of relief, calm or transcendence and in all contexts, physical, social, psychological, spiritual or environmental, and thus be able to offer qualified nursing care to patients, whose need for assistance will be permanent.[8]

Furthermore, this study seeks to contribute to assessment and elucidation of the knowledge of this theory through analysis of the meaning, internal consistency of this meaning, empirical and pragmatic adequacy of the concepts of comfort and respective dimensionality, in the voice of patients with CKD under hemodialysis, favoring the improvement or refutation of theory elements.[11]

## METHOD

This is a qualitative, descriptive and exploratory study, conducted in a hemodialysis clinic located in a public hospital in the city of Fortaleza, Ceará State, Brazil, between May and June 2018.

The population of this clinic consisted of 130 patients. Patients a diagnosis of CKD; clinically stable, conscious and self-oriented psychically and halo psychically (through the Mini Mental State Examination - MMSS) and older than 18 years were included. Patients unable to communicate verbally were excluded.

It was observed that 38 participants did not meet the inclusion and exclusion criteria, since ten were clinically useless in more than three hemodialysis sessions, eight presented cognitive deficits according to MMSS for education, twelve were under 18 years old, six had hearing impairment and two psychiatric disorders. Thus, the sample to be considered available was from 92 patients with CKD.

Participants were selected based on a previous list, based on the inclusion and exclusion criteria. Thus, it was established as a protocol to investigate patients who did not present recurrent intradialytic complications, based on the evolutions of their medical records to minimize possible interruptions in the management of machines.

When considering the high sample size, it was decided to close the interlocutions from theoretical exhaustion, when 30 participants answered the questions, so that the findings became repetitive. Thus, this number allowed approximation to the object and identification of common themes, which allowed the focus of the study to be reached.

The instrument used for data collection was constituted by means of broad questions about the concepts presented in Katharine Kolcaba's Theory of Comfort. The questions were verbally answered by participants, from mediation of a researcher, who collected the speeches through a recorder.

To collect information, we used a semi-structured interview, with questions that addressed the perspectives of the concept of comfort and the dimensions of state of comfort, in search of patients' verbalizations, concerning the meanings and representations about the concept of comfort in the face of hemodialysis treatment.

The meaning of the concept of comfort was obtained through two guiding questions: what is comfort for you? What is discomfort to you? The trigger questions were used to explore the interview, in the presence of the terms calm, relief, and transcendence (overcoming), through three questions: at what point do you feel relieved? When do you feel more relaxed? At what point do you realize you're overcoming a problem or suffering?

The interview took place during the arrival or departure of hemodialysis sessions. The researchers went to the clinic twice a week, in morning, afternoon and evening shifts, in order to select the research subjects according to their availability. Patients most often undergo three hemodialysis sessions per week. It was performed individually in a hemodialysis-provided environment, with an average duration of 45 minutes, whose answers were recorded in an MP4 device, which were later fully transcribed, preserving interviewees' statements, focusing on word reliability.

Interview closure occurred from theoretical exhaustion to the questions made. Thus, when the statements became repetitive and predictable, i.e., the structure of meanings had been seized, it was decided to close, since there were no more news, at the content level, through participants' statements.

Then, the findings were analyzed according to Bardin's content analysis method,[12] which describes as an organization criterion for analysis the following steps: pre-analysis, material exploration, and treatment of results. After full transcription of the interviews, a thourough, critical and exhaustive reading was performed, which allowed defining the corpus analyzed. The analytical categories were defined, *a priori*, according to the reference of Katharine Kolcaba's Theory of Comfort, by identifying states of comfort: relief, calm, and transcendence.

This study is in line with national and international research requirements with human beings, in which it was submitted and approved by a Research Ethics Committee with Human Beings. Moreover, the administrative aspects were respected with the obtaining of a term of consent by the clinical direction of the locus institution of the study and application of an Informed Consent Form for all participants.

In order to guarantee their anonymity, letter I was used for interviewees, following the order of presentation of the interviews (I1, I2, I3... I30).

## RESULTS

Regarding sociodemographic characterization, the sample consisted of patients aged between 30 and 83 years, of whom 63.3% were women, 76.7% were literate, with less than eight years of education, 83.4% were Catholic, 86.6% were totally dependent on sick pay. Their average income was R$ 954.00 (± US$190.00); 23.3% of participants lived in the countryside of Ceará and were in the capital of Fortaleza and 83.4% lived with their families.

After the characterization of participants, the interviews were fully transcribed, in which participants' interviews were read thoroughly, critically, emerging two categories and their respective subcategories.

### Being and feeling comfortable

It was verified, through the highlighted statements, that comfort is configured as a basic human need, and, for this, it needs to be satisfied, so that the human being achieves self-realization. Thus, five thematic subcategories representing (dis)comfortable being, such as psychological well-being, environmental issue, quality of care, health alterations and frequency/duration of hemodialysis sessions emerged from interviewees' statements, as shown in Chart 1.

**Chart 1 –** Synthesis of contents seized in the conceptualization of being and feeling comfortable in patients with chronic kidney disease during hemodialysis. Fortaleza, Ceará, Brazil, 2018.

| Indexes | Indicators | Speeches |
|---|---|---|
| Psychicological well-being | Tranquility, being well with you, living well, feeling good, not having tranquility, worried. | [...] *My comfort is that I am well with myself daily* (I04). [...] *Comfort is tranquility* (I15). [...] *It's when I'm not getting to stand still, restless, worried about something* (I22). |
| Environmental Issue | House, chair, bed, air conditioning, accommodation. | [...] *I think a better chair, because we spend four hours lying in this chair* (I09). [...] *When I'm in my house* (I04). [...] *It is me being well accommodated* (I26). |
| Quality in service | Good staff, good care, good service, good nurses, not being well assisted, not having good relationship with others, not getting along with people. | [...] *Concerning service, if I could, I would give them a gift every month. It is good you being in a place that you are well received* (I21). [...] *Very good care, the head nurse is very careful, if they were not good with us, things wouldn't go forward* (I19). [...] *Discomfort is not being well assisted, not being welcomed. As I'm sick and I'm badly assisted, that's a very bad discomfort* (I12). |
| Health changes | Not feeling anything, leaving hemodialysis well, getting sick, adverse effects, life with health, life without disease, being without health, not having a good kidney, doing hemodialysis. | [...] *When my weight is good and I feel nothing* (I30). [...] *It is feeling good, leaving hemodialysis well* (I16). [...] *Getting home badly from the adverse effects of hemodialysis* (I15) [...] *Life without disease, has nothing better than having health* (I21) [...] *It is hemodialysis, it is very heavy, the disease is a discomfort, any, outside its normal routine* (I24). |
| Frequency/duration of hemodialysis sessions | Coming three times a week, difficulty coming to sessions, time, long, four hours. | [...] *Having to come three times a week for me is very difficult because I have a baby* (I02). [...] *I'm afraid, you know?! In those four years, I've never missed it, but I feel like not having to come three times a week* (I28). [...] *Discomfort is spending four hours sitting in a chair, it's a long time. It is very tiring for column, back, this is the worst* (I03). [...] *The time is very, four hours. It lacks patience!* (I09). |

## Expressions on the dimensions of state of comfort (relief, calm, and transcendence)

### *Relief*

Given the seized reports, it was noticed that there are numerous limitations for achieving comfort levels, which are or are not in the nursing control area as a profession, in ensuring full care of basic human needs or comfort. From the previous statements, it was noted that many of these restrictions are modified by the team, such as the environmental factors of hemodialysis rooms, the complications and symptoms resulting from therapy, in order to favor relief and calm for hemodialysis patients.

Thus, two indexes of the relief subcategory emerged, in which statements were seized that state of relief was achieved when a patient left the stretcher, when leaving or when he or she did not appear at one of the hemodialysis sessions, and when he or she does not present clinical manifestations of hemodialysis intercurrence, shown in Chart 2.

**Chart 2 –** Synthesis of the contents seized in the dimensionality of comfort, in relief state, in patients with chronic kidney disease during hemodialysis. Fortaleza, Ceará, Brazil, 2018

| Relief indexes | Relief indicators | Speeches |
|---|---|---|
| Associated with treatment | When it's over, when it's done, when it's close to be over, not to come, to stay home, not to be treated, to leave, when I miss. | [...] *When hemodialysis ends and when I am at home, Saturday and Sunday I do not do dialysis and forget that I am someone with chronic kidney disease* (I17). [...] *I say thank you when I do not come for hemodialysis, I feel relieved not to come* (I28). [...] *In my house. I miss, I have come in an Wednesday and the other not* (I11). |
| Absence of hemodialysis symptoms | No problem, no symptoms, no effects, hypotension. | [...] *When I do not feel the effects of hemodialysis* (I07). [...] *When I have no hypotension, because my pressure is already low* (I12). |

### *Calm*

However, it was also found that as much as comfort measures are implemented by the nursing team, visualized in the quality of care provided, there are external dimensions to care that can act as obstacles.

In the statements, situations emerged that prevented the complete establishment of state of calm in hemodialysis treatment, with emphasis on changes in patients' routine; abandonment of work activities; financial difficulties; insufficient family support, in such a way that these conditions are stressful in health, and psychospiritual issues present daily weaken them, making them vulnerable to constant discomfort.

In this regard, four indexes emerged as shown in Chart 3 in the subcategory calm emerged, in which we detected statements that state of calm was reached from the hemodialysis environment, which may be due to the end of hemodialysis or the fact of being at home referring to safety; absence of symptoms demarcated by intradialytic complications, spiritual aspects and related to the environment free of stressful conditions, such as noise.

**Chart 3 –** Synthesis of contents seized in the dimensionality of comfort, in state of calm, in patients with chronic kidney disease during hemodialysis. Fortaleza, Ceará, Brazil, 2018

| Calm indexes | Calm indicators | Speeches |
|---|---|---|
| Hemodialysis environment | At home, when hemodialysis ends, not liking the environment, when I leave here, being here, feeling safe here. | [...] *When I am at home, because every time I come here, we worry about what will happen* (I23). [...] *When I'm here on hemodialysis, even if I'm on dialysis and like it or not, you feel safe here, because if you're sick, you already have the staff there to assist you, and, at home, we don't have that* (I19). |
| Absence of hemodialysis symptoms | Not feeling bad, feeling nothing. | [...] *When I do not feel bad in hemodialysis, when I do not feel anything, I get worried when my pressure drops* (I20). |
| Psychospiritual aspects | Always, all the time, all the time, here and outside here. | [...] *All the time, here and outside here. What will be, will be!* (I14). |
| Environment-related | Noise. | [...] *I feel tranquility, away from noise* (I18). |

### *Transcendence*

In relation to transcendence according to Chart 4, once again absence of symptoms is among the categories selected, showing its importance in reaching comfort to hemodialysis patients. Among the three dimensions of state (relief, calm, and transcendence), the appearance of this category is presented in all of them. In all statements, the absence of physical sensations emerged as a means of overcoming discomfort.

With regard to the spoken statements, there were two aspects of thoughts, in which period of diagnosis and treatment are a factor that favors the reach of this state, because it is common to deny and change psychological status, which are over-stressed, causing conflicts. Also, another common situation in this context is the inability to supplant the disease, accepting, in order to make the relationships with the disease better feasible.

Thus, in most cases, patients with CKD reported treatment as something painful that interferes with multiple life activities. Nevertheless, others mentioned treatment, with all discomforts, as steps to reach comfort. Thus, for these patients, overcoming discomfort means having access to the sessions, since through the process, they can exceed the barriers of CKD, one day at a time.

Therefore, patients with CKD need to modify habits and face the uncomfortable effects of treatment. In these circumstances, many cling to religion, faith, or spirituality as a form of resistance to the new routine.

In this category, in addition to the spiritual aspect and religiosity, personal capacity for resilience was also included. Thus, it is observed that promoting resilience becomes a powerful need for nephrological nursing intervention to ensure the reach of comfort, since it was also listed as a need to achieve a state of calm.

**Chart 4 –** Synthesis of the contents seized in the dimensionality of comfort, in the state of transcendence, in patients with chronic kidney disease during hemodialysis. Fortaleza, Ceará, Brazil, 2018.

| Transcendence indexes | Transcendence indicators | Speeches |
|---|---|---|
| Transplantation | Transplantation, compatible, donor. | [...] *Only with transplantation, but it's that thing, I don't think I'm dying. What will be, will be!* (I27) |
| Absence of hemodialysis symptoms | Not feeling anything, feeling good, doing well. | *When I win another day of dialysis without feeling anything* [...] (I25) |
| Treatment | Undergoing hemodialysis, undergoing treatment. | [...] *Only way for us is to undergone treatment, we cannot fail with treatment, otherwise you can perish* (I18). [...] *When I start hemodialysis* (I16). |
| Psychospirituality | Presence of God and faith in daily life. | [...] *When I cling to God. If you do not have faith in God, you cannot continue. Here we are in his hand* (I08). |
| Resilience | Strength, not being down, not turning yourself in, not giving up | [...] *Not giving up! I do not give up as long as I live, if I decided to give up, I would give up, but it does not solve!* (I29) |

## DISCUSSION

Considering the results envisioned in this study, it is understood that comfort and discomfort always go together; the absence of one results in the accentuation of the other. Thus, it is learned that patients under hemodialysis experience comfort and discomfort on a daily basis.

A similar result was observed in a study of the referred concept in patients with heart failure, which can be viewed under three groups: disease, well-being/health promotion and goals of the profession. In disease, care was taken to make the other free from pain and discomfort relief from discomfort, pain-free state, pain relief, mental anguish or other discomfort. In the conceptual cores linked to well-being/health promotion, the state of having met the basic human needs for relief, tranquility and transcendence was identified; relief, encouragement or comfort; harmony, the result of body-mind-spirit integration; mental and physical well-being; physical comfort; mental comfort; strengthening, encouragement, support and tranquility. Regarding the goals of the profession, the final state of therapeutic nursing actions for a patient was explored.[13] The findings of this study confirm that the nuclei of the disease, well-being and the goals of the profession were seen in the significance of comfort in hemodialysis.

During data categorization, it was observed that patients comfort on hemodialysis permeate the four contexts dimensioned in the initial studies by Kolcaba.[5] The statements related comfort and discomfort to psychological well-being, which highlights the psychospiritual context; the environment, exemplifying the environmental context; quality of care, evidencing the social context through personal and therapeutic interrelationships; absence and presence of symptoms; existence and not health; frequency of hemodialysis, which showed the physical context (body sensations). Thus, it was visualized in patients'speeches under the nuclei of the disease, well-being and the goals of the profession.

In a study with women who suffered acute myocardial infarction, it was found that the meanings of comfort depended on the states dimensioned in the study. Thus, described with varied configurations, not depending exclusively on nursing care, being related to material or financial conditions, when

enjoying personal interactions, sensations of psychological, physical and spiritual well-being, when functioning normally, i.e., hope to recover, not have diseases and be able to perform the usual activities to reach states of comfort.[2] This reality differed from this study in relation to recovering and not having diseases due to the chronic character and palliative therapy in this public.

It was identified in the statements that duration of hemodialysis, with multiple meaning,[14] was classified by patients as something tiring, which interferes with physical and mental comfort, and can then be included in the physical and psychospiritual contexts of the Theory of Comfort.[15] A study with hospital companions observed significance predominantly related to the environmental context related to lack of convenience, discomfort, unattended rights, tension, precarious conditions of structure and functioning of the hospital.[2]

Regarding the states of comfort, relief was represented as reduction of work, load or weight based on a need not to attend hemodialysis sessions. These findings corroborate another study.[16] Thus, the statements converged on conceptual elements of the Theory of Comfort, which defines relief as a dimension of state, in which patients experience having their basic human needs met.[16–17]

Thus, in these studies, two concepts were presented in relation to the feeling of relief, seen as something painful or the discomfort itself.[14,16] With that, participants evidenced it as a heavy feeling to be faced and that needed to be remedied. Patients with CKD, living with chronic conditions that require frequent and long-term treatment daily, become dependent on the machine to live, three to four times a week, for three to four hours. They face discomfort, despite understanding that this is the necessary therapy for maintaining life and reducing discomfort arising from the disease, as long as the prospect of transplantation does not occur or due to the impossibility of transplants resulting from the indications for this therapy.[18]

Understanding hemodialysis as a discomfort itself, from which they cannot dismay, was verified when they did not attend the sessions, which put them in a situation of extreme risk to health and life; when the sessions were completed, when they did not suffer from physical symptoms or lacked hemodialysis sessions.[16]

Thus, it is impossible to predict the effects of hemodialysis, in addition to the fact that complications related to hemodialysis are very frequent; mainly hemodynamic changes resulting from cardiopulmonary bypass, which removes large amounts of liquid and nitrogen excreta, in a short period of time.[19]

The dialogues about “state of relief” entered the “contexts”, i.e., state of relief can only be reached when aspects of contexts are also. In this sense, the Theory of Comfort is ratified when it states that comfort is the result of the juxtaposition of “state and context” dimensions, thus creating a combination of twelve facets.[4]

Regarding the state of Calm, the statements diverged from the definitions proposed by Katherine Kolcaba, expressed as the result of a state of agitation, imbalance of physical, psychological and environmental well-being, triggering dissatisfaction.[4] It is observed the presence of four subcategories formed, in which the state of calm is related to environmental, physical (sensations of the body) and psychospiritual aspects. In view of this, patients also agreed that in the reach of the state of calm, it is necessary that context dimensions are completely satisfied.[20]

It is essential to emphasize that the state of calm, related to the environment, has two aspects, in which there are those who lose their calm in the hemodialysis environment, associating the environment of the hemodialysis room with the fear of the unknown, to the complications, due to the dialysis process itself, which causes dread and tranquility and there are others, who think differently and associate the room environment with a place of safety, in which discomforts can be promptly sanated by the team.[16,21]

These ideas corroborate Kolcaba’s philosophical assumptions, which attest that in stressful health care situations, unmet needs for comfort should be met by nurses. Thus, it is understood that the nursing team achieves the function by comforting patients during hemodialysis sessions, by ensuring an environment free of risks and damage and promoting comfort measures.[22]

It was noticed in the reports that physical conditions remained an obstacle to reach comfort comprehensively. A study states that hemodialysis is a safe treatment, virtually without risks to patients' lives.[23] However, even when performed with the best technique, complications are likely to happen, and the treatment is understood as a stressor to patients.[24]

The reports showed dissatisfaction with external environmental aspects, indicating discomforts related to conditions, not proper to the place, but of what is inserted in the hemodialysis space. In this case, the state of calm is not contemplated by the intervening noise factor.[21] This is because the reality investigated here is characterized by being closed environment, with constant presence of alarms from hemodialysis machines, air conditioning sound, conversations between staff and patients or among patients themselves, television on, among other interferences, resulting in amplified reverberation, which promotes obstacles to the reach of comfort, unhealthy repercussions to patients exposed to this context.

Noise is presented in another study, in which it is pointed out that the effects of exposure to excessive noise in the clinical environment are not limited to hearing damage, which may induce increased fatigue and stress and sleep disorders.[21] Study on comfort of women victims of acute myocardial infarction found that noise is present in other scenarios, presented in the form of daily buzz, caused by conversation among health professionals. Therefore, silence needs to be preserved, as a means of providing tranquility for hospitalized people.[2]

Regarding the state of transcendence, understood as the capacity for autonomy and control to stay above the problems[4], it was evidenced in the interviewees' statements in a minority way. Thus, it is common for hemodialysis patients to highlight transplantation as the main or only alternative to discomfort and restriction stemming from treatment.

It is essential to highlight that this surgical procedure allows rehabilitation with improvement of quality of life in social, family, conjugal and spiritual aspects, as something that refers to life, hope, positive feelings.[25] Nevertheless, it was perceived in the statements that the ability to overcome the disease, adapting to the new reality, is minimal, which makes us infer, considering this specific study, that comfort, at the level of transcendence, is impossible until transplantation occurs.[26]

In this sense, the most prevalent feelings at this stage are denial, anger, bargaining, depression, isolation and acceptance.[27] It should not be forgotten that each individual goes through these transformations in a unique way, at specific intervals and sequences.[28–29]

*A priori*, religion and spirituality are perceived as a means of attributing to patients the meaning of life, giving hope and providing peace, in the midst of serious events, such as chronic disease itself. Thus, in relation to the reports obtained, attachment to the sacred at this moment of life results in adaptation to uncomfortable circumstances.[25]

It is understood that part of hemodialysis patients demonstrates the capacity to overcome daily discomfort and to remain calm, even in adverse situations. This characteristic is called resilience.[30] Thus, it appears that the term presented here is unknown to the concepts pointed out in the Theory of Comfort structuring. However, this element can contribute to the improvement of theoretical and philosophical assumptions of the theory. Resilience is defined as the variation in the innate capacity that accompanies and protects the development of individuals in the long term, as well as the acquired skill that subjects present before adverse situational situations.[30] Thus, it becomes relevant to promote mechanisms for the development of resilience promotion in individuals undergoing hemodialysis, in order to promote the passage of states of relief, calm, to achieve personal transcendence.

It is seen as limitations of this study to identify the verbalizations through MP4 recording device. Most of the time, patients are not used to this type of data collection approach. Thus, it becomes necessary to desensitize the presence of this artifice in data collection, in hemodialysis units, in order to guarantee the veracity of the statements and abstractions of the contents. Another restriction

found occurred in data analysis, as subjectivity was present, despite the maintenance of impartiality by the researcher as the study depends on its interpretation. Still, there was an absence of studies with a similar design in the population on screen to compare the results. However, it was sought, by means of critical analysis of all speeches, by the researchers, to abstract content according to the theoretical framework.

In this study, contributions are emphasized regarding the internal consistency of the theoretical and conceptual elements proposed by Kolcaba. The concepts of comfort states elaborated are congruent to the clinical practice in hemodialysis, permeated by clarity and semantic coherence. It is relevant to highlight that this investigation presented resilience as a new concept that may add new propositions of the Theory of Comfort.

Still, it appears that this study was able to test, empirically, the concepts, the operational definitions, from participants' perspective, and the propositions between the concepts, through individuals' speeches. Thus, it is recognized that the propositions defended by Kolcaba were observed, reaching the criterion of empirical adequacy, and this study can reinforce elements present in the Theory of Comfort, necessary during the theoretical assessment process according to the criteria of Katherine Kolcaba.[5]

With regard to pragmatic adequacy, it was identified that this study adds value to the daily practice of nephrological nursing by promoting and maintaining the comfort of patients with CKD under hemodialysis. Therefore, analysis of speeches' contents can favor the direction of nursing actions based on the Theory of Comfort, leading to favorable results, which include reducing complications, improving health conditions and increasing satisfaction with nephrological nursing actions, based on in the theory studied.

Thus, this study made it possible to identify that some nursing interventions may be opportune to promote comfort, such as monitoring and reducing inter and intradialitic complications through machine management, health guidance, aiming at changing inappropriate health behaviors, increasing self-esteem and self-concept, developing a strategy to face treatment, promoting resilience in the short and long term, and environmental control, in guaranteeing the quality and safety of care, and calm in the environment hemodialysis. Therefore, this study may be useful in directing nursing interventions to promote comfort in this context.

Thus, other studies should be carried out to analyze the need for specific nursing interventions and health behaviors to promote comfort in hemodialysis, in order to achieve institutional integrity, elements of the theory not covered in this study.

## CONCLUSION

It was observed that comfort means relief from discomfort; state of having met basic human needs; mental and physical well-being; physical comfort; mental comfort; environmental comfort; and final state of nursing therapeutic actions. In this way, it goes through the physical, psycho-spiritual, sociocultural and environmental contexts, linked to states of relief, calm and transcendence, which combine with each other to generate in each individual unique responses regarding particular needs. It is learned that comfort is configured as a basic human need; therefore, it needs to be satisfied for the human being to achieve self-realization, as proposed by Katharine Kolcaba's Theory.

Thus, it was noted the difficulty of individuals with CKD to overcome the state of being and feel comfortable, in search of personal transcendence. There is a clear relationship between symptomatology, clinical complications during the interdialitic period, psychospiritual and environmental aspects, such as noise and the ability to deal with problems. That said, the nursing team's performance is relevant, in a comprehensive and holistic way, to achieve transcendence through comfort promotion in a daily basis.

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## NOTES

## ORIGIN OF THE ARTICLE

This article is part of the end of course paper - "*Percepções do conforto por pacientes renais crônicos*", presented to the Undergraduate Nursing Course at *Universidade Federal do Ceará,* in 2018.

## CONTRIBUTION OF AUTHORITY

Study design: Freire SML, Silva RA, Melo GAA, Aguiar LL, Santiago JCS.
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Data analysis and interpretation: Freire SML, Silva RA, Melo GAA.
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## ACKNOWLEDGMENT

We would like to thank the Brazilian National Council for Scientific Research (CNPq - *Conselho Nacional de Pesquisa Científica*) and the Research Support Coordination for granting a scholarship in the form of master's and doctoral degrees.

## APPROVAL OF ETHICS COMMITTEE IN RESEARCH

This article was approved by the Research Ethics Committee of *Universidade Federal do Ceará*, Opinion 2.645.675/2018 and *Certificado de Apresentação para Apreciação Ética* 83521918.9.0000.5054.

## CONFLICT OF INTEREST

There is no conflict of interest.

## EDITORS

Associated Editors: Selma Regina de Andrade, Gisele Cristina Manfrini, Laura Cavalcanti de Farias Brehmer, Ana Izabel Jatobá de Souza.
Editor-in-chief: Roberta Costa.

## HISTORICAL

Received: March 04, 2020.
Approved: June 08, 2020.

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