DOI: 10.5455/msm.2015.27.354-358

Received: 10 August 2015; Accepted: 05 October 2015

Published online: 05/10/2015 Published print: 10/2015

© 2015 Evangelos C. Fradelos, Foteini Tzavella, Evmorfia Koukia, Ioanna Papathanasiou, Victoria Alikari, John Stathoulis, Georgios Panoutsopoulos, Sofia Zyga

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/ by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

**REVIEW** 

Mater Sociomed. 2015 Oct; 27(5): 354-358

# INTEGRATING CHRONIC KIDNEY DISEASE PATIENT'S SPIRITUALITY IN THEIR CARE: HEALTH BENEFITS AND RESEARCH PERSPECTIVES

Evangelos C. Fradelos<sup>1</sup>, Foteini Tzavella<sup>1</sup>, Evmorfia Koukia<sup>2</sup>, Ioanna Papathanasiou<sup>3</sup>, Victoria Alikari<sup>1</sup>, John Stathoulis<sup>1</sup>, Georgios Panoutsopoulos<sup>1</sup>, Sofia Zyga<sup>1</sup>

Department of Nursing, Faculty of Human Movement and Quality of Life, University of Peloponnese, Sparta,

<sup>2</sup>Department of Nursing, University of Athens, Athens, Greece

<sup>3</sup>Department of Nursing, Technological Educational Institute of Thessaly, Greece

Corresponding author: Fradelos C. Evangelos. Address: Ostratous 2, Athens. zip code: 11743 Phone numbers: +302130067696; +306946228458 E-mail address: evagelosfradelos@hotmail.com , efradelos@med.uoa.gr

#### **ABSTRACT**

Introduction: Patients who suffer from chronic renal disease face problems in many aspects of their life; problems such as physical and social as well as mental such as stress, anxiety, depression. In addition, they exhibit an amount of spiritual needs, which relate and influence the psychological adaptation to the illness. Aim: The aim of this article is to examine evidence from the international literature regarding the possible relation of spirituality and health outcomes, mostly in the complex codex of a chronic and life treathing disease such as CKD. Results: Spirituality is a very debatable issue and the term has no single and widely agreed definition. The key components of spirituality were 'meaning', 'hope', 'relatedness/connectedness', and 'beliefs/ beliefs systems'. Spirituality has been characterized as the quest for meaning in life, mainly through experiences and expressions of mind, in a unique and dynamic process different for each individual. For many individuals spirituality and religion are important aspects of their existence, constituting a source support contribute to wellbeing and coping with life's daily difficulties. Conclusion: Considering, assessing and addressing chronic kidney disease patient's spirituality and spiritual needs is necessary and it can have a positive outcome in health related quality of life, mental health and life expectancy.

Key words: Spirituality, Chronic Kidney Disease, holism, health outcomes.

### 1. INTRODUCTION

Renal failure or Renal disease (RD) is a condition in which the kidneys are fail to filter waste products from the blood or to perform the regulating operations Thus, they deregulate the endocrine and metabolic function, and cause disturbances in fluids, electrolytes and acid-base balance. Chronic Kidney Disease (CKD) is a condition that is characterized by gradual and progressive, generally not reversible reduction of renal function. According to the definition, CKD is based on the ascertainment that there is a renal damage, which persists for more than 3 months. There are 5 stages of CKD, based on the glomerular filtration rate (GFR) values. Chronic Kidney Disease is a serious public health problem with 8-16% prevalence worldwide (1-2). According to the world health organization (WHO), at the stage 5 CKD, in the end-stage of renal disease or ESRD there are classified patients whose GFR values are under 15% and they are characterized by the necessity of hemodialysis or kidney transplantation so that the patients can be kept alive (3).

Chronic kidney disease (CKD) is a problem of increasing importance, consuming a growing proportion of health care resources. It estimated that today, 19.2 million individuals are suffering by CKD in the United states of America. This number is expected to increase due to the rising prevalence of hypertension and diabetes, the most common causes of ESRD. The number of patients that are suffering by ESRD is increasing worldwide at an estimated annual rate of 7% (4).

Patients who suffer from chronic renal disease face problems in many aspects of their life, problems such as physical, social as well as mental such as stress, anxiety, depression (5-6). Most patients that suffer from ESRD depend on health services for kidney replacement therapies such as hemodialysis. Moreover, they are obliged to adapt to new data and experience enormous changes in their daily habits, not only restrictions in food and liquid intake must be enforced but also restrictions in various activities. The management of illness presupposes multiple changes in patients' life. (7-12).

The aim of this article is to examine evidence from the international literature regarding the possible relation of spirituality and health outcomes, mostly in the complex codex of a chronic and life threating disease such as CKD. Moreover to indicate common psychosocial problems that patients with chronic kidney disease are facing, how that may be related to the spirituality.

## 2. THE CONCEPT OF SPIRITUALITY

"Spirituality exists in testing and experiencing the depth of inner peace consistently." Amit Ray

It is widely accepted that we draw spiritual support from many sources, by nature, God, Christ, the Buddha, Jehovah and from other superior powers. Although many of these have been incorporated into religions, spiritual life is not a religion, nor is religion spiritual life. Religion is a set of beliefs, practices and rituals, and spiritual life is a projection of the spirit and its relationship with the world. Some people develop their spirituality throughout their lifetime through prayer, reflection and meditation. Others leave this road because of conflicts with religious beliefs, values and practices due to disturbed relations within the family or others because they are busy (13).

Spirituality is a very debatable issue and the term has no single and widely agreed definition. Spirituality is considered to be a more wide-ranging and inclusive concept than religion, though their concept relationships are quite complex. Based on an earlier literature review, the key components of spirituality were 'meaning', 'hope', 'relatedness/connectedness', and 'beliefs/ beliefs systems' (14). Indeed spirituality has been characterized as the quest for meaning in life, mainly through experiences and expressions of mind, in a unique and dynamic process different for each individual. This process may reflect the belief in a God or in a Supreme Being, but also the deep relation between the individual with others and nature. Moreover the term spirituality also refers to the integrity and consistency of all dimensions, thought, body and spirit (15).

Some argue that the term Spirituality comprises the connection that people have with themselves or with others, with God or a higher power, or with nature. This is often combined with a deep sense of peace and satisfaction, which can facilitate physical healing. Spiritual experiences are unique and deeply personal (16).

Spirituality as a concept transcends religiousness. Through spirituality even those who do not believe in the existence of God can seek inspiration, meaning, purpose (17). Until the 20th century the term spirituality was related with God and the whole concept of it was associated with God and religious practices. In today's post modern and holistic health care systems it is recognized that individuals can seek spiritual experiences, seeking meaning, fulfillment and purpose in life, without necessarily this quest including a higher power.

For many individuals spirituality and religion are important aspects of their existence, constituting a source support contributing to wellbeing and coping with life's daily difficulties. For many patients, the integration of spiritual beliefs in the therapeutic process is vital and has been found to correlate with positive outcomes for mental health (18). The positive influence that spirituality can have in patients' perception of health, but also in individual's perception and coping of severe and life threating diseases has been well documented. More specifically, studies that have been conducted in patients diagnosed with a serious

disease such as advanced cancer, indicated that spirituality is an important factor that affects both adaptation to the disease, and general mental health status of patients (19, 20).

## 3. SPIRITUALITY IN NURSING AND HEALTH CARE

The relation between spirituality and health goes back in time and it is placed in antiquity in the primal civilizations where myths and metaphors were used in order to make sense of the world around them and of life in general (21). For centuries and in many cultures the religious leader and healer was the same person supporting the direct link between religious and spiritual beliefs and health. From the Native American shamanism to ancient Greek god of healing Asclepius and the his temples - infirmaries "Asclepeiia" the direct link between spirituality and health is highlighted (22). This connection prevailed within time and it was passed on up to Byzantine era where the main health care facilities "Xenones" were placed next to monasteries and they were directed by monks. In those forerunners of today's hospitals the care besides cleaning the patients and providing them with proper food, the administration of medicines according to a doctor's instructions included psychological support of patients and elementary comfort all within the prism of Christianity. Thus, we can say that patients received physical and spiritual care as well (23).

Furthermore the theoretical concepts of nursing care, lean towards a more holistic approach of care. Since the very beginning of nursing science it was recognized that "In every human being there seems to be a spiritual dimension, a quality that exceeds the religious bond, which "struggles" for inspiration, respect, awe, meaning and purpose for life, even to those who do not believe in God. The spiritual dimension is trying to be in harmony with the world, trying to give answers to the infinite and comes essentially into focus during periods of emotional stress, physical illness, loss, mourning, and death" (24, 25).

In nursing literature, the term spirituality is used to describe various concepts, such as the search for meaning, compliance to religion, energy equilibrium (26). Incorporating the spiritual dimension of patients in care should and must be an integral part of nursing practice. The pioneer of nursing Florence Nightingale had recognize the spiritual dimension of nursing care. She believed that it was the deepest and most essential source of healing. Nurses, despite their specialty, shouldn't be onedimensional technocrat- health professionals and they should have a more holistic approach to their patients. Nowadays, incorporating spiritual care in nursing practice seems to be gaining ground and interest year by year (27-29). It is beyond doubt that nurses are trained and qualified with the necessary knowledge, behavioral skills and experience, in order to successfully assess and address patients' spiritual needs. According to the International Council of nursing, nurses are responsible for providing holistic care, which includes the satisfaction of their spiritualreligious needs (30, 31). Addressing patient's spiritual needs is an essential nursing practice and can contribute to the improvement of biological, psychological and spiritual well-being of the individual. Thus, nurses should encourage the establishment of an environment in which values, habits, human rights and spiritual beliefs of individuals, would be respected.

#### **4. SPIRITUALITY AND HEALTH OUTCOMES**

A large body of research has been conducted to establish the relationship between religion/spirituality and physical and mental health outcomes. Mostly regarding populations that are facing a severe and life threating disease, such cardiovascular disease, various cancers and AIDS. But also and other conditions such chronic pain and aging. Research has shown that one's religious and/or spiritual beliefs can positively impact health, longevity, and recovery from physical illness (32).

Since 1998 that WHO recognized and incorporate religiousness/spirituality as important aspects of health related quality of life, numerous researches that have been conducted are supporting this fact (33). Thus, the relationship between spirituality and various aspects of quality of life (QoL) has been thoroughly researched in the past years. Evidence suggests that spiritual wellbeing is significant correlated with QOL aspects such us fatigue, distress and sadness, mood, work, relationship with others, and enjoyment of life. Supporting that spiritual wellbeing is closely related with both physical and psychological indicators of distress. Spirituality was considered important for coping with disease and provide peace during adverse events in life and times of stress (34,35).

Spirituality seem to affects the social, emotional, psychological and intellectual dimensions of our lives. A lot of evidence links spirituality and religious expression with different aspects of mental health and, in particular, different mental health problems. Spirituality can encourage personal empowerment, that affirms and embraces diversity and that promotes the importance of emotions such as hope, forgiveness and purpose. Furthermore, it can affect a person's coping styles or their locus of control perceptions. In addition, spiritual/ religiousness practices can provide individuals a network of social support that promotes and sustains emotional and psychological wellbeing (36).

Moreover, a comparative study conducted by Sodhi and Manju, between healthy and chronically ill (20), showed that there is a statistically significant positive correlation between the various aspects of spirituality and "good" mental status, suggesting that people with a high level of spirituality have higher mental health indicators. According to them ,one can positively enhance the health of a person providing a therapeutic environment that enhances the spiritual beliefs and in such way a positive attitude towards life can be achieved. Spiritual beliefs and practices can be important resources for addressing and positive resolution of chronic disease, and contribute to the mental health of the chronically ill (37).

In addition, the participation of low life expectancy and endstage cancer patients in religious and spiritual practices appears to reduce the chances of developing depression and melancholia (38). While, according to Yates et al (1981) spirituality can be a coping strategy for pain, it wasn't found to be related to the intensity of pain that patients experience. Nonetheless, researchers suggest conducting further research to clarify the clinical usefulness of incorporation of religious and spiritual practices, especially in palliative care (38).

According to the results of Koenig et al(1997) there is a positive relationship between spirituality and immune system. The mechanism that is presented in their study relates spirituality with stress coping, which successively affect the immune system. Spirituality provides mechanisms to better deal with stressful situations, rich social support and empowerment of

personal values (39). Furthermore, in some cases spirituality can affect lifestyle in such way in which a person can adopt or reject some behaviors that are related positively or negatively with health (36).

## 5. SPIRITUALITY AND CKD: HEALTH BENEFITS AND RESEARCH PERSPECTIVES

Studies on patients with CKD in regarding spirituality, led to the conclusion that these patients present an amount of spiritual needs, which relate and influence the psychological adaptation to the illness. Furthermore, those reviled that the development of a therapeutic relationship between nurses and patients in renal departments, is influenced by the positive experiences of these patients' spiritual care (10-12).

According to Eslami et al (2014) religious beliefs and spiritual health during the disease trajectory are among the most important things, because in times of crisis or when other coping mechanisms are not efficient enough, people become more religious. In these cases, religious beliefs as strategy and lifestyle have provided good supportive source to individuals and they have been equipped with a variety of effective coping skills (40).

The prevalence of depression worldwide is reaching 16.2% and depression is the second most common psychiatric disorder according to WHO (41). When it comes to individuals that are suffering by a chronic and severe illness, depression is very common even reaches 50% of all diagnosed psychopathology (42). The 20-30% of patients undergoing dialysis treatment suffer from depression (43). Research finding supporting that patients whose spiritual needs were met seemed to be less anxious and depressed. Moreover patients who's spiritual well-being is taking under consideration seem to be less depressed and anxious, they were also calmer and comfortable with their lives (44,40). According to Braam et al (1997), by valuing and considering someone's spiritual and religious preference can potentially provide hope and caring which might also aid in protecting against depression (45). Furthermore spiritual interventions such prayer or reading verses of the Holy books such bible, Koran etc can significantly and rapidly improve anxiety symptoms that often patients suffering by CKD have (46). In addition, spiritual health and spiritual wellbeing is close related with sleep quality in hemodialysis patients. Fact supporting the argument that incorporating spirituality in chronic kidney patients care is a necessity (44). Nonetheless a care model that incorporates patients spirituality can provide an additional coping strategy to patients that are suffering by chronic kidney disease.

It is a fact that physical health is a key factor for quality of life, good mood and feeling of happiness of the individuals and it is closely related to the perception that ones have on his self. A health problem such as a chronic illness as CKD can negatively impact QoL, life satisfaction leading the person to feel less happy and optimistic (47). That's why religion, spirituality and personal beliefs are considered as an important domain for the assessment Quality of life (33, 48). Nowadays it is suggested that QoL is related with spirituality, and that spirituality can be positive associated with social and psychological dimensions of QoL and negative associated with anxiety, depression and in general spirituality and religiosity are reported as factors that are protective for health (49, 50).

Over the years many studies have been conducted assessing this relation of health related quality of life and spirituality most of them in chronic, severe and life threating condition. Most of them suggesting a direct link between spirituality and psychosocial domains of HRQoL. Moreover indicating that the meaning/peace subscale more closely predicts HRQOL, and that higher faith scores may be detrimental to HRQOL (51, 52).

Patients suffering by a severe illness such as Chronic kidney disease are often demonstrating various spiritual needs in fact CKD seem to imposes various physical and psychosocial stresses on patients life. To be diagnosed with CKD often led people to change their point of view of their life, the world, themselves, and their future (53). Many times arising concerns of existential nature among others (54, 55). Moreover issues relating to the meaning and purpose seem to arise for those patients and often such issues can effect physical well-being, especially in the context of life limiting illness. In addition spiritual distress and suffering is very common in CKD patients and it may give rise to physical or psychological problems and shares many features with depression, including feelings of hopelessness, worthlessness, and a sense of meaninglessness (53, 54). Thus, spirituality is an important domain of HRQoL and should be assessed as it can supply unique information. Furthermore, spirituality as a domain holds significant potential for improving patients' QOL and maintaining and promoting patients spiritual wellbeing can improve mental health and the toleration of symptoms such pain or fatigue (56).

Researches on spirituality and health outcomes can have important implications regarding the clinical care of patients and spirituality can be a significant coping strategy. The majority of research so far suggests that religious and spiritual beliefs and practices are associated with greater well-being, and successful coping, especially in chronic conditions. Such condition as CKD has a significant impact on the life of patients and affects physical, functional, emotional, social and spiritual well-being. Health care that assesses and addresses CKD patients' spirituality and spiritual needs is essential and it can contribute to patients' improvement and recovery. There are several directions for future research on spirituality and health outcomes on CKD patients. Valid and reliable spiritual assessment tools are now available to facilitate such studies in order to understand these complex relationships. Continued research in this area is needed in order to identify, understand, and appreciate the clinical significance of spiritual well-being for patients with chronic kidney disease (57, 58).

Chronic Kidney Disease is a very complex issue, as a chronic illness affects many aspects of human existence. It is a progressive disease which generates many problems in patients not only physical, but also social and psychological. Like many chronic conditions that appear to reduce life expectancy, either directly or through complications, it seems to cause depression (59, 60). As seen from the above a holistic care model that takes into consideration, assess and address patients spiritual needs can contribute substantially to the care of patients with CKD. Moreover it can improve patient's quality of life and mental health. It also can contribute to face life with optimism, maintain hope and improve patient's cognitive perceptions of health and disease (61, 62).

### 6. CONCLUSION

To summarize, religion, spirituality and health have been combined through ages (63). For many people their religious

and spiritual component is very important. Furthermore, many of them wish those aspects of their existence to be taken under consideration through the healing process. Eventually, it appears that physical and spiritual wellbeing are linked and can affect each other. Many patients want to discuss religious or spiritual concerns with someone during their hospitalization and in fact most of them wish to discuss their R/S beliefs with physicians more frequently. Patients who had religious and spiritual discussions during their hospitalization were more likely to give a positive assessment of their care (64). A good physical health can promote spiritual wellbeing and the opposite as well. Studies must be conducted investigating upon the relationship between the physical and spiritual wellbeing, which will closely examine the factors related to physical health and mental well-being of the individual. Spirituality can be a source of comfort and hope and can help the acceptance of a chronic condition. Spiritual care in complex content such as of CKD can be challenging for health care professionals. Moreover, by incorporating patients spiritual beliefs in their care can have positive results in their active participation in their treatment (65, 66). For many professionals such issues as spiritual care can be difficult, this can be attributed to the lack of knowledge and inability to deal with it (61). Patient suffering by CKD are facing multiple challenges and comorbid conditions. Those emerging issues need to be address within the healing process (53-55, 59, 67-70). Moreover they have to be treated as a whole person, not as a "condition or illness", take it into account physical, emotional and spiritual dimension. Finally we can say that considering, assessing and addressing chronic kidney disease patient's spirituality and spiritual needs is necessary and it can have a positive outcome in HRQoL, mental health and life expectancy.

## **Abbreviations**

RD: Renal Disease CKD: Chronic Kidney Disease GFR: Glomerular Filtration Rate WHO: World Health Organization ESRD: End-Stage Renal Disease QoL: Quality of Life HD: Haemodialysis.

CONFLICT OF INTERESTS: NONE DECLARED.

## **REFERENCES**

- NKF. K/DOQI clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. Am J Kidney Dis. 2002; 39: S1-S266.
- Jha V, Garcia-Garcia G, Iseki K, Li Z, Naicker S, Plattner B, & Yang CW. Chronic kidney disease: global dimension and perspectives. Lancet. 2013; 382: 260-272. doi:10.1016/S0140-6736(13)60687-X
- Schieppati A, Remuzzi G. Chronic renal disease as a public health problem: epidemiology, social, and economic implications. Kidney Int Suppl. 2005; 68: 7-10. doi:10.1111/j.1523-1755 2005 09801 x
- Temimovic R, Rasic S, Muslimovic A. High Prevalence of Early Chronic Kidney Disease in High Risk Outpatients. Materia Socio-Medica. 2015; 27(2): 79-82. doi:10.5455/msm.2015.27.79-82.
- Fredric O. Finkelstein, Diane Wuerth, and Susan H. Finkelstein. "Health related quality of life and the CKD patient: Challenges for the nephrology community." Kidney International . 2009; 76: 946-952. doi:10.1038/ki.2009.307
- Theofilou P. The relation of social support to mental health and locus of control in Chronic Kidney Disease. Journal of Renal Nursing. 2012; 4: 18-22. doi: http://dx.doi.org/10.12968/jorn.2012.4.1.18
- Theofilou P. Association of insomnia symptoms with kidney disease quality of life reported by patients on maintenance dialysis. Psychol Health Med. 2013; 18(1): 70-78. doi: 10.1080/13548506.2012.674144
- De Santo NG, Perna A, El Matri A, De Santo RM, Cirillo M. "Survival is not enough." Journal of Renal Nutrition. 2012; 22: 211-219. doi: 10.1053/j.jrn.2011.10.010
- Alikari V, Fradelos E, Zyga S. Family support, social and demographic correlations of nonadherence among haemodialysis patients. American Journal of Nursing Science. Special Issue:Mental Health Care: Aspects, Challenges and Perspectives. 2015; 4(2-1): 60-65. doi: 10.11648/j.ajns.s.2015040201.21
- Davison SN, Jhangri GS. "Existential and supportive care needs among patients with chronic kidney disease." Journal of Pain and Symptom Management. 2010; 40: 838-843. doi:10.1016/j.

- jpainsymman.2010.03.015
- Davison SN, Jhangri GS. "The relationship between spirituality, psychological adjustment to illness, and health-related quality of life in patients with advanced chronic kidney disease." Journal of Pain and Symptom Management. 2013; 45: 170-178. doi:10.1016/j.jpainsymman.2012.02.019
- Deal B, Grassley JS. The lived experience of giving spiritual care: A phenomenological study of nephrology nurses working in acute and chronic hemodialysis settings. Nephrology Nursing Journal. 2012; 39(6): 471-481.
- Kneisl C, Wilson H, Trigoboff E, Contemporary mental health nursing, Hellin Publishing, Athens. 2009: 43.
- Cheawchanwattana A, Chunlertrith D, Saisunantararom W, Pratheepawanit N. Does the Spiritual Well-Being of Chronic Hemodialysis Patients Differ from that of Pre-dialysis Chronic Kidney Disease Patients? Religions. 2015; 6: 14-23. doi:10.3390/rel6010014
- Meraviglia MG.'Critical analysis of spirituality and its empirical indicators. Prayer and meaning in life.' Journal of holistic nursing: official journal of the American Holistic Nurses' Association. 1999; 17(1): 18-33. doi: 10.1177/089801019901700103
- 16. Zeckhausen W. Spirituality and your practice. Family Practice Management. 2001; 8(5): 60.
- $17. \qquad Murray\,RB, Zentner\,JP.\,Nursing\,Concepts\,for\,Health\,Promotion.\,Prentice\,Hall, London\,1989.$
- 8. Greenberg D. Spirituality in medicine: Does it fit? PennPulse. 2003; 99: 1-7.
- Zullig KJ, Ward RM, Horn T. The association between perceived spirituality, religiosity and life satisfaction: The mediating role of self-rated health. Social Indicators Research. 2009; 79: 255-274. doi:10.1007/s11205-005-4127-5
- Lin HR, Bauer-Wu SM. Psycho-spiritual well-being in patients with advanced cancer: An
  integrative review of the literature. Journal of Advances Nursing. 2003; 44(1): 69-80. doi:
  10.1046/j.1365-2648.2003.02768.x
- Fradelos E, Fradelou G, Kasidi E. Pain: Aspects and treatment in Greek antiquity. Journal of Medical Sciences and Public Health. 2014; 2(2): 29-36.
- Kourkouta L, Fradelos E, Papathanasiou I. Asklipieia as infirmaries. Oral Presentation. Conference proceedings. 1st International Balkan Conference on Health Sciences, 14-16 May 2014, Edirne, Turkey. 2014: 142.
- Kourkouta L. Working conditions and duties of nurses in Byzantium. Int Hist Nurs J. 1998; 4(1): 32-34.
- Papathanasiou I, Sklavou M, Kourkouta L. Holistic nursing care: theories and perspectives.
   American Journal of Nursing Science. 2013; 2(1): 1-5. doi: 10.11648/j.ajns.20130201.11
- American Journal of Nursing Science. 2013; 2(1): 1-5. doi: 10.11648/j.ajns.20130201.11

  25. Murray RB, Zentner JP. Nursing concepts for health promotion. London: Prentice Hall; 1989.
- Tanyi RA. Towards clarification of the meaning of spirituality: nursing theory and concept development or analysis. Journal of Advanced Nursing. 2002; 39(5): 500-509. doi: 10.1046/j.1365-2648.2002.02315.x
- McSherry W, Cash K, Ross L. Meaning of spirituality: implications for nursing practice. Journal of Advanced Nursing. 2004, 13: 934-941. doi: 10.1111/j.1365-2702.2004.01006.x
- Pullen L, McGuire S, Farmer L, Dodd D. The relevance of spirituality to nursing practice and education: Mental Health Practice. 2015; 18(5): 14-18. http://dx.doi.org/10.7748/ mbp.18.5.14-2016
- Timmins F, Murphy M, Neill F, Begley T, Sheaf G. An exploration of the extent of inclusion of spirituality and spiritual care concepts in core nursing textbooks. Nurse education today. 2015; 35(1): 277-282. doi: 10.1016/j.nedt.2014.05.008
- Ledge SD. The duty of nurses to meet patients' spiritual and/or religious needs. British Journal of Nursing. 2005; 14: 220-225. doi: http://dx.doi.org/10.12968/bjon.2005.14.4.17607
- 31. ICN. Code of Ethics for Nurses. ICN, Geneva; 2000.
- Rippentrop E, Altmaier E, Chen J, Found M, Keffala V, The relationship between religion/ spirituality and physical health, mental health, and pain in a chronic pain population. Pain. 2005; 116(3): 311-321. doi:10.1016/j.pain.2005.05.008
- World Health Organization. WHOQOL and spirituality, religiousness and personal beliefs (SRPB) - report on WHO Consultation. Geneva; 1998.
- Leak A, Hu J, King C. Symptom distress, spirituality and quality of life in African-Americanbreast cancer survivors. Cancer Nursing. 2008; 31(1): E15-E21. doi: 10.1097/01. NCC.0000305681.06143.70
- Kandasamy A, Chaturvedi SK, Desai G. Spirituality, distress, depression, anxiety, and quality of life in patients with advanced cancer. Indian Journal of Cancer. 2011; 48(1): 55-59 doi: 10.4103/0019-509X.75828.
- Mental Health Foundation. The impact of spirituality on mental health. A review of the literature. Mental Health Foundation. UK 2006.
- Sodhi R, Dr. Manju. Spiritually and mental health among normal and chronic disease group.
   International Journal of Research Studies in Psychology. 2013; 2(1): 59-68. doi: 10.5861/jirsp.2012.106
- Yates JW, Chalmer BJ, St James P, Follansbee M, McKegney FP. Religion in patients with advanced cancer. Med Pediatr Oncol. 1981; 9(2):121-128. doi: 10.1002/mpo.2950090204
- Koenig HG, Cohen HJ, George LK, Hays JC, Larson DB, Blazer DG. Attendance at religious services, interleukin-6, and other biological parameters of immune function in older adults. Int J Psychiatry Med. 1997; 27(3): 233-250. doi:10.2190/40NF-Q9Y2-0GG7-4WH6
- Eslami AA, Rabiei L, Khayri F, Nooshabadi MRR, Masoudi R. Sleep Quality and Spiritual Well-Being in Hemodialysis Patients. Iranian Red Crescent Medical Journal. 2014; 16(7): e17155. doi: 10.5812/ircmj.17155
- Kessler RC, Berglund P, Demler O, et al. The Epidemiology of Major Depressive Disorder: Results From the National Comorbidity Survey Replication (NCS-R). JAMA. 2003; 289(23): 3095-3105. doi:10.1001/jama.289.23.3095
- 42. Steptoe A, ed. Depression and physical illness. Cambridge University Press, 2006.

- Finkelstein FO, Finkelstein SH. Depression in chronic dialysis patients: assessment and treatment. Nephrol Dial Transpl. 2000; 15(12): 1911-1913. doi:10.1093/ndt/15.12.1911
- Moreira-Almeida A, Pinsky I, Zaleski M, Laranjeira R. Envolvimento religioso e fatores sociodemográficos: resultados de um levantamento nacional no Brasil. Revista de Psiquiatria Clínica. 2010; 37(1): 12-15. doi:http://dx.doi.org/10.1590/S0101-60832010000100003
- Braam AW, Beekman ATF, Deeg DHG, Smit JH, Tilburg, W. van. Religiosity as a protective or prognostic factor of depression in later life; results from a community study in The Netherlands. Acta Psychiatrica Scandinavica. 1997;96(3): 199-205 doi: 10.1111/j.1600-0447.1997.tb10152.x
- Elham H, Hazrati M, Momennasab M, Sareh K. The effect of need-based spiritual/religious intervention on spiritual well-being and anxiety of elderly people. Holist Nurs Pract. 2015; 29(3): 136-143. doi: 10.1097/HNP.000000000000083.
- Pargament KI, Magyar GM, Benore E, Mahoney A. Sacrilege: a study of sacred loss and desecration and their implications for health and well-being in a community sample. Journal for the scientific study of religion. 2005; 44(1): 59-78. URL: http://www.jstor.org/stable/3590519
- Kioulos K, Bergiannaki J. Religiosity, spirituality and depression. Archives of Hellenic Medicine. 2014; 31(3): 263-227.
- Panzini RG, Maganha C, Da Rocha NS, Bandeira DR, Fleck MP. Brazilian validation of the Quality of Life Instrument/spirituality, religion and personal beliefs Rev Saude Publica. 2011; 45(1): 153-165.
- Panzini RG, Bandeira, DR. Escala de coping religiosoespiritual (Escala CRE): elaboração e validação de construto. Psicol estud. 2005; 10(3): 507-516.
- Zavala MW, Maliski SL, Kwan L, Fink A, Litwin MS. Spirituality and quality of life in low-income men with metastatic prostate cancer. Psycho-Oncology. 2009; 18(7): 753-761. doi: 10.1002/pon.1460
- Edmondson D, Park CL, Blank TO et al. Deconstructing spiritual well-being: existential well-being and HRQOL in cancer survivors. Psycho-Oncology. 2008; 17(2): 161-169. doi: 10.1002/pon.1197
- Davison SN, Jhangri GS. Existential and supportive care needs among patients with chronic kidney disease. Journal of pain and symptom management. 2010; 40(6): 838-843. doi: 10.1016/j.jpainsymman.2010.03.015
- Davison SN, Jhangri GS. Existential and religious dimensions of spirituality and their relationship with health-related quality of life in chronic kidney disease. Clinical Journal of the American Society of Nephrology. 2010; 5(11): 1969-1976. doi: 10.2215/CJN.01890310
- Gerogianni S, Babatsikou F, Gerogianni G, Grapsa E, Vasilopoulos G, Zyga S, Koutis Ch. 'Concerns of patients on dialysis: A Research Study'. Health Science Journal. 2014; 8(4): 423-437.
- Brady MJ, Peterman AH, Fitchett G, Mo M, Cella D. A case for including spirituality in quality of life measurement in oncology. Psycho oncology.1999; 8(5): 417-428. doi: 10.1002/ (SICI)1099-1611(199909/10)8:5<417::AID-PON398>3.0.CO;2-4
- Büssing A, Koenig HG. Spiritual Needs of Patients with Chronic Diseases. Religions. 2010;
   1: 18-27. doi:10.3390/rel1010018
- Bredle JM, Salsman JM, Debb SM, Arnold BJ, Cella D. Spiritual Well-Being as a Component of Health-Related Quality of Life: The Functional Assessment of Chronic Illness Therapy -Spiritual Well-Being Scale (FACIT-Sp). Religions. 2011; 2: 77-94; doi:10.3390/rel2010077
- Coric A, Resic H, Celik D, Masnic F, Ajanovic S, Prohic N, Mujakovic A. Mortality in Hemodialysis Patients Over 65 Years of Age. Materia Socio-Medica. 2015; 27(2): 91-94. doi: 10.5455/msm.2015.27.91-94
- McCullough ME, Larson DB, Hoyt WT. et al. Religious involvement and mortality: A metaanalytic review. Health Psychology 2000; 19(3): 211-222. doi: http://dx.doi.org/10.1037/0278-6133.19.3.211
- Finkelstein FO, West W, Gobin J, Finkelstein SH, Wuerth D. Spirituality, quality of life and the dialysis patient. Nephrol Dial Transplant. 2007; 22(9): 2432-2434. doi: 10.1093/ndt/gfm215
- Nascimento LC, Oliveira FCS, Moreno MF, et al. Cuidado espiritual: componente essencial da prática da enfermeira pediátrica na oncologia. (Spiritual care: an essential component of the nurse practice in pediatric oncology) Acta Paul Enferm. 2010; 23(3): 437-440. http://dx.doi. org/10.1590/S0103-21002010000300021
- 63. Zyga S. Assessing Patients Spirituality: A New Age Holistic Approach or a Forgotten Nursing Practice? Health science journal. 2015; 9(3:1):1-3.
- Williams JA, Meltzer D, Arora V, Chung G, Curlin FA. Attention to Inpatients' Religious and Spiritual Concerns: Predictors and Association with Patient Satisfaction. Journal of General Internal Medicine. 2011; 26(11): 1265-1271. doi:10.1007/s11606-011-1781-y.
- Kolovos P, Kaitelidou D, Lemonidou Chr, Zyga S, Sourtzi P. Patient Participation in Nursing Care a systematic review. Nursing care and research. 2012; 32: 30-39.
- Kolovos P, Kaitelidou D, Lemonidou C, Sachlas A, Zyga S, Sourtzi P. Patient participation in hospital care: nursing staff's point of view. International Journal of Nursing Practice. 2015; 21(3): 258-268. Doi:10.1111/ijn.12242
- Tsiamis G, Alikari V, Fradelos E, Papapetrou S, Zyga S. Assessment of Quality of Life and Fatigue among Haemodialysis Patients. American Journal of Nursing Science. Special Issue: Mental Health Care: Aspects, Challenges and Perspectives. 2015; 4(2-1): 66-73. doi: 10.11648/j.ajns.s.2015040201.22
- Theofilou P, Aroni A, Tsironi M, Zyga S. Measuring pain self-efficacy and health related quality of life among hemodialysis patients in Greece: a cross-sectional study. Health Psychology Research. 2013; 1(3): e30. doi:http://dx.doi.org/10.4081/hpr.2013.1522
- Alikari V, Zyga S, Saroglou G. Peritoneal dialysis peritonitis: risk factors and effects. Interscientific Health Care. 2013; 5(3): 97-101.
- Alikari V, Zyga S. Conceptual analysis of patient compliance in treatment. Health Science Journal. 2014; 8(2): 179-186.