Spirituality, nursing and pain: an indissociable triad

Espiritualidade, enfermagem e dor: uma tríade indissociável

Regina de Souza Moreira[1], Rui Nei de Araújo Santana Junior[2], Maria Belén Salazar Posso[3]

DOI 10.5935/2595-0118.20210069

ABSTRACT

BACKGROUND AND OBJECTIVES: Spirituality is intrinsically involved in nursing care. Despite being a topic that, in recent years, has attracted the interest of researchers, there is still little evidence to prove the effect of spirituality in reducing pain and associated anxiety. In this sense, the aim of this study was to identify the state of science related to the use of spirituality as a nursing intervention to control patients' pain and anxiety in different health problems.

CONTENTS: An integrative literature review in the following databases: Pubmed, Cochrane, Web of Science and *Biblioteca Virtual da Saúde* (BVS – Virtual Health Library). Data collection was carried out in May and updated in September 2021. Scientific articles with full text available published in the last 10 years that addressed spirituality in nursing care to patients with pain and anxiety were included. Ten articles were included in the analysis, including six randomized clinical trials, two quasi-experimental studies and two systematic reviews. The following interventions based on spirituality that guided nursing in pain reduction were identified: prayer meditation, prayer, positive thinking training, active listening, among others. All articles showed a positive effect in reducing pain and anxiety, as well as improving vital parameters.

CONCLUSION: Nursing interventions based on spiritual care techniques seem to be effective in reducing pain and anxiety. Nevertheless, further studies should be carried out in order to validate that spirituality as nursing care is effective in reducing pain and associated anxiety.

Keywords: Nursing Care, Pain, Spirituality.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A espiritualidade está intrinsecamente envolvida no cuidado de Enfermagem. Apesar de ser uma temática que, nos últimos anos, vem despertando interesse de pesquisadores, ainda são poucas as evidências que comprovam o efeito da espiritualidade na redução da dor e ansiedade associada. Nesse sentido, o objetivo deste estudo foi identificar o estado da ciência relacionada ao uso da espiritualidade como intervenção de enfermagem no controle da dor e da ansiedade do paciente em diferentes problemas de saúde.

CONTEÚDO: Trata-se de uma revisão integrativa da literatura, nas bases de dados: Pubmed, Cochrane, *Web of Science* e na Biblioteca Virtual da Saúde. A coleta de dados foi realizada em maio e atualizada em setembro de 2021. Foram incluídos artigos científicos com texto completo disponível, publicados nos últimos 10 anos e que abordassem a espiritualidade no cuidado de enfermagem ao paciente com dor e ansiedade. Foram incluídos 10 artigos na análise, sendo seis ensaios clínicos randomizados, dois estudos quase experimentais e duas revisões sistemáticas. Identificou-se intervenções baseadas na espiritualidade que nortearam a enfermagem na redução da dor: meditação de orações, prece, treinamento de pensamento positivo, escuta ativa, entre outros. Todos os artigos demonstraram efeito positivo na redução da dor e da ansiedade, bem como melhora nos parâmetros vitais.

CONCLUSÃO: As intervenções de enfermagem baseadas em técnicas de cuidados espirituais parecem ser eficazes na redução da dor e da ansiedade. Sugere-se, contudo, que novos estudos sejam realizados para validar a espiritualidade como cuidado de enfermagem eficaz na redução da dor e ansiedade associada.

Descritores: Cuidados de Enfermagem, Dor, Espiritualidade.

INTRODUCTION

Spirituality, Nursing and Pain are an inseparable triad because they are felt, lived and experienced in a unique, individual, integral and total manner. Spirituality is the relationship of the creature with the divine, the transcendent, the Creator; nursing exists in the interpersonal relationship of professionals and people, healthy or sick, for the maintenance and rebalancing of their energies, their health; pain is the universal symptom that unites the triad in the vital cycle of human beings; and anxiety results from feelings of fear, insecurity, uneasiness, excessive worries, which can also lead to pain[1], be it physical, emotional, or of the soul.

People, in their need to survive, whether following a specific religion or not, are responsible for their decisions, attitudes and choices guided by their value systems and philosophy of life that connects them to their surroundings and to the universal whole.

Regina de Souza Moreira – https://orcid.org/0000-0001-8242-332X;
Rui Nei de Araújo Santana Junior – https://orcid.org/0000-0002-4291-3559;
Maria Belén Salazar Posso – https://orcid.org/0000-0003-3221-6124.

1. Federal University of Bahia, Postgraduate Program in Health Sciences, School of Medicine of Bahia, Salvador, BA, Brazil.
2. Institute of Neurology and Neurosurgery, Feira de Santana, BA, Brazil.
3. University of Taubaté, Nursing Department, Taubaté, SP, Brazil.

Submitted on October 01, 2021.
Accepted for publication on October 05, 2021.
Conflict of interests: none – Sponsoring sources: none.

Correspondence to:
Regina Moreira
Rua Iguatu, nº 289, Conjunto Morada do bosque – Cidade Nova
44053-072 Feira de Santana, BA, Brasil.
E-mail: reginades.moreira@yahoo.com.br / E-mail alternativo: reginades.moreira@gmail.com

Throughout life, individuals express their relationship with the world, community, group, family, and themselves, impacting the ability of self-knowledge, the ability to relate to others, to "be-in-the-world", to their constant "coming-to-be", to existence itself. And, in this sense, they seek a connection with something superior and transcendental, governing their "coming-to-be" and "being-in-the-world", bringing up the need to understand the feelings of love, compassion, pain, fear, anxiety, health, disease, restoration of well-being, desire of happiness, braveness, hope, solidarity, creativity, personal satisfaction, morality, ethics, care, humanization, life, finitude, spirituality, among others.

This needs to understand feelings and emotions, as well as the cycle of life, creates a connection between body, mind, culture, spirituality, and the subjective or even objective search for medical and non-medical resources to alleviate pain, anxiety, suffering, fear, and also, in face of the various afflictive existential, economic, loss or disease situations, among others, that life imposes. Nursing care is intrinsically involved and acts in all stages of these experiences, that is, in the maintenance of the homeodynamic balance or in the rebalancing of basic psychobiological, psychosocial, and psychospiritual human needs and their various meanings[1-9], which impact the process of caring in an empathetic way, whether cognitive, emotional, or compassionate, using spirituality as a supportive and helpful procedure.

The importance of using spirituality in human care goes back to ancient times, when primitive civilizations attributed the power over health and disease to a superior Being, which accompanied the evolution of knowledge of man and care, the latter, today, related to a more humanist assistance, allied with science and technique. Thus, spirituality is an old component of the Art and Science of Nursing.

In the 1960s and 1970s, Nursing followed the path of theories that sought to explain the harmonic confluence between the art and science of caring for human beings, which are unique, homeodynamic, family members, have beliefs and values, communities, culture, and environment, showing the tendencies and the importance of nurses to recognize the set of psychobiological, psychosocial, and psychospiritual aspects of this being who is the object of their knowledge and work[1-7].

The psychospiritual aspects of human beings that impacted care[1-7] as much as those of a physical nature were scarce in the nursing literature at that time, and focused more on the religious practices of the major religions in Western culture to the detriment of spirituality, a human need that today has garnered the interest of several scholars not only in the field of nursing but also of health as a whole[2-9].

At this point is valid to make some considerations about the basic human need - spirituality, or religious or psychospiritual philosophy, which according to some authors[1,3-13] are understood as impulses, tendencies, or fundamental needs coming from the unconscious, such as the need for survival, preservation of the species, and the need to believe in something superior to the limited human condition, specific and inherent to man, which influences the other needs, namely, the psychobiological and psychosocial ones.

The need to search for the meaning of life, of one's role and function in this world, of one's essence, of having a philosophy of life, of establishing a relationship with oneself and with the social and spiritual realms, in short, why and for what one lives, all this can be defined as Spirituality, often confused with religion, which is only "*an expression of spirituality, practiced through sacred traditions, transmitted by cultural heritage, accompanied by dogmas and doctrines*"[1]. As some authors[9-13] express well, spirituality is the subjective and symbolic construction of the understanding that human beings use to unveil their vulnerability, fragility, and confrontation succeeded by countless situations imposed by daily living, such as the health/illness cycle, its treatment, and care.

Many researchers, although there is no taxonomy of religion and spirituality, defined spirituality as the individual meaning and purpose in life, connecting the "I" to the universal whole, the sacred, regardless of whether or not one believes in God[13-17], "*experienced inside or outside of institutional environments and traditions*"[17]. These authors also mention that in 2009 the Consensus Committee of the United States of America (USA) defined spirituality as: "*The aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way they experience their connection to the moment, to themselves, to others, to nature, and to the meaningful or sacred*"[17] and also, the definition of the International Consensus Conference of 2012: "*Spirituality is a dynamic and intrinsic aspect of humanity through which people seek ultimate meaning, purpose, and transcendence, and experience a relationship with themselves, family, others, community, society, nature, and what is meaningful or sacred. Spirituality is expressed through beliefs, values, traditions, and practices*"[18].

On the other hand, other authors[13-20] define religion as doctrinal practices and rites for approaching transcendence, often professed in a socially organized formal religious institution, and authors[15] reflect on spirituality, religiosity, and religion as different but dynamic and interconnected realities. Another author[20] argues: "S*pirituality is an innate attribute of human beings, which promotes well-being, health and stability*", furthermore, that it's inherent to the "essence of life", giving it meaning by producing "*behaviors and feelings of hope, love and faith*" while "*religiosity is a way for individuals to express their spirituality through the adoption of values, beliefs and ritual practices that provide answers to essential questions about life and death*".

Health professionals have endeavored to investigate the concepts and meanings of spirituality and religion to understand, distinguish, and apprehend them to better assist therapeutically human beings under their care.

Authors[11] in 2007 studying the historical retrospective of the study of spirituality in Brazilian nursing pointed out that "*... the first scientific publication dates from 1947 and remains until today represented by the* Revista Brasileira de Enfermagem". They searched for articles addressing Spirituality from 1941 to 1999 published in "*...the entire* REBEn *collection present in the Library of the Nursing School of University of São Paulo...*", and 57 articles were selected, from which nine categories emerged: "*... Spirituality as part of the character and morals of the indivi-*

dual who chooses to work in nursing; spirituality as a work philosophy of nurses; spirituality as part of the curriculum and training of nurses; spirituality in patient care, as a basic human need; the meaning of spirituality for those being cared for (patients/clients); the meaning of spirituality for those who work with patient care; spirituality and humanization; spirituality and death; and spirituality in the light of Ethics and Bioethics".

After analyzing each category, authors[11] considered that the articles allowed to identify the evolution of nursing thought regarding the complexity of the subject. Initially more associated with religion, as nurses' scientific knowledge advanced, their reflections lead them to understand care connected with ethical-philosophical phenomena. Therefore, this understanding reveals the impact of spirituality on human beings nursing care, who in their life cycle are affected by the unbalance of basic needs, such as psychobiological, psychosocial, and psychospiritual needs, in short, their health[12,20].

The objective of this study was to identify the state of the science[21,22] related to the use of spirituality as a nursing intervention to control pain and anxiety in patients with varied health problems.

CONTENTS

The choice for an integrative review aimed at learning the current panorama of the scientific production of nurses on the use of spirituality as a nursing care/intervention tool in the control of pain and anxiety caused by different disease scenarios, understanding that it favors the identification and systematic and comprehensive search of primary results on the topic, critical evaluation, synthesis, analysis, and incorporation of evidence from national and international scientific studies, highlighting the need for new investigations[23-25], whose retrospective time frame respected the copyrights of the literature used, according to Law 9610/1998 of the *Ministério da Educação e da Cultura* (MEC - Ministry of Education and Culture)[26].

The model used was composed of six steps: subject of interest; establishment of the guiding question; criteria for inclusion and exclusion of articles; combination of two or more DeCS/MeSH of the descriptors with the Boolean expressions E/AND/Y used in the articles search strategy in the researched databases; information extracted from the selected articles; analysis and presentation of the studies[23-25].

The research question was structured according to the format of the PICO acronym (patient, intervention, comparison, outcomes)[27], which guides its formulation, favoring the collection of evidence from the databases, being a key element to perform judicious searches, resulting in the question: "what is the national and international scientific production of nurses on the use of spirituality as a nursing intervention in pain and anxiety control"?

The following databases were consulted: Publisher Medline (Pubmed), CENTRAL (The Cochrane Central Register of Controlled Trials, The Cochrane Library), Web of Science and *Biblioteca Virtual de Saúde* (BVS - Virtual Health Library), using controlled descriptors from the DeCS and MeSH, in Portuguese, English and Spanish languages: "*espiritualidade*/spirituality/*espiritualidad*"; "*Enfermagem*/Nursing/*Enfermería*"; "*dor*/pain/*dolor*"; "*cuidado de enfermagem*/nursing care/*atención de enfermería*"; "*intervenção de enfermagem*/nursing intervention/*atención de enfermería*"; "*ansiedade*/anxiety/*ansiedad*". Two or more mentioned DeCS/MeSH were combined with the Boolean operator E/AND/Y (Table 1).

Table 1. Combinations of descriptors used in the articles search strategy

Espiritualidade e dor (spirituality/*espiritualidad*) AND/*Y* (pain/*dolor*)
Enfermagem e dor (Nursing/*Enfermería*) AND/*Y* (pain/*dolor*)
Cuidado de enfermagem e dor (Nursing care/*atención de enfermería*) AND/*Y* (pain/*dolor*)
Espiritualidade e enfermagem (spirituality/*espiritualidad*) AND/*Y* (Nursing/*Enfermería*)
Espiritualidade e cuidado de enfermagem (spirituality/*espiritualidad*) AND/*Y* (Nursing care/*atención de enfermería*)
Espiritualidade e dor e intervenção de enfermagem e ansiedade (spirituality/*espiritualidad*) AND/*Y* pain/*dolor* AND/*Y* (nursing intervention/*atención de enfermería*) AND/*Y* Anxiety/*ansieda*d.
ALL = (pain AND spirituality AND nursing AND Anxiety) *Todos* = (*dolor Y espiritualidad Y enfermería Y ansiedad)*

Data collection was performed in May 2021 and updated in September of the same year. The inclusion criteria were scientific articles from the last 10 years fully available electronically in the aforementioned languages, from national and international journals, that addressed spirituality in nursing care to patients with pain and anxiety, published by nurses and using spirituality as a nursing intervention to control pain and anxiety. In addition, articles whose classification of scientific evidence level ranged from 1 to 3 according to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA)[28,29]; thus, the presence of authors from the nursing field in articles on this subject was an inclusion criterion.

Documents, editorials, letters, theses, dissertations, monographs, manuals, congress abstracts, qualitative studies, articles duplicated in more than one database (counting only one), or that did not meet the research question, the objective, and the descriptors were excluded. It's worth noting that the present research was done by three authors, but the selection and search for the studies was carried out independently by two of the authors and reviewed by the third, in order to prevent bias and reflecting the concern with scientific rigor and quality, as well as the credibility of the results obtained in the literature.

After identifying the studies according to the search strategy described above, duplicates were excluded, and articles that did not fit the scope of the review were excluded based on the information contained in the title. Next, the abstracts were read, eliminating articles that were off topic, and finally, the studies selected for the sample were read in-full (Figure 1).

After reading the abstracts and the full texts, the information was gathered and organized in a specially composed form to identify title, author, year of publication, journal and database, type of study/level of evidence, objectives/summary, and main conclusions of the selected articles, including or excluding them for the final analysis.

As previously mentioned, the PRISMA[28,29] guidelines were used for classification of evidence (Figure 1), determining eligibility, inclusion of articles, favoring the quality, scientific validity and reliability of articles by the following levels of evidence (LE)[23-25]: level 1, evidence from systematic review or meta-analysis of relevant randomized controlled trials (RCT) or from clinical guidelines based on systematic reviews of RCT; level 2, evidence from at least one well-designed RCT; level 3, evidence from well-designed and non-randomized clinical trials; level 4, evidence from well-designed cohort and case-control studies; level 5, evidence from systematic reviews of descriptive and qualitative studies; level 6, evidence from a single descriptive or qualitative study; level 7, evidence from authoritative opinion and/or expert committee reports. The PRISMA guidelines also aided the construction of the Figure 1 flowchart.

The number of articles identified was 1340; however, as specified in the inclusion criteria, after reading the titles and abstracts, articles that did not address the study topic, duplicates, and those whose full texts were not available (n =1332) were excluded (Figure 1). Thus, only 10 articles were selected for this review.

From the evaluation of the studies it was possible to extract three categories of analysis as answers to the research question: "articles about spiritual care as a nursing intervention in patients with pain (n=3)", "articles published in the nursing area (with a nurse in the authorship group) about spirituality as an intervention in patients with pain" (n=1) and "articles published in the nursing field about spirituality as a therapeutic intervention in patients with pain, anxiety and other physiological alterations" (n=6).

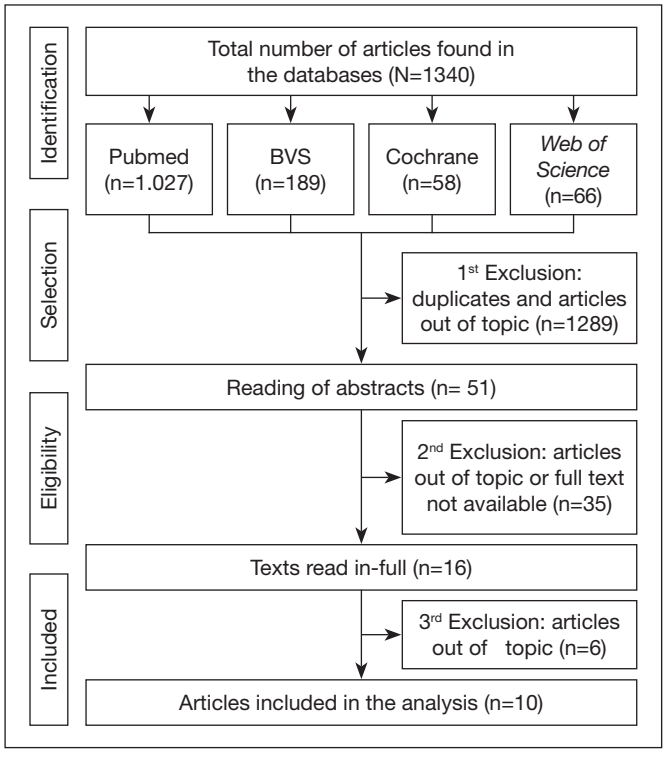

Figure 1. Flowchart of articles eligibility and inclusion

Of these, 60% were indexed in Pubmed, 30% in Scielo/LILACS via BVS, and 10% in Web of Science. Most were conducted in the Asian continent (70%), more specifically in Iran and Indonesia, with only three studies conducted in Brazil, predominantly in the southeastern region. The selected articles were published in the years 2019 (n=2), 2018 (n=3), 2016 (n=1), 2015 (n=1), and 2014 (n=3) (Table 2). They consisted of six RCT (LE 2), two quasi-experimental studies (LE 3), and two systematic reviews (LE 1). Hierarchical LE (1 to 3) are considered high according to the quality of strong and sufficient LE[23-25,28,29], demonstrating that spirituality used by nurses as a nursing intervention in the researched studies seems to be effective in controlling pain and anxiety.

The studies presented a varied population with different disease scenarios, such as: pregnant women from the 32nd week of gestation until labor[30], patients with a burn level higher than 20% in its acute phase (24 to 72 hours after the burn)[31], postoperative puerperal women in caesarean[37], patients with chronic renal failure (CRF)[33], with stroke[34], with coronary artery disease[36], patients undergoing intravenous chemotherapy treatment[38] and patients with leukemia[39] (Table 2).

Two spirituality-based intervention programs that guided nursing for the reduction of pain were identified: the program of spiritual care in changing dressings in patients with burns[31] and the Nursing Intervention Integrating an Islamic Praying (NIIP)[30]. The following were also identified: intervention through prayer[33,38], prayer meditation[37], nursing spiritual care based on Swanson's theory of care (knowing, being with, doing for, enabling, and maintaining belief) and O'Brien's dimensions of care on the practice of spiritual care (being with, listening, touching)[34], positive thinking and prayer training[36], and spiritual care based on the presence of support and help in prayer rituals[39] (Table 2).

The Visual Analog Scale (VAS)[30-32,37] and the Numeric Rating Scale (NRS)[31] were used for pain assessment. The Pain Behavior Observation Scale (PBOS)[30] was used to evaluate pain behavior. The Duke Religious Index "DUREL"[33,38] scale measured religious involvement. To measure anxiety levels, the Hamilton Anxiety Rating Scale[34] and the State-Trait Anxiety Inventory (STAI) were used[38]. Finally, spiritual well-being was evaluated by the Ellison and Paloutzian scale (SWBS)[36].

The present study found that five (50%)[30-32,35,37] articles focused on the efficacy of spirituality as a nursing intervention in pain control of various etiologies; four (40%)[34,36,38,39] in reducing anxiety in various diseases, one (10%) in vital parameters in patients with CRF[33] (Table 2), with a predominance of 60% of articles with LE 2, 20% with LE 1 and 20% with LE 3, confirming the scientific rigor of the studies, with spirituality being recommended as a nursing intervention for pain and anxiety control in patients with various health problems. These results are in agreement with several authors[16-18,21,40,42] when discussing the importance and efficacy of spirituality in several scenarios of pain and anxiety experienced by patients and evidenced in well-planned, conducted, and reported RCT.

As the authors[40] well expose, "*spirituality is considered the very essence of being and for some it's what motivates and guides them*

Table 2. Summary of studies

Autors	Types of studies/LE	Objective/Synthesis	Conclusion
Desmawati, Waraporn and Chatchawet[30]	RCT/2	Examine the effect of nursing interventions integrating an Islamic prayer program (NIIIP) on labor pain and pain behavior that depends on pain intensity and frequency. Forty-two women were selected for the control group and received usual care. Forty-one were selected for the experimental group and received usual care + NIIIP program starting at 32 weeks of pregnancy. NIIIP consisted of childbirth education, practiced by the pregnant women at home every day until they entered the delivery room. Nurses conducted 30 min of Quran recitation, helping with positioning and stimulating breathing exercises during contractions in the 1st, 2nd and 3rd h after 3-4 cm dilation. The Visual Analog Scale (VAS) and the Pain Behavior Observation Scale (PBOS) were used to measure pain and pain behaviors. There were significant differences in labor pain experience ([F = 113.07, df (1, 81), p <0.001] and pain behavior ([F = 147.49 df (1, 81), p<0.001] between the control and experimental groups. Using repeated ANOVA and Student's t-test measurements, statistically significant differences of more than four times in pain scores [F = 82.84, df (2, 182), p<0.001] and pain behaviors [F = 165.55, df = (2, 189), p<0.001] were observed.	Spiritual intervention significantly reduced labor pain and improved pain behaviors scores.
Keivan, Daryabeigie and Alimohammadi[31]	RCT/2	Evaluate the effects of a religious and spiritual care program on pain intensity and satisfaction with pain control during dressing changes for 64 burn patients (32 from the Control Group and 32 from the Experimental Group). Three sessions of spiritual care intervention were carried out by the nurse, who performed the following: established a relationship of trust and active careful listening; provided moral and psychological support; recited verses from the Quran; prayed and read biblical texts; welcomed with a smile and handshake, while speaking words of encouragement and hope; encouraged repentance of sins; in addition to the presence of a religious representative (for guidance, conversation, and narration of lives of religious models and prophets) and a family member after dressing changes.	The spiritual care program reduced mean pain intensity (8.5 and σ=1.64 to 4.4, σ=2.33) and increased satisfaction with pain control (2.16 and σ=0.50 to 6.53 σ=0.44).
Vasigh, Tarjoman and Borji[32]	Systematic review/1	Determine the effect of religious-spiritual interventions on the patients' pain status. A systematic review of studies published between 2000 and September 2018 was conducted, and six clinical trial and two quasi-experimental studies were included in the final sample. The questionnaires used were based on the MPQ, the VAS pain assessment scale, the form of analgesic received, and neonatal infant pain scale (NIPS). Patients ranging from newborns to adults were included. Pain was related to multiple diseases and painful procedures such as: venipuncture, birth and burns. Of 145 articles studied, only 8 met the inclusion criteria. The findings showed that the religious intervention improved the pain status of patients in the experimental group, inferring that religion and spirituality can be effective in reducing pain.	In all studies, the patients' pain level was significantly reduced after the religious intervention, but varied depending on the different types of scales for the age group and time of pain measurement.
Brasileiro et al.[33]	1st phase: Double-blind RCT/2 2nd phase: qualitative	Evaluate the effect of prayer on BP, HR, RR in 42 patients with chronic renal failure (CRF) and to assess their perception regarding the intervention. Patients received the intervention (prayer): 11-minute audio, with prayer based on Psalm 138 (divine omniscience), three times, on alternate weeks, with the presence of the interventionist nurse. The control group (37 patients) received an informal visit with active listening during the same period as the intervention group. In the 2nd phase, 35 patients from the intervention group participated in the interview.	Prayer reduced blood pressure, heart rate and respiratory rate values of patients with CFR and the volunteers' evaluation of the intervention was positive.
Trihandini et al.[34]	Quasi-experimental with pre-test post-test control group/3	Examine the effect of nursing spiritual care on the reduction of anxiety in patients with stroke in the inpatient ward. Thirty patients were allocated into intervention group (n=15) and control group (n=15). Spirituality as a nursing spiritual care intervention was developed based on Swanson's theory of care (knowing, being with, doing for, enabling, and maintaining belief) and O'Brien's dimensions of care on the practice of spiritual care (being with, listening, touching). Spiritual nursing care was conducted over three days with the following steps: preparation of the physical space, greeting with eye contact and smiling, introducing and sitting next to the patient, listening to the patient's experience by responding to their most basic needs, facilitating the need for prayer, informing families to be involved in care, and motivating patients with words of reinforcement. The Hamilton Anxiety Rating Scale was used for anxiety assessment. Using the paired t-test and the independent t-test, a significant effect of spiritual nursing care on anxiety levels in stroke patients was observed (p=0.000).	Spiritual nursing care significantly reduced anxiety in stroke patients. Results showed that there was a decrease in anxiety levels in both groups, with the mean difference value in the experimental group of 20.33 and in the control group of 11.73.

Continue...

Table 2. Summary of studies – continued

Autors	Types of studies/LE	Objective/Synthesis	Conclusion
Simão, Caldeira and Carvalho[35]	Systematic review/1	Verify the contribution of prayer to the health/disease process and to promote the integration of prayer in holistic health care. Ninety--two studies were investigated with a final sample consisting of 12 articles focusing on the effects of prayer on patient health. The review was conducted in international electronic databases in 2015, with the search strategy "Prayer" and "clinical trial", not considering time frame or language limitation, with the focus of interest on randomized and blinded clinical trials on the effects of prayer on patients' health. The studies showed consistent results highlighting that the literature recognizes effective prayer as a complementary nursing intervention for patients to cope with pain, anxiety, and worries in the face of illness or crisis situation.	Healthcare professionals should consider patients' spiritual needs and need to be prepared to provide this support based on ethical precepts.
Ghodsbin et al.[36]	Controlled randomized clinical trial/2	Evaluate the effect of positive thinking on the level of spiritual well-being (SWBS) in patients with coronary artery disease (CAD). These patients usually suffer from anxiety and other biopsychological alterations, interfering with their well-being, so 74 patients aged between 42 and 79 years old with CAD were randomized, allocated into an intervention group (38 patients) and a control group (36 patients). A simple sampling and block randomization method was used. The intervention group participated in positive thinking training, which consisted of a 75-minute session weekly for seven consecutive weeks. The content of the trainings were: the importance of anthropology and self-analysis, cognitive errors, definition and role of positive thinking in life, overcoming illness, the importance of prayer, communication with God and thanksgiving, training relaxation techniques, visualization and positive imagery, considering prayer, patience, forgiveness and trust in God as relaxation factors, as well as the causes of fear of death. The Ellison and Paloutzian Spiritual Well-Being Scale (SWBS) was used for evaluation at baseline, immediately after the intervention, and one month later. Mean spiritual well-being increased from 88.71±12.5 to 96.63±12.58 in the intervention group.	Training optimism and positive thinking associated with communication with the Divine in the form of prayer are important measures in the treatment of patients with CAD and should be considered in nursing interventions, since the results showed that there was an increase in these patients' general well--being.
Beiranvand et al.[37]	Prospective randomized double-blind clinical trial/2	Evaluate the effect of prayer meditation on reducing postoperative pain and physiological responses among Muslim women patients who underwent cesarean surgery under spinal anesthesia. The women were randomly divided into an intervention group and a control group, both with n = 80 each. The prayer "*O, I am the name of the medicine and the remembrance of healing, there is no god, but Muhammad and the God of Muhammad*" was heard for 20 minutes through a disposable headset in the intervention group. The control group wore the headset turned off. The study was conducted during 2011-2013 in a regional university hospital in Lorestan, Iran. Pain intensity, blood pressure (BP), heart rate (HR) and respiratory rate (RR) were checked before and during prayer, as well as 30 minutes, 60 minutes (p>0.05), 3 and 6 h after prayer. There was no significant improvement in pain score before and during prayer meditation, nor 30 and 60 min after (p>0.05). However, there was sensitive statistically significant improvement in pain after 3 and 6 h compared to the control group (1.5±0.3 vs. 3±1.3, p=0.030) and (1.3±0.8 vs. 3±1.1, p=0.003). There was no significant difference for BP, HR and RR between the groups.	Religious and spiritual intervention with meditative prayer is a simple, efficient and low-cost strategy with no adverse effects and the authors recommend it for reducing pain after a cesarean section, even though there was no improvement in pain after prayer meditation (p>0.05) at 30 and 60 minutes. Nevertheless, after 3 and 6h before and during prayer meditation there was a statistically significant improvement in pain compared to the control group.
Carvalho et al. [38]	Quasi-experimental pre- and post-intervention design/3	Evaluate the effect of prayer on anxiety in cancer patients undergoing chemotherapy treatment. Twenty patients received a nursing intervention using 11 minutes of audio with prayer based on Psalm 138 (divine omniscience), with the presence of the researcher. The control group received an informal visit from the researcher with active listening during the same period as the intervention group. To evaluate spiritual characteristics, Duke University Religion Index (DUREL) was used. The State-Trait Anxiety Inventory (STAI) was used to evaluate anxiety before and after the intervention. The data found between the pre- and post-intervention collections revealed statistically significant differences for anxiety state (p=<0.00), BP (systolic, p=0.00; diastolic, p=<0.00) and RR (p=0.04).	Significant efficiency of prayer as a nursing intervention for reducing anxiety in patients undergoing chemotherapy treatment was evidenced.

Continue...

Table 2. Summary of studies – continued

Autors	Types of studies/LE	Objective/Synthesis	Conclusion
Moeini et al.[39]	Randomized clinical trial/2	The study's objective was to determine the effects of a spiritual care program on anxiety in leukemia patients. Sixty-four Shiite patients admitted to an intensive care unit with a diagnosis of leukemia were allocated into an intervention and control group (32 patients in each). The intervention group received the spiritual care program from 4 pm to 8 pm for three days. This program included the presence of support that encouraged the expression of feelings, needs, and concerns through welcoming gestures and active listening, avoiding any kind of prejudice on the part of the researcher. Another component of the program was the support in religious rituals, and patients received a kit containing a prayer rug, rosary, and veil for women, and had access to MP3s with prayers and passages from the Quran. For the assessment of anxiety, the subscale of the 42-item depression, anxiety, and stress scale (DASS-42) was used with testing at baseline and at the end of the 3rd day of intervention. After the program, the mean anxiety score was significantly lower in the intervention group than in the control group ($p<0.01$).	The implementation of a spiritual care program by nurses with the objective of reducing anxiety in leukemia patients was statistically lower ($p<0.01$) in the intervention group than in the control group.

MPQ = McGill Pain Questionnaire; VAS = visual analogue scale; RCT = randomized clinical trial; CVA = stroke; BP = blood pressure; HR = heart rate; RR = respiratory rate.

to live a meaningful existence". It's essential that nurses understand the bio-psycho-spiritual needs of patients under their care, that they are prepared to implement interventions to guarantee that these needs are met, and also understand the efficacy and beneficial results of spirituality in the control of pain and anxiety, promoting spiritual, physical, psychological, and social well-being.

It's worth mentioning, as some authors[5,13,17,41,42] emphasize, that spirituality applied as nursing care does not depend on the professional's faith; however, the spiritual needs of patients must be assessed, so that patients and nurses can implement together a therapeutic intervention plan of support and facing of difficulties and stress factors, aiming at comfort and well-being, as well as pain and anxiety control. Furthermore, it's important that nurses use the methodological process, systematized and inherent to the science of caring, as an adequate instrument for the operationalization of this care as part of the *Sistematização da Assistência de Enfermagem* (SAE - Systematization of Nursing Care), providing theoretical/practical support to the prescription of nursing interventions to meet the patient's needs and evaluating the results of these actions[43].

The SAE is the guideline for the Nursing Appointment, which involves the nursing history, physical examination, nursing diagnosis, nursing care prescription, nursing care evolution, and the daily report that nurses must perform of patients under their responsibility[44]. In the Nursing Diagnoses[45] (nursing scientific language classification), pain, anxiety, and spirituality ("*willingness to increase spiritual well-being and improve spiritual distress and hindered religiosity*") are included in the taxonomic classification, with their defining characteristics, related factors, and risk factors that support the implementation of the care process[45]. Therefore, through practice based on validated protocols planned by the SAE, both basic and advanced, nurses perform nursing interventions interacting with the multi-professional and disciplinary team, fully assisting the patients with competence and quality, contributing to their recovery[43].

All the articles in this review presented a significantly better effect not only in pain intensity and anxiety, but also in other parameters evaluated in comparison with the baseline condition of each individual, besides highlighting that spirituality applied as a nursing intervention is effective and safe[30-39].

It's worth mentioning that, in the phase of identification and systematic search of articles, a respectable number of articles produced by nurses on spirituality were found, but many presented qualitative and descriptive methodologies, were narrative reviews, conceptual considerations, or other approaches that deviated from the established inclusion criteria. On the other hand, the medical and psychological production without the contribution of a nurse as an author was also greatly numerous and had various types of methodologies.

This review expressed the need to stimulate more research produced by nurses, since these professionals stay longer in direct contact with patients suffering from acute, chronic, and total pain. Nurses need to appropriate the power they have based on their competences and profile to implement interventions that complement their integral care to human beings, including spirituality. For this reason, systematic, randomized, and controlled studies that result in high, strong, and sufficient evidence are needed[23-25,28,29]. These studies should encompass spirituality as a nursing intervention in daily care and in the treatment of pain and anxiety, as these often compromise the quality of life of people by incapacitating them, partially or totally, temporarily or permanently.

There are some limitations to be considered on the present research: studies on the topic indexed in other databases that were not consulted; studies that were not identified due to not being available electronically; combinations of descriptors may have been insufficient to encompass all publications related to the subject. However, it's important to highlight that the authors searched the databases with a broad scope of health research and different combinations of descriptors in order to reduce selection bias.

It's undeniable that the evidence base of spirituality in nursing care needs more research, especially regarding patients' bio-psycho-spiritual needs, as found herein, in order to more accurately and safely implement evaluations, validate results, and in the case of this review, spirituality is associated with pain and anxiety control.

CONCLUSION

Most of the evidence emerged from the reviewed studies focused on levels 1 to 3 regarding the effectiveness of the applicability of spirituality as a nursing intervention. Thus, it's possible to conclude that nursing interventions based on spiritual care techniques are effective in reducing levels of pain and anxiety, and spirituality can be used as an important strategy in nursing care. Its applicability should be increasingly present in the daily care of nurses and health teams. New studies with rigorous scientific methodologies need to be carried out to underpin and validate spirituality as a nursing care that contributes to the therapeutic control and reduction of pain and anxiety, as well as to plan the systematization of nursing care.

AUTHORS' CONTRIBUTIONS

Regina de Souza Moreira
Statistical Analysis, Data Collection, Conceptualization, Resource Management, Project Management, Research, Methodology, Writing - Preparation of the original, Writing - Review and Editing, Supervision, Validation, Visualization
Rui Nei de Araújo Santana Junior
Statistical Analysis, Data Collection, Conceptualization, Project Management, Research, Methodology, Writing - Preparation of the original, Writing - Review and Editing, Supervision
Maria Belén Salazar Posso
Statistical Analysis, Data Collection, Conceptualization, Project Management, Research, Methodology, Writing - Preparation of the original, Writing - Review and Editing, Supervision, Visualization

REFERENCES

1. Araújo CP. A problemática da assistência religiosa em enfermagem. Rev Esc Enf USP. 1975;9(1):27-34.
2. Piepgras R. The other dimension: spiritual help. Am J Nurs. 1968;68(12):2610-3.
3. Brookes J. Care of the whole person. N Z Nurs J. 1969;62(3):7-8.
4. Berns A. Ministering to religious needs is important part of care. Mod Nurs Home. 1971;26(4):4.
5. Araújo CP. Estudo sobre a necessidade religiosa de pacientes em face pré-cirúrgica. Rev Esc Enferm USP. 1977;11(1):77-9.
6. Araújo CP, Horta WA. O significado psicológico de palavras relacionadas a valores espirituais entre estudantes de enfermagem. Rev Bras Enferm. 1978;31(1):93-100.
7. Escribano MD. La intimidad del cuidado y el cuidado de la intimidad: una reflexión desde la ética. Rev ROL Enfermería. 1999;22(4):303-8.
8. Hassed CS. Depression: dispirited or spiritually deprived? Med J Aust. 2000;173(10):545-7.
9. Como JM. Spiritual practice: a literature review related to spiritual health and health outcomes. Holist Nurs Pract. 2007;21(5):224-36.
10. Selli L, Alves JS. O cuidado espiritual ao paciente terminal no exercício da enfermagem e a participação da bioética. Bioethikos. 2007;1(1):43-52.
11. Pereira LL. Espiritualidade na enfermagem brasileira: retrospectiva histórica. O Mundo da Saúde. 2007;31(2):225-37.
12. Pedrão RB, Beresin R. O enfermeiro frente à questão da espiritualidade. Einstein. 2010;8(11):86-91.
13. Gonçalves JP, Lucchetti G, Menezes PR, Vallada H. Religious and spiritual interventions in mental health care: a systematic review and meta-analysis of randomized controlled clinical trials. Psychol Med. 2015;45(14):2937-49.
14. Sullivan WP. "It helps me to be a whole person": The role of spirituality among the mentally challenged. Psychosoc Rehabil J. 1993;16(3):125-34.
15. Gomes NS, Farina M, Forno CD. Espiritualidade, religiosidade e religião: reflexão de conceitos em artigos psicológicos. Rev Psicol IMED. 2014;6(2):107-12.
16. Steinhauser KE, Fitchett G, Handzo GF, Johnson KS, Koenig HG, Pargament KI, et al. state of the science of spirituality and palliative care research part i: definitions, measurement, and outcomes. J Pain Symptom Manage. 2017;54(3):428-40.
17. Puchalski C, Ferrell B, Virani R, Otis-Green S, Baird P, Bull J, et al. Improving the quality of spiritual care as a dimension of palliative care: the report of the Consensus Conference. J Palliat Med. 2009;12(10):885-904.
18. Puchalski CM, Vitillo R, Hull SK, Reller N. Improving the spiritual dimension of whole person care: reaching national and international consensus. J Palliat Med. 2014;17(6):642-56.
19. Nascimento LC, Santos TF, Oliveira FC, Pan R, Flória-Santos M, Rocha SM. Espiritualidade e religiosidade na perspectiva de enfermeiros. Texto Contexto Enferm. 2013;22(1):52-60.
20. Reginato V, Benedetto MAC, Gallian DMC. Espiritualidade e saúde: uma experiência na graduação em medicina e enfermagem. Trab Educ Saúde. 2016,14(1):237-55.
21. Steinhauser KE, Fitchett G, Handzo GF, Johnson KS, Koenig HG, Pargament KI, et al. State of the Science of Spirituality and Palliative Care Research Part I: Definitions, Measurement, and Outcomes. J Pain Symptom Manage. 2017;54(3):428-40.
22. Balboni TA, Fitchett G, Handzo GF, Johnson KS, Koenig HG, Pargament KI, et al. State of the Science of Spirituality and Palliative Care Research Part II: Screening, Assessment, and Interventions. J Pain Symptom Manage. 2017;54(3):441-53.
23. Mendes KD, Silveira RC, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto Contexto Enferm. 2008;17(4):758-64.
24. Galvão CM. Níveis de evidência. Acta Paul Enferm. 2006;19(2):V.
25. Soares CB, Hoga LAK, Peduzzi M, Sangaleti C, Yonekura T, Silva DRAD. Revisão integrativa: conceitos e métodos utilizados na enfermagem. Rev Esc Enferm USP. 2014;48(2):335-45.
26. Brasil. Ministério da Educação e Cultura. Lei nº 9.610, de 19 de fevereiro de 1998. Altera, atualiza e consolida a legislação sobre direitos autorais e dá outras providências. MEC.19/02/1998.
27. Brasil. Ministério da Saúde. Diretrizes metodológicas: elaboração de revisão sistemática e metanálise de ensaios clínicos randomizados/Ministério da Saúde, Secretaria de Ciência, Tecnologia e Insumos Estratégicos, Departamento de Ciência e Tecnologia. Brasília: Editora do Ministério da Saúde, 2012. 92 p.: il. – (Série A: Normas e Manuais Técnicos).
28. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Int J Surg. 2010;8(5):336-41.
29. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71.
30. Desmawati, Waraporn K, Warangkana C. Effect of nursing intervention integrating an Islamic praying program on labor pain and pain behaviors in primiparous Muslim women. Iran J Nurs Midwifery Res. 2019;24(3):220-6.
31. Keivan N, Daryabeigi R, Alimohammadi N. Effects of religious and spiritual care on burn patients' pain intensity and satisfaction with pain control during dressing changes. Burns. 2019;45(7):1605-13.
32. Vasigh A, Tarjoman A, Borji M. The effect of spiritual-religious interventions on patients' pain status: systematic review. Anaesth Pain Intens Care. 2019;22(4):499-505.
33. Brasileiro TOZ, Prado AAO, Assis BB, Nogueira DA, Lima RS, Chaves ECL. Effects of prayer on the vital signs of patients with chronic kidney disease: randomized controlled trial. Rev Esc Enferm USP. 2017;51:e03236.
34. Trihandini B, Fatmasari D, Hartati YK LE, Sudirman S. Effect of spiritual nursing care on the level of anxiety in patients with stroke. Belitung Nurs J. 2018.4(1):98-103.
35. Simão TP, Caldeira S, Carvalho EC. The effect of prayer on patients' health: systematic literature review. Religions. 2016;7(1):11.
36. Ghodsbin F, Safaei M, Jahanbin I, Ostovan MA, Keshvarzi S. The effect of positive thinking training on the level of spiritual well-being among the patients with coronary artery diseases referred to Imam Reza specialty and subspecialty clinic in Shiraz, Iran: a randomized controlled clinical trial. ARYA Atheroscler. 2015;11(6):341-8.
37. Beiranvand S, Noparast M, Eslamizade N, Saeedikia S. The effects of religion and spirituality on postoperative pain, hemodynamic functioning and anxiety after cesarean section. Acta Med Iran. 2014;52(12):909-15.
38. Carvalho CC, Chaves ECL, Iunes DH, Simão TP, Grasselli CSM, Braga CG. A efetividade da prece na redução da ansiedade em pacientes com câncer. Rev Esc Enferm USP 2014;48(4):683689.
39. Moeini M, Taleghani F, Mehrabi T, Musarezaie A. Effect of a spiritual care program on levels of anxiety in patients with leukemia. Iran J Nurs Midwifery Res. 2014;19(1):88-93.
40. McDonnell-Naughton M, Gaffney L, Fagan A. Spirituality and caring for the older person: a discussion paper. J Relig Health. 2020;59(6):2775-93.
41. Arrieira OCI, Thofehrn MB, Milbrath VM, Schwonk CRGB, Cardoso DH, Fripp JC. O sentido da espiritualidade na transitoriedade da vida. Rev Esc Anna Nery. 2017;21(1):1-6.
42. Lin MF, Hsieh YJ, Hsu YY, Fetzer S, Hsu MC. A randomized controlled trial of the

effect of music therapy and verbal relaxation on chemotherapy-induced anxiety. J Clin Nurs. 2011;20(7-8):988-99.
43. Posso MBS. Semiologia e Semiotécnica de Enfermagem- Bases para o cuidar. In: Posso MBS, Sant'Anna ALGG. Semiologia e semiotécnica de enfermagem. 2ª ed. Rio de Janeiro: Atheneu; 2021.
44. COFEN. Resolução Cofen n.358/2009. Dispõe sobre a Sistematização da Assistência e a implementação do Processo de Enfermagem em ambientes, públicos ou privados, em que o ocorre o cuidado profissional de enfermagem e dá outras providências. [Internet]. Brasília: Cofen: 2009[citado2021out3]. Disponível em: http://www.cofen.gov.br/resolu-cofen-3582009_4384.html.
45. North American Nursing Diagnosis Association. Nursing Diagnoses: definitions and classification: 2021-2023. 12ª ed. New York: Thieme Medical Publishers; 2021.