

# Benefits of spirituality and/or religiosity in patients with Chronic Kidney Disease: an integrative review

Benefícios da espiritualidade e/ou religiosidade em pacientes renais crônicos: revisão integrativa Beneficios de la espiritualidad y/o religiosidad en pacientes renales crónicos: revisión integrativa

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#### **ABSTRACT**

**Objective**: Identify and analyze existing evidence regarding the benefits of spirituality and / or religiosity in patients with Chronic Kidney Disease. **Method**: Integrative review carried out through consultation of databases: Latin American and Caribbean Literature in Health Sciences, Scientific Electronic Library Online, US National Library of Medicine and Scopus. The following descriptors were used: chronic kidney disease, spirituality and religion. Primary articles published by December 2017 were included. **Results**: Twenty-six articles were selected, from which four thematic categories emerged: benefits as a modality of coping, perception of quality of life, mental health and improvement of renal function after transplantation. **Conclusion:** Benefits included those related to situational coping modalities, such as the strengthening of hope, social support and coping with pain; those related to mental health, such as the lower risk of suicide and fewer depressive symptoms; improvement in the perception of quality of life and in renal function after transplantation.

**Descriptors:** Chronic Kidney Disease; Spirituality; Religion; Religion and Medicine; Patient-Centered Care.

#### **RESUMO**

Objetivo: Identificar e analisar as evidências existentes referentes aos benefícios da espiritualidade e/ou religiosidade em pacientes renais crônicos. Método: Revisão integrativa realizada por meio de consulta às bases de dados: Literatura Latino-Americana e do Caribe em Ciência da Saúde, Scientific Electronic Library Online, US National Library of Medicine e Scopus. Utilizaram-se os descritores: Doença Renal Crônica, espiritualidade e religião. Foram incluídos artigos primários publicados até dezembro de 2017. Resultados: Foram selecionados 26 artigos, dos quais emergiram quatro categorias temáticas: benefícios como modalidade de enfrentamento, na percepção da qualidade de vida, à saúde mental e na melhora da função renal pós-transplante. Conclusão: Os benefícios incluíram os relacionados às modalidades de enfrentamento situacional, como o fortalecimento da esperança, apoio social e enfrentamento da dor; os relacionados à saúde mental, como o menor risco de suicídio e menos sintomas depressivos; melhora na percepção da qualidade de vida e na função renal pós-transplante.

**Descritores:** Doença Renal Crônica; Espiritualidade; Religião; Religião e Medicina; Assistência Centrada no Paciente.

#### **RESUMEN**

Objetivo: Identificar y analizar las evidencias existentes referentes a los beneficios de la espiritualidad y/o religiosidad en pacientes renales crónicos. Método: Revisión integrativa realizada por medio de consulta a las bases de datos: Literatura Latino-Americana e do Caribe em Ciência da Saúde, Scientific Electronic Library Online, US National Library of Medicine y Scopus. Se utilizaron los descriptores: enfermedad renal crónica, espiritualidad y religión. Se incluyeron artículos primarios publicados hasta diciembre de 2017. Resultados: Se seleccionaron 26 artículos, de los cuales surgieron cuatro categorías temáticas: beneficios como modalidad de enfrentamiento, en la percepción de la calidad de vida, la salud mental y en la mejora de la función renal post-transplante. Conclusión: Los beneficios incluyeron los relacionados a las modalidades de enfrentamiento situacional, como el fortalecimiento de la esperanza, apoyo social y enfrentamiento del dolor; los relacionados con la salud mental, como el menor riesgo de suicidio y menos síntomas depresivos; mejora en la percepción de la calidad de vida y en la función renal post-transplante.

**Descriptores:** Enfermedad Renal Crónica; Espiritualidad; Religión; Religión y Medicina; Asistencia Centrada en el Paciente.



#### **INTRODUCTION**

Chronic Kidney Disease (CKD) consists of progressive and irreversible loss of renal functions, where in the most advanced phase the maintenance of the internal environment is severely impaired and there is a need to initiate dialytic treatment<sup>(1)</sup>.

Worldwide, CKD has been identified as an important public health problem because it affects a significant portion of the population and implies high morbidity and mortality, causing poor quality of life for patients and high costs to the health system<sup>(2)</sup>. In Brazil, the incidence of 123 thousand patients under dialysis treatment is admitted. These values are more exorbitant and worrying if we consider their annual growth<sup>(3)</sup>.

Although substitutive rather than curative, treatment modalities include peritoneal dialysis, hemodialysis, and kidney transplantation<sup>(4)</sup>. Regardless of the type of treatment, patients and their families are exposed to significant changes in their lives, with a need to reorganize the family and personal context. The need to use medications continuously, routine physical activities, infection monitoring, as immunity undergoes changes, water and dietary restrictions, periodic medical visits, loss of employment, among others, are pointed out as stressful situations. Changes in activities of daily living and disturbances of self-image and self-esteem<sup>(5)</sup>. In summary, patients with CKD often present functional, aesthetic and psychosocial problems<sup>(6)</sup>.

In this context, the development of situational coping strategies or modalities is necessary. Among them, the ones related to spirituality and/or religion. Although the mechanisms are still not fully understood, research has pointed out that religiosity/ spirituality is positively related to a variety of mental health indicators in the process of coping with illnesses, as well as providing protection against addictive or suicidal behaviors<sup>(7)</sup>.

Although for many, spirituality and religiosity are synonymous, their definitions point to distinctions. Spirituality is defined as "the personal quest to understand final questions about life, about its meaning, about relationships with the sacred or transcendent, which may or may not lead to the development of religious practices or formation of religious communities"; while religiosity is defined as "the extent to which an individual believes, follows, and practices a religion, whether it be organizational (participation in church or religious temple) or non-organizational (praying, reading books, watching religious television programs)" (8).

Benefits of spirituality and/or religiosity in clinical practice have been evidenced<sup>(4,9-10)</sup>. A literature review study that evaluated the relationship between spirituality, religiosity and the health of dialysis patients indicated improvements in the doctor-patient relationship, quality of life and coping with the disease. The authors defend the need for spirituality and religiosity to be considered by professionals in the care of these patients<sup>(4)</sup>. Another study carried out in Saudi Arabia with 310 patients under hemodialysis showed that religiosity was associated with better psychological health, greater social support, better physical and cognitive functioning, better health behavior and greater adherence to Renal Replacement Therapy<sup>(9)</sup>. Another descriptive study of a qualitative approach performed in Brazil with 12 kidney transplant recipients showed that spirituality helps in coping with the transplantation process, as well as in overcoming negative

feelings. Still, getting closer to God, the church and its members results in greater emotional and social support<sup>(10)</sup>.

However, there is a shortage of evidence and strategies focused on the best way to incorporate spirituality in the process of caring for patients with CKD, which is a major challenge for health professionals<sup>(11)</sup>. In fact, there is a discrepancy between the spiritual needs of patients and the provision of care and related interventions, including care for patients with Chronic Kidney Disease<sup>(12-13)</sup>. Thus, it is believed that the realization of studies that point out the benefits of spirituality/religiosity can contribute to the planning and implementation of spiritual care in the practice of care.

Although review studies that considered the benefits of spirituality and/or religiosity in patients with Chronic Kidney Disease have been developed, it is evident that they were limited to specific groups of patients, such as peritoneal dialysis or hemodialysis, or quality of life or self-care. In this context, the development of this research seeks to contribute to healing this knowledge gap.

In view of the above, one wonders: what are the benefits of spirituality and/or religiosity for patients with Chronic Kidney Disease? With this research, we hope to increase understanding and clarify the benefits of spirituality and/or religiosity in patients with CKD, as well as their impact on treatment and its influence on the lives of these patients.

#### **OBJECTIVE**

This study aims to identify and analyze existing evidence regarding the benefits of spirituality and/or religiosity in patients with Chronic Kidney Disease.

#### **METHOD**

#### Study design

This is an integrative review of the literature. This methodology allows the approach of several types of studies and provides a comprehensive analysis of the subject addressed besides the synthesis of the produced knowledge<sup>(14)</sup>.

#### Methodological framework and the respective steps

In order to make this review, the following steps were considered: development of the guiding question; search for primary studies in databases; extraction of study data; evaluation of selected studies; analysis and synthesis of the results and presentation of the review<sup>(14)</sup>.

Respecting what it was proposed to evaluate, the guiding question was: "what are the benefits of spirituality and/or religiosity in patients with Chronic Kidney Disease?"

Primary articles were included in English, Spanish and Portuguese. No publication time period was stipulated. The search was finalized on December 16, 2017. Secondary articles were excluded, that is, validation or revision, and those that after reading in full did not answer the guiding question.

The search was carried out by means of consultation with databases: Latin American and Caribbean Literature in Health Sciences (LILACS), Scientific Electronic Library Online (SCIELO), US National Library of Medicine (PubMed) and Scopus. The choice of the databases considered the comprehensiveness and qualification of the same. Thus, the main ones were included in the researchers' opinion.

For the search, we used the descriptors: Chronic Kidney Disease, spirituality and religion, in Portuguese, English and Spanish. All descriptors and their synonyms have been combined. For the descriptors the combinations were realized by means of the Boolean term "AND", while for the synonyms, the Boolean term "OR".

The selection of studies was carried out initially through the thorough reading of titles and abstracts, including those that met the established inclusion criteria. For the final selection, the articles were read in full. The entire process, from the search to the selection, was carried out by two researchers. In case of doubt or discrepancy between them, a third researcher was consulted.

A standardized form was used to collect and analyze the data: title of the article, authors, year of publication, country where it was published, study design, Level of Evidence and main results or recommendations.

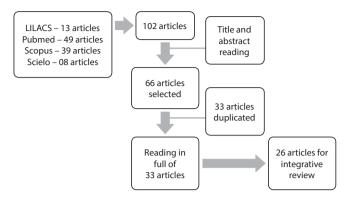
In order to evaluate the Level of Evidence of the studies, it was used the categorization of the Agency for Healthcare Research and Quality (AHRQ) that classifies the studies into six levels, being: I - Evidence resulting from the meta-analysis of multiple controlled and randomized clinical studies; II - Evidence obtained in individual studies with experimental outlining; III - Evidence from quasi-experimental studies; IV - Evidence from descriptive studies (non-experimental) or qualitative approach; V - Evidence from case or experience reports and VI - Evidence based on expert opinions<sup>(15)</sup>.

Finally, the content identified in the articles was exposed through thematic categories.

#### **RESULTS**

Initially, 102 studies were selected. After reading the titles and abstracts, 66 studies were selected. Of these, 33 studies were excluded because they were duplicated, that is, available in more

than one database. Thus, 33 articles were selected for reading in their entirety. Of these, 26 composed the final sample (Figure 1).



**Figure 1 -** Flowchart of the selection process of the articles of the integrative review, 2017

Of the 26 articles that composed the final sample, the oldest was published in 2003 and the most current in 2017. Of the 26 articles, 23 (88%) were available in English. 15 (58%) were published in international journals and, although eight (31%) were published in national journals; they were indexed in international databases. Regarding origin, those developed in Brazil (54%) followed by the United States (27%) prevailed. Regarding the design of the studies, all (n = 26, 100%) were descriptive, therefore, with Level of Evidence  $IV^{(15)}$  (Chart 1).

From the analysis of the selected studies and in the light of the guiding question, four thematic categories emerged: 1) Benefits of spirituality and/or religiosity as a modality of coping; 2) Benefits of spirituality and/or religiosity in the perception of quality of life; 3) Benefits of spirituality and/or religiosity to mental health; and 4) Benefit of spirituality and/or religiosity in the improvement of renal function after transplantation.

Chart 1 - Presentation of included studies in the integrative review, according to the title, authors, year of publication, country where it was published, design, Level of Evidence and outcomes, 2017

Article title	Authors/Country/ Publication year	Study design/ Level of Evidence	Main results/ Recommendations
Adjustment, spirituality, and health in women on hemodialysis <sup>(16)</sup> .	Tanyi RA, Werner JS. USA. 2003.	Descriptive and correlational study (n=65 patients). Level IV.	The relationships between adjustment, spiritual well-being and self-perception of health in women with end-stage renal disease under hemodialysis were evidenced.
Religious beliefs and quality of life in an American inner-city haemodialysis population <sup>(17)</sup> .	Ko B, Khurana A, Spencer J, Scott B, Hahn M, Hammes M. USA. 2007.	Cross-sectional study (n=112 patients). Level IV.	Patients under hemodialysis use religious/spiritual beliefs to give themselves hope, meaning and life purpose.
Spirituality in African American and Caucasian women with end-stage renal disease on hemodialysis treatment <sup>(18)</sup> .	Tanyi RA, Werner JS. USA. 2007.	Cross-sectional study (n=58 patients). Level IV.	Benefits of religious well-being were evidenced.
Women's experience of spirituality within end-stage renal disease and hemodialysis <sup>(19)</sup> .	Tanyi RA, Werner JS. USA. 2008.	Qualitative study (n=16 patients). Level IV.	Spirituality is of great importance and should be used to improve holistic care.
Religion and spirituality: the experience of families of children with Chronic Renal Failure <sup>(20)</sup> .	Paula ES, Nascimento LC, Rocha SM. Brazil. 2009.	Qualitative study (n=14 participants). Level IV.	Health professionals should understand the religion and spirituality of the family in the process of illness, with a view to their work in promoting health.

To be continued

Chart 1

Article title	Authors/Country/ Publication year	Study design/ Level of Evidence	Main results/ Recommendations
Existential and religious dimensions of spirituality and their relationship with health-related quality of life in chronic kidney disease <sup>(21)</sup> .	Davison SN, Jhangri GS. Canada. 2010.	Quantitative study (n=253 patients). Level IV.	The existential domain of spirituality had a greater impact on quality of life compared to measures of religiosity.
Religious/spiritual coping in people with chronic kidney disease undergoing hemodialysis <sup>(22)</sup> .	Valcanti CC, Chaves ECL, Mesquita AC, Nogueira DA, Carvalho EC. Brazil. 2012.	Descriptive and cross- sectional study (n=123 patients). Level IV.	Patients use coping positively religious/spiritual as a coping strategy.
Religious beliefs and practices in end- stage renal disease: implications for clinicians <sup>(23)</sup> .	Elliott BA, Gessert CE, Larson P, Russ TE. USA. 2012.	Qualitative study (n=31 patients). Level IV.	Religious beliefs brought meaning to life. The importance of religious practices (prayer, liturgy and traditions) was highlighted to keep them connected to God. Receiving visits from church members and clergy offered support.
Religiousness, mental health, and quality of life in Brazilian dialysis patients <sup>(24)</sup> .	Lucchetti G, Almeida LG, Lucchetti AL. Brazil. 2012.	Descriptive and cross- sectional study (n=133 patients). Level IV.	Religiousness was associated with fewer depressive symptoms and better quality of life.
Investigating the action and interaction strategies that patients use to cope with peritoneal dialysis <sup>(25)</sup> .	Santos FK, Valadares GV. Brazil. 2013.	Qualitative study (n=8 patients). Level IV.	When knowing the strategies used in coping with DP, it will be up to the nurse to participate in this process in which the client gives meaning to this method.
The relationship between spirituality, psychosocial adjustment to illness, and health-related quality of life in patients with advanced chronic kidney disease <sup>(26)</sup> .	Davison SN, Jhangri GS. Canada. 2013.	Descriptive and cohort study (n=253 patients). Level IV.	The importance of directing psychosocial adjustment to disease and spirituality as ways of preserving or improving the quality of life of predialysis and dialysis patients was evidenced.
Spiritual coping, religiosity and quality of life: a study on Muslim patients undergoing haemodialysis <sup>(27)</sup> .	Saffari M, Pakpour AH, Naderi MK, Koenig HG, Baldacchino DR, Piper CN. Iran. 2013.	Descriptive cohort study (n=362 patients). Level IV.	Spiritual resources may contribute to a better quality of life and health status among patients under hemodialysis.
Quality of life/spirituality, religion and personal beliefs of adult and elderly chronic kidneypatients under hemodialysis <sup>(28)</sup> .	Rusa SG, Peripato GI, Pavarini SCI, Inouye K, Zazzetta MS, Orlandi FS. Brazil. 2014.	Descriptive cross- sectional study (n=110 patients). Level IV.	Patients presented high quality of life scores, specifically in the dimensions related to spirituality, religion and personal beliefs.
Religious Wellbeing as a Predictor for Quality of Life in Iranian Hemodialysis Patients <sup>(29)</sup> .	Taheri Kharame Z, Zamanian H, Foroozanfar S, Afsahi S. Iran. 2014.	Cross-sectional study (n=95 patients). Level IV.	Religious well-being should be considered as an important predictive factor for better quality of life in patients under hemodialysis.
Hope and spirituality among patients with chronic kidney disease undergoing hemodialysis: a correlational study <sup>(30)</sup> .	Ottaviani AC, Souza EN, Drago NC, Mendiondo MSZ, Pavarini SCI, Orlandi FS. Brazil. 2014.	Descriptive, cross- sectional study (n=127 patients). Level IV.	Hope and spirituality should be considered in health care.
How do thai patients receiving haemodialysis cope with pain? <sup>(31)</sup>	Yodchai K, Dunning T, Savage S, Hutchinson AM, Oumtanee A. USA. 2014.	Qualitative study (n=20 patients). Level IV.	The study made it possible to understand how patients deal with pain and the importance of cultural beliefs and coping strategies and appropriate management of pain.
Relationship between mental health and spiritual wellbeing among hemodialysis patients: a correlation study <sup>(32)</sup> .	Martínez BB, Custódio RP. Brazil. 2014.	Descriptive cross- sectional study (n= 150 patients). Level IV.	Poor mental health was associated with lower spiritual well-being. Spiritual well-being has been negatively related to stress, sleep disorders, psychosomatic complaints, and mental health.
Relation between quality of life and spirituality in chronic renal patients who conduct hemodialysis <sup>(33)</sup> .	Malaguti I, Manfrim PB, Santos TM, Santos DCN, Napoleão LL, Silva RCR, et al. Brazil. 2015.	Descriptive cross- sectional study (n= 100 patients). Level IV.	Spirituality was positively related to the improvement in quality of life.
Family experience in the kidney transplant process from a living donor <sup>(34)</sup> .	Cruz MG, Daspett C, Roza BA, Ohara CV, Horta AL. Brazil. 2015.	Qualitative study (n=4 families). Level IV.	Live donor kidney transplantation involves aspects of physical and emotional care of all involved, where spirituality is a contributing factor.

To be continued

Article title	Authors/Country/ Publication year	Study design/ Level of Evidence	Main results/ Recommendations
Religião no tratamento da doença renal crônica: comparação entre médicos e pacientes <sup>(35)</sup> .	Souza Júnior EA, Trombini DSV, Mendonça ARA, Von Atzingen AC. Brazil. 2015.	Qualitative study (n= 20 participants, being 10 patients and 10 doctors). Level IV.	The meaning of religion in their lives was distinct among the groups analyzed; however, both agree that religion is a beneficial factor in the patient's life.
Quality of life and associated factors in patients with chronic kidney disease on hemodialysis <sup>(36)</sup> .	Fukushima RL, Menezes AL, Inouye K, Pavarini SC, Orlandi FS. Brazil. 2016.	Descriptive cross- sectional study (n= 101 patients). Level IV.	Socio-demographic and clinical factors, including spirituality, are important for improving the care of patients with Chronic Kidney Disease under hemodialysis.
Religiosity and health-related quality of life: a cross-sectional study on filipino christian hemodialysis patients <sup>(37)</sup> .	Cruz JP, Colet PC, Qubeilat H, Al-Otaibi J, Coronel El, Suminta RC. Philippines. 2016.	Descriptive cross- sectional study (n=100 patients). Level IV.	The holistic approach in treating patients under hemodialysis, with an emphasis on spiritual care, was encouraged in order to improve health as a whole.
The role of religion and spirituality in coping with kidney disease and haemodialysis in Thailand <sup>(38)</sup> .	Yodchai K, Dunning T, Savage S, Hutchinson AM. USA. 2017.	Qualitative study (n=20 patients). Level IV.	Religion and spirituality provided powerful coping strategies.
Influence of spirituality on renal function of kidney transplant patients <sup>(39)</sup> .	Bravin AM, Trettene AS, Cavalcante RS, Banin VB, Padula NA, Saranholi TL, et al. Brazil. 2017.	Descriptive cross- sectional study (n=81 patients). Level IV.	More spiritual patients had better renal function during the course of a year of transplantation. This effect was independent.
Factors associated with the quality of life of patients undergoing hemodialysis (40).	Gesualdo GD, Menezes ALC, Rusa SG, Napoleão AA, Figueiredo RM, Melhado VR, et al. Brazil. 2017.	Descriptive cross- sectional study (n=101 patients). Level IV.	Religiousness, among others, had a positive influence on health-related quality of life.
The influence of spirituality and religiousness on suicide risk and mental health of patients undergoing hemodialysis <sup>(41)</sup> .	Loureiro ACT, Rezende Coelho MC, Coutinho FB, Borges LH, Lucchetti G. Brazil. 2017.	Descriptive cross- sectional study (n=264 patients). Level IV.	In short, spiritual beliefs were associated with lower risk of suicide and better mental health among patients under hemodialysis.

#### DISCUSSION

# Benefits of spirituality and/or religiosity as a modality of coping

Among the thematic categories listed in this review, the one that described spirituality and/or religiosity as a religious/spiritual coping modality included the largest number of articles. It related to the establishment and strengthening of hope, social support and coping with pain.

Living with CKD is known to be stressful and stressful for the patient and their family members. Thus, hope becomes an indispensable and continuous process, since it has contributed to the acceptance of the new condition imposed by the disease. In this context, spirituality and religiosity, often represented by spiritual beliefs, emerge as tools to support and strengthen<sup>(4,9)</sup>.

The experience of falling ill, when faced with hope, causes the individual to put his energy to the expectation of restitution of health and spiritual well-being<sup>(9)</sup>. These benefits were evidenced in a study with 127 Brazilian patients with CKD and under hemodialysis treatment, where the relationship between the level of hope and spirituality was confirmed, reinforcing the need for its monitoring and insertion in the context of the care of these patients<sup>(30)</sup>.

The use of religious/spiritual coping in patients who undergo hemodialysis treatment was verified as a way of facing the health condition, where patients who consider religion/spirituality as important in their lives presented high scores of religious/spiritual coping<sup>(22)</sup>.

Qualitative study conducted with 31 US patients with end-stage renal disease and their families pointed out that religious beliefs brought meaning to their lives. The importance of religious practices, including prayer, liturgy and traditions as a way of keeping them connected to God, was also highlighted. Receiving visits from church members and clergy represented support and support through joint prayer and fellowship with the sacraments (23). These findings corroborated another qualitative study that included 16 US women with CKD under hemodialysis, where spirituality was linked as a modality of acceptance, understanding, strength and emotional control (19).

Although religiosity and spirituality are referred to as situational coping modality, it is observed that cultural differences influence their meanings. Thus, populations that are recognized as more religious or spiritual tend to have better results in terms of their benefits. In this context, a Thai qualitative study involving 20 patients with Chronic Kidney Disease under hemodialysis, whose objective was to investigate the influence of religion and spirituality in coping with the disease, pointed to religious and

spiritual practices as a modality of coping, including religious and spiritual for the development of disease, karmic disease, merit, prayer and praises, and the act of bargaining with the gods through promises. Finally, the authors associated the results with the religiosity and spirituality of the Thai people<sup>(38)</sup>.

Another study involving 58 patients with CKD and hemodialysis to compare spiritual well-being scores among African-American and Caucasian women found that African-Americans had greater value in religious well-being including the feeling of being assisted by God, to be helped by Him in times of solitude, to have a satisfying relationship with God, to feel satisfied with life, and to give meaning to life. The authors reinforce the need to consider cultural differences in the interpretation of results<sup>(18)</sup>.

Believing that disease is a stage to be fulfilled and that life is governed by a divine force brings meaning to sickness and suffering. Often patients and their families trust the success of treatment to divine intervention. In this context, a qualitative study that included the participation of eight Brazilian patients with CKD and peritoneal dialysis identified several resources used by clients in coping with the disease and its treatment, including, among others, the refuge in spirituality<sup>(25)</sup>.

The benefits of spirituality and/or religiosity were also recorded as coping modality in the process of living donor kidney transplantation in a qualitative study with four Brazilian families, both for the patient, for the donor and his family. The need for physical and emotional care to all involved, considering the potentialities and adaptations experienced, where spirituality was an indispensable auxiliary factor was evidenced (34).

Another qualitative study carried out with 20 participants, 10 patients and 10 physicians, sought to know the importance they both attribute to religion and spirituality, and its relation to the treatment of CKD. For doctors, religion represents strength and comfort in coping with any disease. Patients, on the other hand, put faith in the hope that they will improve. Although the meaning has been different, both agree that religion is a beneficial factor in the patient's life, providing relief, support and optimism<sup>(35)</sup>.

Among the difficulties faced by patients with Chronic Kidney Disease is pain that is recognized as one of the most common symptoms experienced by people receiving hemodialysis. Of varying intensity and typology, pain affects the well-being and quality of life of these people<sup>(31)</sup>.

In that sense, a qualitative study that included 20 Thai patients under hemodialysis investigated how they perceive the pain, the effect of the pain in their lives and how they manage it. Three major types of pain are identified: the physical related to venous and vascular access punctures; the psychological associated with unfulfilled expectations and changes in family roles; and social. Religion, spirituality, acceptance of pain associated with treatment and social support were identified as coping modalities<sup>(31)</sup>.

The diagnosis of CKD has a profound negative impact on the family. In cases where the patient is a child, the repercussions are even more overwhelming. Thus, the scientific explanation is not the only. In this context, spirituality emerges as a source of support. While scientific knowledge presents only palliative and non-healing treatments, spirituality gives the family feelings of hope, acceptance and/or comfort<sup>(20)</sup>.

Religion is recognized as a source of support for the family, as well as offering comfort, welcoming and providing an environment conducive to sharing experiences, where the community mobilizes for the benefit of the sick child. Moreover, religion promotes social interaction and support between family members and society<sup>(19-20)</sup>.

A qualitative study with 14 participants pointed to religion and spirituality as important resources for family members to deal with CKD in children undergoing peritoneal dialysis, especially in view of threatening prognoses. It is important that health professionals understand the religion and spirituality of the family regarding the disease process, with a view to their work in promoting health<sup>(19)</sup>.

## Benefits of spirituality and/or religiosity in the perception of quality of life

CKD and its treatments can influence the biological, psychological, economic and social dimensions of patients and their families with potential interference with the perception of their quality of life. In fact, patients with Chronic Kidney Disease tend to have worse quality of life<sup>(42)</sup>. In this context, numerous publications have pointed out the benefits of religiosity and/or spirituality in these patients regarding the perception of health-related quality of life<sup>(24,28,37)</sup>.

Religious people are more likely to use coping strategies as a means of managing their problems and conflicts, as well as having greater religiosity is intrinsically related to the sense of satisfaction and well-being, with consequent repercussion for a better perception of health-related quality of life<sup>(24,37)</sup>.

To give a meaning to life, to have feelings of belonging or to be connected to a "higher being" to have hope, purpose for life, and to feel supported by God are the forms that religious or spiritual people use to cope with stress during exposure to stressful events in your life<sup>(17,29)</sup>. In addition, spirituality and religious involvement are related to greater social support, the development of strategies to deal with the disease, certainly influencing their quality of life<sup>(29)</sup>.

The comfort and well-being that faith linked to spirituality, religion and personal beliefs gives the individual a positive influence on their way of life, as well as promoting improvements in general health<sup>(28,37)</sup>. A research has indicated that patients who practice some religion have a better perception of their quality of life compared to non-practitioners, possibly associated with the support and social interaction that it provides<sup>(40)</sup>. Similar results were found in other international studies, the first one consisting of 362 patients in Iran and the second with 253 patients in Canada, in whom patients with CKD on peritoneal dialysis or hemodialysis who had some religious beliefs had a better perception of the related quality of life the health<sup>(21,27)</sup>.

A study carried out with 168 Saudi patients undergoing hemodialysis in order to evaluate the influence of religiosity and spiritual coaching on health-related quality of life showed that religiosity and spirituality, among others, were associated with a better perception of quality of life, especially among older and unemployed patients<sup>(37)</sup>.

Another study with 112 Brazilian patients under hemodialysis pointed out the benefits of religiosity and/or spirituality in the

perception of quality of life. The authors report that as the patient ages or becomes physically incapacitated, quality of life decreases and appears to become more religious/spiritual<sup>(17)</sup>. This finding corroborates that of another study<sup>(37)</sup>.

People become more religious or spiritual as they grow older, possibly associated with the need to socialize and have more time for religious activities. Moreover, the religious community is considered an important source of social support for families, including, in particular, the unemployed. In addition to this, the fact that the unemployed patient is supported by the hope of getting a job, besides faith is an important modality of situational coping. On the other hand, people tend to be less religious as they are more economically favored, among others<sup>(43)</sup>.

Research that evaluated the quality of life/spirituality, religion and personal beliefs in 110 Brazilian patients with Chronic Kidney Disease under hemodialysis also pointed to the influence of spirituality and religiosity on quality of life. The patients presented high scores, specifically in the dimensions related to spirituality, religion and personal beliefs<sup>(28)</sup>. A similar result was observed in research with 100 Brazilian patients, where the spirituality score was positively related to the majority of domains related to quality of life. Still, it was possible to identify that the greater the "hope in the future" and the "belief that life has improved", the better the perception of health<sup>(33)</sup>.

Spiritual well-being is known as one of the main resources of adjusting and coping with stressful situations, such as managing a chronic illness. In this context, an Iranian study sought to identify the relationship between spiritual well-being and quality of life in patients under hemodialysis. 95 patients participated and it was concluded that religious well-being was associated with a better quality of life in the physical and mental domains<sup>(29)</sup>.

Spirituality may promote psychosocial adjustment of the disease, and this may be a mechanism by which patients with Chronic Kidney Disease with greater existential well-being have a better perception of health-related quality of life. In this context, a Canadian study involving 253 patients with CKD pointed out that psychosocial adjustment in the areas of psychological distress and prolonged family relationships seemed to mediate some of the beneficial effects of existential well-being on quality of life. However, the benefits of spirituality in patients' quality of life were independent of psychosocial adjustment<sup>(26)</sup>. In contrast, another study of 65 US patients with Chronic Kidney Disease under hemodialysis revealed the relationship between psychosocial adjustment, spiritual well-being and self-perceived health<sup>(16)</sup>.

Finally, from this point of view, spirituality, religion and personal beliefs are important factors influencing the perception of the quality of life of patients with Chronic Kidney Disease, and should be established as important therapeutic tools and as a strategy for offer comfort, tranquility and well-being to patients and their families<sup>(28)</sup>.

In short, it was highly recommended to integrate religiosity into the health care process for these patients, aiming at obtaining optimal global levels of health.

#### Benefits of spirituality and/or religiosity to mental health

Suicide is intimately related to depression and both are pointed out as complex phenomena that cause intense suffering to the people affected, their relatives, friends and community, besides being considered significant public health problems<sup>(41,44)</sup>.

The World Health Organization (WHO) estimates that depression accounts for 4.3 percent of the global burden of disease and is among the world's biggest causes of disability, particularly for women, while suicide, also understood as a problem universal, is among the main causes of death, representing around 11.4 per 100,000 inhabitants<sup>(44)</sup>.

Both depression and suicide result from the interaction of biological, genetic, psychological, sociological, cultural and environmental factors, being an important indicator of the quality of life of populations<sup>(41,44)</sup>.

Depression is characterized by the prolongation of depressive symptoms and mood swings, where one sees the world and reality in an altered way<sup>(45)</sup>. Research has indicated that patients with CKD and hemodialysis treatment are at higher risk for mental disorders, as well as higher risk of suicide<sup>(46)</sup>. Thus, a cross-sectional study evaluating 69 patients undergoing dialysis concluded that patients without religiousness had a suicide risk of eight times greater. However, this benefit occurred only in non-depressed religious patients<sup>(47)</sup>.

The protective mechanisms of spirituality and/or religiosity regarding these offensive behaviors to life have not yet been fully elucidated. Studies show the performance as modality of social support, restructure of suffering, hope and spiritual comfort (48-49).

Spirituality has been associated with better mental health and less risk of suicide in comparison to religiosity<sup>(41)</sup>, reinforcing the hypothesis of encompassing a broad and dynamic concept guided by the search for meaning and comfort, which is not limited only to religious involvement, although can also be expressed through it<sup>(50)</sup>.

On the other hand, a cross-sectional study aimed at identifying the religious aspects associated with mental health and quality of life in 133 Brazilian patients undergoing peritoneal dialysis showed that religiousness was inversely associated with depressive symptoms and the psychological domain quality of life was positively associated with an increase in religiosity, evidencing its benefits<sup>(24)</sup>.

Another study with 264 patients submitted to hemodialysis, whose objective was to investigate the association between spirituality and religiosity to the presence of suicide risk and mental health problems, pointed out that 18% had suicide risk, 14% depression and 15% of generalized anxiety disorder. The authors concluded that spiritual beliefs, including significance, peace and faith, were associated with lower risk of suicide and better mental health<sup>(41)</sup>.

Therefore, monitoring the mental health and, consequently, the risk of suicide in patients with Chronic Kidney Disease, can minimize its incidence, as well as complications and death. In this context, health professionals should be aware of and attentive to the importance of prevention as an instrument of health promotion, as well as the fact that religiosity and/or spirituality has been highlighted as a possible instrument (46).

It is also emphasized that the existence of depression and suicide risk can explain or justify patients' attitudes that are poorly understood and interpreted, such as rebellion and lack of adherence to treatment, becoming an important ally in clinical control<sup>(41)</sup>.

Finally, it becomes explicit the vulnerability of patients with Chronic Kidney Disease, who need to be comforted in their pain in all dimensions, not only in the physical.

#### Benefit of spirituality and/or religiosity in the improvement of renal function after transplantation

Although many studies have pointed to the influence of spirituality and/or religiosity in clinical practice, including patients with Chronic Kidney Disease, its benefits as an independent variable are still scarce, as well as its impact on renal function itself.

In this context, a recent study aimed to evaluate the influence of spirituality on the renal function of kidney transplant patients as an independent variable. This was a cross-sectional study that included 81 kidney transplant recipients, between 30 days and 60 months after transplantation, who were followed for 12 months in renal function. Possible confounding variables were worked out and discarded, including clinical features, immunosuppression, social support, adherence to drug treatment, quality of life and depression. The results showed that renal function over a year was significantly higher in the spiritualized group from the ninth month. At the end of 12 months, the percentage of patients with creatinine clearance higher than 60 ml/min was significantly higher (61.5%) in the spiritualized group and multivariate analysis showed that the less spiritualized group had a risk of 4.7 times greater for worse renal function. Thus, it was possible to conclude that more spiritual patients presented better renal function during one year of transplantation, being this effect independent. Finally, the authors emphasized the need for a holistic approach to care, with an emphasis on spiritual care<sup>(39)</sup>.

#### **Study limitations**

The inclusion criteria established for this study, although in line with that recommended in the literature, may have somehow limited the findings. For example, the databases consulted included PubMed, Scopus, LILACS and Scielo. Thus, journals not indexed were not selected. Also, articles published in languages other than English, Portuguese and Spanish were excluded. Although English is used in most scientific studies, it is believed that publications in other languages can contribute to broadening the findings.

#### **Study contributions**

The main contribution of this review includes the study of the benefits of spirituality and/or religiosity in patients with Chronic Kidney Disease. The findings point to evidence of the importance of these variables as coadjutor in the treatment of CKD, as well as for clinical practice. In summary, the results reinforce the need to include spirituality and/or religiosity in the context of the care of these patients and their relatives.

Finally, the realization of this research allowed us to identify that the number of publications focused on the implications of spirituality and religiosity in clinical practice is increasing. However, in their totality, they were classified in low level of scientific evidence, since they are descriptive or qualitative studies. In this context, the development of more rigorous methodological research that allows a systematic evaluation of the influence of spirituality and/or religiosity is encouraged, as well as those that evaluate the impact of spiritual or religious care in clinical practice.

The physical, psychosocial and spiritual implications of patients with CKD are well known. However, the insertion of spiritual care does not seem to follow scientific evolution, even with its evidenced benefits.

The lack of preparation of health professionals, including since their training, as well as the influence of their beliefs, have been pointed out as hindering the implementation of spiritual care. Although health professionals recognize the importance of spirituality and/or religiosity to patients and their families, they also acknowledge their unpreparedness to deal with this context. Thus, the inclusion in the curricular curriculum of health courses of disciplines or classes that address issues related to spiritual and palliative care are necessary.

Although it is possible to measure spirituality and/or religiosity numerically through various instruments, the fact that they are linked to individualized concepts and meanings do not allow their generalization. Health professionals should strive to know the culture and beliefs of their patients so that they can plan and implement interventions for spiritual care, as well as interpret the influence they have on the patient and their family members.

#### CONCLUSION

The benefits of spirituality and/or religiosity evidenced in patients with Chronic Kidney Disease included those related to situational coping modalities, such as strengthening hope, social support and coping with pain; those related to mental health that included the lower risk of suicide and fewer depressive symptoms; improvement in the perception of quality of life and in renal function after transplantation.

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