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REVIEW ARTICLE

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Major clinical outcomes and discussions of the impacts of religiousity/spirituality in patients with palliative care and nutrology therapy: a concise systematic review

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Abstract

Introduction: In the scenario of nutritional therapy and religiosity/spirituality (R/S), several factors can impact the nutritional status of patients in palliative care. These include knowledge of nutrition, the level of emotional support required for the patient, their motivation, and the nature, impact, and severity of the illness. A diet suitable for weight stabilization provides patients with the energy necessary to meet physical, psychological, social, and R/E aspects. **Objective:** It was to carry out a concise systematic review to present the main clinical outcomes and discussions about the impacts of religiosity/spirituality in patients with palliative care undergoing nutritional therapy. **Methods:** The PRISMA Platform systematic review rules were followed. The search was carried out from August to October 2024 in the Scopus, PubMed, Science Direct, Scielo, and Google Scholar databases. The quality of the studies was based on the GRADE instrument and the risk of bias was analyzed according to the Cochrane instrument. **Results and Conclusion:** A total of 91 articles were found, and 24 articles were evaluated in full, and 17 were included and developed in the present systematic review study. Considering the Cochrane tool for risk of bias, the overall assessment resulted in 15 studies with a high risk of bias and 25 studies that did not meet GRADE and AMSTAR-2. Most studies showed homogeneity in their results, with X^2=72.8%>50%. It was concluded that when the natural oral intake of food and liquids is disturbed, the role of caregivers is to assist the patient in covering the individual's nutritional needs through nutritional therapy and religiosity and spirituality as metabolic and immunological stimuli. Nutritional therapy requires indication to achieve a treatment goal and informed consent from the patient. The suspension and withdrawal of nutritional therapy and artificial hydration must be evaluated in specific situations (terminally ill, palliative care, dementia, elderly patients) and always on a case-by-case basis, according to the cultural and spiritual needs of the patients. Caregivers must emphasize the right to self-determination and therefore respect the patient's autonomy, and also the particular vulnerability of the patient who suffers from or is at risk of malnutrition.

Keywords: Nutrological therapy. Palliative care. Religiosity/Spirituality. Quality of life.

Introduction

In the context of nutrition therapy and religiosity/spirituality (R/S), there are several factors that can impact the nutritional status of patients in palliative care. These include nutrition knowledge, the level of emotional support needed by the patient, their motivation, and the nature, impact, and severity of the disease. A diet appropriate for weight stabilization provides patients with the energy needed to address physical, psychological, social, and R/S aspects **[1-3]**.

In this context, religiosity is a factor involved in the management of health and disease/longevity of patients. It is necessary to assess the nature of

religiosity that can be used in clinical studies, thus avoiding contradictory reports that arise from misinterpretations of religiosity. Religiosity is multidimensional and is associated with enteral/parenteral nutrition therapy inherent protection against disease and improved overall quality of life. However, several untouched aspects of religiosity need to be further investigated before introducing religiosity in its fully functional form into the domain of health care **[3]**.

In this sense, spiritual, religious, and existential aspects of care constitute one of the eight core domains of palliative care. Several studies have shown that R/S are important factor influencing medical decision-making in the case of a terminally ill patient receiving nutritional care. Approximately half of outpatients express a desire to engage with their physicians regarding R/S beliefs in a near-death scenario. It has been shown that lack of R/S support is widespread in cancer patients, which is associated with a significantly lower quality of life compared to those whose spiritual needs are adequately addressed. Less than one-fifth of goalsof-care conversations in intensive care units (ICUs) include discussions of R/S **[2,3]**.

A study of patients with advanced cancer showed a significantly increased likelihood of quality of life in patients who received spiritual support provided primarily by religious communities **[4]**. Furthermore, patients who received R/S care from a medical team had higher rates of palliative care utilization, fewer ICU deaths, and underwent fewer aggressive interventions. Spiritual support from a medical team has also been associated with improved quality of life near death (2010) and lower costs of care **[5,6]**.

Despite the overwhelming evidence of the positive impact of appropriate R/S care at the end of life, its routine incorporation into clinical practice is lacking **[7]**. Although there is abundant data on the spiritual aspects of end-of-life, a gap in the literature has been identified in peer-reviewed scientific publications when it comes to addressing religious beliefs at the end of life **[8]**.

Nutritional support and R/S are important elements of palliative care, as inadequate hydration and malnutrition result in skin and muscle loss, vulnerability to pressure ulcer development, infection, and respiratory problems that frequently occur. The criteria for nutritional intervention are a body mass index (BMI) of less than 18.5 kg/m^2, unintentional weight loss greater than 10% in the last 3 to 6 months, a BMI of less than 20 kg/m^2, and involuntary weight loss greater than 5% in the last 3 to 6 months **[9]**.

In view of this, the present study carried out a systematic review to present the main clinical outcomes and discussions on the impacts of religiosity/spirituality in patients with palliative care undergoing nutritional therapy.

Methods

Study Design

This study followed the international systematic review model, following the PRISMA (preferred reporting items for systematic reviews and meta-analysis) rules. Available at: http://www.prisma-statement.org/?AspxAutoDetectCookieSupport=1. Accessed on: 09/20/2024. The AMSTAR-2 (Assessing the methodological quality of systematic reviews) methodological quality standards were also followed. Available at: https://amstar.ca/. Accessed on: 09/20/2024.

Data Sources and Search Strategy

The literature search process was carried out from August to October 2024 and developed based on Scopus, PubMed, Lilacs, Ebsco, Scielo, and Google Scholar, covering scientific articles from various periods to the present day. The following Health Science Descriptors (DeCS /MeSH Terms) were used: "Nutrological therapy. Palliative care. Religiosity/Spirituality. Quality of life", and using the Boolean "and" between MeSH terms and "or" between historical findings.

Study Quality and Risk of Bias

Quality was classified as high, moderate, low, or very low regarding the risk of bias, clarity of comparisons, precision, and consistency of analyses. The most evident emphasis was on systematic review articles or meta-analysis of randomized clinical trials, followed by randomized clinical trials. Low quality of evidence was attributed to case reports, editorials, and brief communications, according to the GRADE instrument. The risk of bias was analyzed according to the Cochrane instrument through the analysis of the Funnel Plot graph (Sample size versus Effect size), using Cohen's d test.

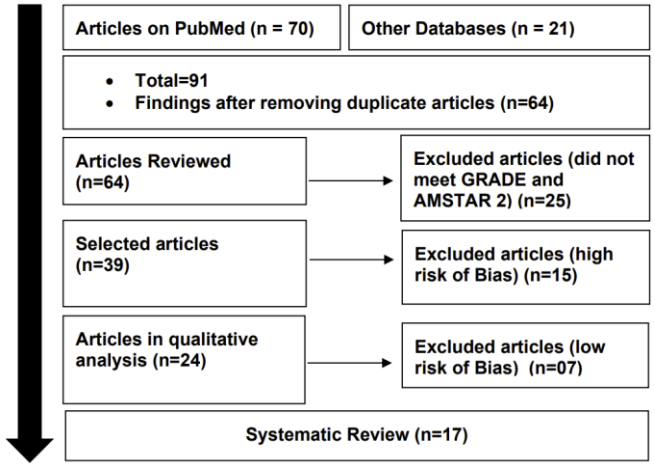
Results and Discussion

Summary of Findings

A total of 91 articles were found that were submitted to eligibility analysis, and 17 final studies were selected to compose the results of this systematic review. The studies listed were of medium to high quality (Figure 1), considering the level of scientific evidence of studies such as meta-analysis, consensus, randomized clinical, prospective, and observational. Biases did not compromise the scientific basis of the studies. According to the GRADE instrument, most

studies presented homogeneity in their results, with X^2=72.8%>50%. Considering the Cochrane tool for risk of bias, the overall assessment resulted in 15 studies with a high risk of bias and 25 studies that did not meet GRADE and AMSTAR-2.

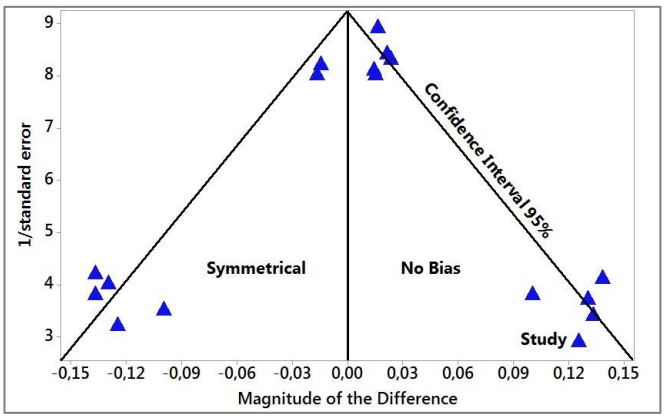
Figure 1. Flowchart showing the article selection process.



Source: Own Authorship.

Figure 2 presents the results of the risk of bias of the studies using the Funnel Plot, showing the calculation of the Effect Size (Magnitude of the difference) using Cohen's Test (d). Precision (sample size) was determined indirectly by the inverse of the standard error (1/Standard Error). This graph had a symmetrical behavior, not suggesting a significant risk of bias, both among studies with small sample sizes (lower precision) that are shown at the bottom of the graph and in studies with large sample sizes that are shown at the top.

Figure 2. The symmetrical funnel plot does not suggest a risk of bias among the studies with small sample sizes that are shown at the bottom of the graph. High confidence and high recommendation studies are shown above the graph (n = 17 studies).



Source: Own Authorship.

Religiosity/Spirituality in Palliative and Nutrological Care

Authors Chakraborty et al. (2017) **[10]** examined the religious/spiritual beliefs of followers of the five major world religions regarding medical situations frequently encountered at the end of life. A wide degree of heterogeneity was observed within religions, depending on the country of origin, level of education, and degree of intrinsic religiosity. In this context, palliative care offers a holistic approach and care for patients with terminal illnesses and their families. In palliative care, both physical complaints and emotional, social, and spiritual aspects are considered. Nutritional care should also be considered in palliative support. For those working in the area of nutritional support, suspending or withdrawing nutritional support can be an ethical dilemma in this scenario. The controversy begins when considering nutrition and hydration as basic care or treatment. The goals of nutritional support in patients in palliative care differ from those in common care, aiming to improve quality of life, survival, or both. The decision should be based on consideration of prognosis (survival time), quality of life, and risk-benefit ratio. With regard to oral nutrition (with or without oral supplements), the prevailing idea is "comfort feeding", based on oral feeding until discomfort arises. There is no evidence of the benefit of specific nutrients, although omega-3 fatty acids may have some positive effects in cancer patients. Regarding nutritional support (enteral or parenteral), there is no scientific evidence, so the decision needs to be agreed upon following the wishes and beliefs of the patient and their family, and based on a consensus with the interdisciplinary team on the objectives of this support **[11]**.

Also, quality of-life tests are the basis for assessing the condition of cancer patients, allowing valuable information from patients not only about the symptoms of the disease and adverse effects of treatment but also about the assessment of psychological, social, and spiritual aspects. Taking into account the assessment of the quality of life made by the patient during the disease has a positive effect on the well-being of patients, their families, and their caregivers, as well as on satisfaction with interdisciplinary and holistic cancer care. A population-based, multi-area cross-sectional study was conducted among the cancer patients in the study to assess their quality of life. The method used in the study was clinical interview. Quality of life was measured using the EQ-5D-5L Quality of Life Questionnaire, Karnofsky Performance Status, our symptom checklist, Edmonton Symptom Assessment, and Visual Analogue Scale. In the subjective assessment of fitness, after using the Karnofsky fitness index, it was shown that 28% (95% CI (confidence interval): 27-30) of the patients declared

the ability to perform normal physical activity. In the evaluation of the profile, quality of life, and psychometric properties of the EQ-5D-5L, it was shown that patients presented the most severe problems in terms of self-care (81%, 95% CI: 76-89) and feeling anxious and depressed (63%, 95% CI: 60-68). Therefore, cancer hurts the quality of life of patients, depending on whether the patient and their family members exercise R/S or whether the patient is on adequate nutritional therapy **[12]**.

In addition, religious and spiritual interventions may affect the prevention of Alzheimer's disease. Kirtan Kriya meditation has been shown to mitigate the deleterious effects of chronic stress on cognition, reverse memory loss, and create psychological and spiritual well-being, which may reduce several risk factors for Alzheimer's disease. Authors Khalsa and Newberg (2021) **[13]** detailed a new concept in medicine called Spiritual Fitness, a fusion of stress reduction, basic well-being, and psycho/spiritual well-being to prevent Alzheimer's disease. Religious and spiritual practices, including Kirtan Kriya, are crucial components in developing better cognition and well-being, which may help prevent and, in some cases, reverse cognitive decline.

A study by Mohty et al. (2021) **[14]** discussed the various practices classified as complementary and alternative medicine (CAM) and analyzed the benefits and uncertainties regarding nutritional supplements in patients with hematologic diseases. The high prevalence of CAM use is considered, especially among cancer survivors, particularly patients with hematologic malignancies and survivors of allogeneic stem cell transplantation, many of whom believe that supplements are anticancer/antitoxic agents, despite the scarcity of evidence to support any benefit and the enormous cost to the individual. CAM constitutes several nutritional practices and behaviors, including prayers, relaxation, spiritual healing, nutritional supplements, meditation, religious counseling, massage, and support groups.

Authors Kamijo and Miyamura (2020) **[15]** examined the spirituality of patients, the relationship between spirituality and physical pain, and the association between spirituality and quality of life (QoL) among patients undergoing cancer chemotherapy and undergoing nutritional therapy. Spirituality was defined as a sense of meaning in one's existence and life, peace of mind, and strength and comfort derived from faith. A cross-sectional questionnaire was distributed to 176 adult cancer patients who received chemotherapy between May and

September 2011 at an outpatient clinic in rural Japan. Spirituality was measured using the Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-Sp-12). Demographic data on performance status, cancer stage, age, marital status, occupational status, family members, pain intensity, and other troubling symptoms were collected. The relationship between patients' spirituality subscale score and QoL was assessed using a structural equation model. Results: Two FACIT-Sp-12 subscales, meaning/peace and faith, were moderate to strongly associated with age, appetite, and QoL scores. Although physical pain was significantly related to the QoL score ($p=0.002$), it was not related to the FACIT-Sp-12 score ($p=0.427$). These results indicated that patients with higher spiritual scores and severe pain enjoyed life more than patients with lower spiritual scores and severe pain. Furthermore, two subscales of FACIT-Sp-12 had a direct effect on QoL. Therefore, spirituality was strongly associated with QoL. Younger patients (<50 years) and patients with stage I cancer require additional assistance to meet their spiritual needs. To maintain the spiritual well-being of cancer patients, interventions should facilitate nutritional support for patients and adequately address their spirituality.

Finally, the goal of palliative care (PC) is to improve the quality of life of patients and their families through the involvement of a multidisciplinary team. PC improves symptom control and end-of-life care, especially when strongly guided by adequate nutritional therapy. In this regard, a three-month retrospective study analyzed the sociodemographic, disease, and hospitalization characteristics of patients admitted to a specialized unit. Patient information, such as sociodemographic data, clinical data, psychological, social, nutritional, and spiritual counseling of the patient and family members, and knowledge about the diagnosis and goals of therapy, were collected from medical records and analyzed. Forty-one patients were included, with a mean age of 66.4 years. Spouses were the primary caregivers. There was no indication for targeted therapy in any of the patients. Before hospitalization, 58.5% were not receiving follow-up. The most frequently reported symptoms were pain (75.6%), fatigue (68.3%), anorexia (61%), and emotional distress (58.5%). Patients were referred for psychological (43.3%), spiritual (19.5%), nutritional (58.5%), and social (34.1%) counseling. During hospitalization, 75% of the patients died; of these, 70.9% were not previously followed up by the team. Therefore, PC patients are complex, with multiple clinical-psychological-social-spiritual problems. The use of a multidisciplinary approach, especially appropriate nutritional therapy, can improve the quality of life of patients and their families. It is essential to form, expand, and integrate PC teams into existing teams, allowing patients a better quality of life until their death **[16,17]**.

Conclusion

It was concluded that when the natural oral intake of food and liquids is disturbed, the role of caregivers is to assist the patient to cover the individual's nutritional needs through nutritional therapy and religiosity and spirituality as metabolic and immunological stimulation. Nutritional therapy requires indication to achieve a treatment objective and informed consent from the patient. The suspension and withdrawal of nutritional therapy and artificial hydration should be evaluated in specific situations (terminally ill, palliative care, dementia, elderly patients) and always on a case-by-case basis, according to the cultural and spiritual needs of the patients. Caregivers should emphasize the right to self-determination and therefore respect the patient's autonomy, as well as the particular vulnerability of the patient who suffers from or is at risk of malnutrition.

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Author contributions: Conceptualization, Data curation, Formal Analysis, Investigation, Methodology, Project administration, Supervision, Writing - original draft, and Writing-review & editing by Julian Yin Vieira Borges

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Conflict of Interest

The authors declare no conflict of interest.

Similarity Check

It was applied by Ithenticate®.

Peer Review Process

It was performed.

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