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Interconnection between health, spirituality and religiosity: importance of teaching, research and assistance in medical education

Interconexão entre saúde, espiritualidade e religiosidade: importância do ensino, da pesquisa e da assistência na educação médica

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ABSTRACT: Introduction: Since the beginnings of mankind, all populations have valued the correlation between health and the binomial spirituality-religiosity (S/R), although they have been separated in modern medical practice. In recent decades, there has been an increase in studies and researches that endorse the need to reconsider this integrative approach, with evident increase in health care. Objective: The article emphasizes the importance and necessity of teaching, research and assistance in medical education. Method: Narrative review of the literature conducted in 2018 from the publications in MEDLINE (via PubMed) and LILACS (via VHL) databases. Results: Describing the panorama of the studies that demonstrate the positive effects of the spiritual and religious practices on the physical and mental health of the individuals, this review evidences that its incorporation to the other therapies can increase the coping and the clinical evolution in numerous diseases. Conclusion: However, appropriately designed research should be conducted to differentiate the specific therapeutic effect of spiritual and religious interventions from the non-specific therapeutic effect or placebo effect that spiritual and religious symbolism arouses in the patients' psyche.

Keywords: Integral health assistance; Integrative medicine; Complementary therapies; Spirituality; Religiosity; Spiritual therapies; Education, medical.

RESUMO: Introdução: Desde os primórdios da humanidade, todas as populações valorizam a correlação entre a saúde e o binômio espiritualidade-religiosidade (E/R), embora tenham sido separados na prática médica moderna. Nas últimas décadas, têm-se observado um incremento de estudos e pesquisas que endossam a necessidade de se reconsiderar essa abordagem integrativa, com evidente incremento na atenção à saúde. Objetivo: O artigo ressalta a importância e a necessidade do ensino, da pesquisa e da assistência da interconexão entre saúde, espiritualidade e religiosidade na educação médica. Método: Revisão narrativa da literatura realizada em 2018 a partir das publicações existentes nas bases de dados MEDLINE (via PubMed) e LILACS (via BVS). Resultados: Descrevendo o panorama dos estudos que demonstram os efeitos positivos das práticas espirituais e religiosas na saúde física e mental dos indivíduos, o artigo evidencia que sua incorporação às demais terapias poderia incrementar o enfrentamento e a evolução clínica em inúmeras doenças. Conclusão: No entanto, pesquisas com desenhos apropriados devem ser realizadas para diferenciar o efeito terapêutico específico das intervenções espirituais e religiosas do efeito terapêutico não específico ou efeito placebo que o simbolismo espiritual e religioso desperta no psiquismo dos pacientes.

Descritores: Assistência integral à saúde; Medicina integrativa; Terapias complementares; Espiritualidade; Religiosidade; Terapias espirituais; Educação médica.

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INTRODUCTION

Since ancient times, all civilizations and cultures have been trying to understand their spiritual essence, their place of connection with the divine, the meaning of life and the mystery of death. The so-called soul or spirit represents the hope of the continuity of being and its life of relationships after the carnal mind, and it has an important role in the doctrines of different religions and philosophies[1].

At the same time, secular vitalist medical rationalities have contributed to broaden the understanding of the health-disease process, considering non-material factors (vital force, mind, soul and spirit, among others) as possible causes of human illness, and correlating subjective manifestations of individuality (thoughts, feelings and emotions) to alterations in physiological systems[2].

According to Koenig[3], an important researcher of the interconnection between health, spirituality and religiosity, "religion, medicine, and healthcare have been related in one way or another in all population groups since the beginning of recorded history. Only in recent times have these systems of healing been separated, and this separation has occurred largely in highly developed nations; in many developing countries, there is little or no such separation".

In 1946, the Constitution of the World Health Organization (WHO) defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"[4]. In 1999, an amendment to this Constitution included the spiritual aspect in the multidimensional concept of health: "health is a dynamic state of complete physical, mental, spiritual and social well-being and not merely the absence of disease or infirmity"[5].

Endorsing this definition, several studies show that spiritual and religious involvement is positively associated with physical and, mainly, mental health indicators. In this context, religiosity and spirituality are related to lower rates of suicide, depression, anxiety and use of illegal substances; better recovery in cases of depression; and greater well-being; among other benefits that characterize these aspects as sources of strength and resilience for patients, including those with severe mental disorders[6,7].

In view of this evidence, the World Psychiatric Association[8] and other psychiatric institutions, such as the Royal College of Psychiatrists[9], the American Psychiatric Association[10] and the *Associação Brasileira de Psiquiatria*[11], started recommending the inclusion of religiosity and spirituality in clinical practice and medical training.

Valuing the spiritual and religious aspects of individuality in mental health care, the American Psychiatric Association included "Spiritual and Religious Issues" as a new diagnostic category in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)[12,13], justifying the evaluation of religious and spiritual experiences as part of psychiatric investigation, without necessarily judging them as psychopathological. In this context, spirituality and religiosity are considered important factors in clinical care and health promotion. Therefore, they must be incorporated into teaching, research and assistance activities in the academic medical curriculum.

In line with the growth of medical education in Complementary and Integrative Health Practices (CIHPs), such as homeopathy and acupuncture[14-16], which expand the understanding of the illness process and improve the treatment of diseases according to vitalist anthropological conception[1,2], the dissemination of other philosophical-spiritual approaches could also contribute to the understanding and treatment of the patient/disease.

Similarly, due to the growing importance of the correlation between health, spirituality and religiosity, doctors and other health professionals must be prepared to address the spiritual and religious demands of their patients. For this, they should acquire information and engage in training on the various aspects and approaches of this vast field of knowledge.

With this objective in mind, this narrative review proposes a global overview of teaching, research and assistance in this area, exemplifying the advances and limitations through the Spiritist Doctrine or Spiritism, as it is an ideological system of scientific, philosophical and religious nature that is spread worldwide and followed by 2% of the Brazilian population (around 3.8 million individuals), according to the latest demographic census[17].

METHOD

This narrative review of the literature on the interconnection between health, spirituality and religiosity was elaborated using articles selected through a search of MEDLINE (via PubMed) and LILACS (via VHL) databases, using Health Sciences Descriptors (DeCS) and including articles published until June 30, 2018. The descriptors used and the search strategies with the respective results are described in Table 1. Full-text studies in English, Portuguese and Spanish were considered. After reading the abstracts, the studies were chosen according to their importance and scope in relation to the topics of interest. Although not indicated in the initial search filter, classic studies were included for their high standard content and authors.

RESULTS

Table 1. Systematic search strategies in the databases until June 2018 and results obtained

Databases	Descriptors used / Search strategies	Results (articles)
MEDLINE (via PubMed)	"health" AND "spirituality"	5466
	"health" AND "spirituality" AND "medical education"	116
	"health" AND "spirituality" AND "psychological adaptation"	1120
	"health" AND "spirituality" AND "therapeutic use"	79
	"health" AND "spirituality" AND "clinical trial"	88
	"health" AND "spirituality" AND "psychophysiology"	16
	"health" AND "spirituality" AND "placebo effect"	4
	"health" AND "spirituality" AND "integral healthcare practice"	28
	"spiritism"	28
LILACS (via VHL)	"health" AND "spirituality"	356
	"health" AND "spirituality" AND "medical education"	12
	"health" AND "spirituality" AND "psychological adaptation"	15
	"health" AND "spirituality" AND "therapeutic use"	7
	"health" AND "spirituality" AND "clinical trial"	1
	"health" AND "spirituality" AND "psychophysiology"	0
	"health" AND "spirituality" AND "placebo effect"	0
	"health" AND "spirituality" AND "integral healthcare practice"	4
	"spiritism"	16

In the discussion of each topic of interest to the subject matter, the number of studies used was as follows: "medical education" (14 articles), "coping with health problems" (23 articles), "clinical implications in mental and physical health" (27 articles), "psychological and physiological mechanisms of action" (4 articles), "influence of the placebo effect" (29 articles), "integration in health care" (1 article), "contributions of Spiritism to the complementary treatment of diseases" (8 articles) and "scientific evidence on the efficacy of Spiritist therapy" (1 article).

HEALTH, SPIRITUALITY AND RELIGIOSITY

According to researchers in the field[3,18], the definitions for the terms 'spirituality' and 'religiosity' are very similar and overlap. Spirituality is defined as a personal search for understanding spiritual/existential questions (for example, the meaning of life and the mystery of death) and their relationships with the sacred and/or transcendent (God, Allah, Brahman and Buddha, among others denominations), and it is not necessarily related to the development of practices or the formation of religious communities. On the other hand, religiosity is understood as the practice of a religion, which is defined as a system of beliefs and activities carried out by a certain community and supported by rituals, practiced with the objective of coming into contact with the sacred and/or transcendent; in general, religions also have specific beliefs about life after death (also addressed by spirituality) and rules about conduct and relationships within a social group.

Several reasons justify the inclusion of spirituality/religiosity (S/R) in teaching, research and health care: (a) a lot of patients have spiritual/religious beliefs and have needs in this area when they are ill; (b) spiritual/religious beliefs provide support for patients who face several distressing aspects (spiritual/religious coping); (c) spiritual/religious beliefs and practices promote health and quality of life, being complementary to conventional treatments and reducing health costs; (d) the spiritual/religious beliefs of patients affect their decisions in relation to treatment, which may conflict with or influence their adherence; (e) spiritual/religious beliefs of doctors can influence the decisions they make and the type of care they provide to patients; (f) studies show that many patients would like health professionals to see them as whole persons and to include their spiritual/religious needs in the care they receive, which would bring significant benefits to their treatment; among other aspects[3,19-23].

Regarding the acceptance of the beliefs of patients in routine health care, studies indicate that most physicians neglect their responsibility in this area[24-26]. Despite the historical correlation between mental health, spirituality and religiosity[3], currently supported by modern psychiatry[27], a national American (USA) survey found that the majority of the psychiatrists consulted rarely or never inquired about patients' spiritual/religious issues; however, they did agree with the importance of the topic in the therapeutic context[28]. A similar attitude was observed in surveys carried out with psychiatrists from other countries, who considered 'lack of time and training' as the main obstacle to the incorporation of these issues into clinical practice[29-31].

Similarly, a recent survey of 484 Brazilian psychiatrists members of the *Associação Brasileira de Psiquiatria* found that, even though most psychiatrists have a religious affiliation (67.4%), 55.5% did not inquire about their patients' S/R. The main obstacles described were 'fear of overstepping the role of the doctor' (30.2%) and 'lack of training' (22.3%)[32].

Based on the Medical Code of Ethics (Chapter 5, Article 31 and 32, for example)[33], doctors claim that religious beliefs can generate conflict between their own conscience and that of the patient, disrespecting health care decisions made in advance by the patient. However, some health professionals and bioethics researchers have opposing positions: "Respect for the patient's autonomy must include their religious values. These values must not be disregarded or belittled by others, in particular by health professionals, despite of their best and most sincere interests". It is worth mentioning that "religious values can be a positive force for the comfort and recovery of patients if they are sure that they will be respected"[34]. This dilemma reinforces the importance of including activities, disciplines and debates on these topics in the education of health professionals and in the care of patients[35,36].

As examples of this conduct, in the USA, the standards set by Medicare[37] and by the Joint Commission on Accreditation of Healthcare Organizations[38] require that providers of health care show respect for patients' cultural and personal values, beliefs and preferences (including religious and spiritual beliefs). In view of this, if health professionals are unaware of those beliefs and preferences, they cannot show respect for them and adjust care accordingly[3].

Thus, in addition to making these topics available to medical students[39], health professionals must integrate these contributions in semiology and conventional clinical propaedeutics, through brief spiritual histories or anamneses[3,40-42], with the objective of expanding the understanding of human illness, improving the doctor-patient relationship and promoting well-being. In addition, the incorporation of spiritual/religious practices into conventional therapy could increase the resolution of modern illnesses and reduce health care costs[6,7], as we will see in detail below.

Medical education in spirituality and health (S/H)

Several studies point out the benefits of including the theme 'spirituality and health' (S/H) in the curricula of medical schools[43-47], as well as in other health-related courses[48,49].

A global survey on spirituality in medical education[50] showed a predominance of the subject in the USA over other countries. In 1994, only 13% of medical schools in the USA offered curricular activities related to spirituality; in 1998, this number reached 31% and, in 2004, 67% of medical schools offered these activities. In 2008, 67% of American medical schools continued to offer activities related to spirituality, and 75% of those occurred as a regular practice[51]. In 2010, a national survey indicated that 90% of medical schools in the United States had activities related to S/H, 73% of those with content in required courses addressing other topics, such as Complementary and Integrative Health Practices (CIHPs) or Complementary and Alternative Medicine (CAM), and 7% with a required course dedicated specifically to the topic[52].

In the United Kingdom, a survey answered by 53% of the medical schools consulted showed that 59% of these institutions provided some form of teaching on spirituality. The inclusion of these activities occurred in the form of lectures, group discussions, patient interviews, follow-up with chaplains and specific readings[53].

In Brazil, a survey[54] answered by 47.7% of the medical schools consulted indicated that only 10.5% offered courses on S/H and 40.7% had courses or some content on S/H. Only two schools offered courses that involved practical training and three schools had courses that taught how to take a spiritual anamnesis. Most medical school directors (54%) believed that S/H should be taught in their schools. According to this same survey, the curricular content of these courses was quite heterogeneous and addressed diverse topics: aspects intrinsic to different religions and philosophies, CIHPs or CAM, interface between quantum physics and health, among others.

With the objective of expanding academic education by including themes related to S/H, three methodological proposals for the implementation of this process with health professionals are suggested[55]: a) "composition of disciplines in the curriculum in such a way that the interrelationships between S/H are included in the training of health professionals"; b) "offer of extension courses and other possibilities, such as internships, that can be used as complementary activities, as provided for in the National Curriculum Guidelines for Higher Education"; c) "intersectional approach, in which the components of the curriculum address educational practices focused in aspects related to spirituality and its relationship with health".

In addition to medical undergraduate courses, courses on S/H are also offered in medical residency programs (palliative care, psychiatry, internal medicine and family medicine) in the USA, Canada and Europe[50], providing residents with improved doctor-patient relationship, broader understanding of the spiritual needs of patients and increased job satisfaction[56].

Use of spirituality/religiosity (S/R) in coping with health problems

Spirituality and religiosity (S/R) can help patients in their psychological adaptation or coping with health problems. Several studies show that spiritual/religious

coping helps people to deal with a variety of chronic diseases and stressful situations: chronic pain, kidney diseases, diabetes, lung diseases, cancer, hematologic diseases, cardiovascular diseases, neurological disorders, HIV/AIDS, systemic lupus erythematosus, irritable bowel syndrome, musculoskeletal disorders, psychiatric disorders, end-of-life care and post-traumatic stress, among others[3].

Studies have shown that spiritual/religious coping is associated with lower levels of discomfort, anxiety, hostility and social isolation among cancer patients[57-61]; in addition, it also assists family caregivers[62,63]. Characteristics related to spiritual/religious beliefs or convictions, such as hope, optimism, absence of regret and life satisfaction, are also associated with better adaptation among individuals diagnosed with cancer.

The type of religious coping can also influence the quality of life of patients. Studies with patients with advanced cancer show that positive religious coping (such as 'benevolent religious appraisals') is associated with better quality of life and greater psychological and existential well-being. In contrast, negative religious coping (such as 'anger at God') decreases quality of life and psychological and existential well-being[64,65] and increases suicidal ideation[66]. A study with patients diagnosed with cancer over the course of 5 years found that spirituality was associated with less distress and better quality of life, regardless of the perceived life threat; spiritual/existential well-being was found to be the main contributor[67].

Spiritual/existential well-being, understood as a 'sense of meaning for life and inner peace'[68], is directly associated with the ability of cancer patients to continue enjoying life, despite high levels of pain or fatigue. Studies with cancer patients indicate that spiritual/existential well-being is inversely related to anxiety and depression[69-71] and directly related to physical and mental health[72]. On the other hand, measures of religiosity are not related to depression[71,73], or may predict an aggravation of the disease, particularly in cases where spiritual/existential well-being is low[74,75].

Research in pediatric patients reveals that spirituality is an important part of children's lives, and that it often goes deeper than religiosity in the understanding of the context and purpose of chronic diseases, suggesting that spiritual beliefs help these patients to cope with disease[76,77]. In short, positive religious involvement and spirituality seem to be associated with an improvement in health and a longer life expectancy, even after controlling for other variables such as lifestyle and social support[78].

Influence of S/R on mental and physical health: scientific research and clinical implications

As previously mentioned, spiritual/religious practices and beliefs are commonly used by patients and doctors coping with illnesses and other stressful life changes. A large body of research shows that people with higher levels of S/R are healthier and can adapt better to mental and physical disorders that may affect them, compared to those with lower levels of S/R. These possible benefits for mental and physical well-being have physiological consequences that, in turn, have an effect on health, on the risk of contracting diseases and on the response to treatments. Several qualitative and quantitative studies analyzed in systematic reviews and meta-analyzes describe these scientific evidences.

In a general and broad systematic review (1872-2010), Koenig[3] analyzed studies on S/R and their clinical implications in a variety of mental and physical disorders and diseases. The results of this review are described, with the addition of other recent reviews.

Influence of S/R on mental health

Around 80% of the studies on S/R address the area of mental health. Therefore, there are many general systematic reviews on the subject available in the literature[6,79-84].

Analyzing studies of high methodological quality (score ≥ 7; 0-10 scale), Koenig[3] describes the relationships between S/R and the development of various mental disorders and diseases: depression (178 studies, inverse relationships were reported in 68% and direct relationships in 7%), anxiety (67 studies, inverse relationships in 55% and direct in 10%), suicide (49 studies, inverse relationships in 80% and direct in 4%), schizophrenia and psychotic disorders (7 studies, inverse relationships in 29%, direct in 29% and mixed in 29%), bipolar disorder (2 studies, inverse relationships in 50% and mixed in 50%), substance abuse (alcohol, 145 studies, inverse relationships in 90% and only 1 study with a direct relationship; cigarette, 83 studies, inverse relationships in 90%; other drugs, 112 studies, inverse relationships in 86% and direct in only 1 study), sexual behavior (50 studies, inverse relationships in 84%), crime/delinquency (60 studies, inverse relationships in 82% and direct in only 1 study), marital instability (38 studies, inverse relationships in 92%), among others.

Other reviews described similar inverse relationships with the following disorders: suicide[85], schizophrenia and psychotic disorders[86,87], chemical dependency[88-91], eating disorders[92] and post-traumatic stress[93], among others. On the other hand, recent studies have also described direct (negative) relationships between S/R and anxiety[94], personality disorders[95] and delusions/hallucinations[96].

Influence of S/R on physical health

According to Koenig[3], there is a growing body of evidence proving that stress and negative emotions (depression and anxiety, for example) have adverse effects on physiological systems vital for the maintenance of physical health and healing of diseases; increase

susceptibility to or worse outcomes from a wide range of illnesses; and may shorten life expectancy. On the other hand, social support has been recognized as a protective factor against diseases and conducive to increased longevity. By reducing stress and negative emotions, S/R involvement also increases social support, positively affects life, health habits and behaviors, and has a favorable impact on several physical diseases and the response of those diseases to treatment.

Analyzing studies of high methodological quality (score ≥ 7; 0-10 scale), the author[3] describes the associations between S/R and physical disorders or diseases: coronary heart disease (13 studies, inverse associations in 69% and direct in only 1 study), cardiovascular functions (16 studies, inverse association in 69%), hypertension (39 studies, inverse association in 62%), cerebrovascular diseases (9 studies, inverse association in 44%), Alzheimer's disease and dementia (14 studies, inverse associations in 57% and direct associations in 21%), immune function (14 studies, inverse association in 71%), susceptibility to infection (12 studies, inverse association in 70%), endocrine function (13 studies, inverse association in 69%), cancer (20 studies, inverse association in 60%), pain (18 studies, inverse association in 50% and direct in 20%) and mortality (63 studies, inverse association in 57% and direct in 5%), among others.

Other systematic reviews have described similar inverse associations with cancer[97], HIV/AIDS[98], amyotrophic lateral sclerosis[99], chronic pain[100] and mortality[101-103]. The effects on longevity were stronger among individuals who regularly attended religious services, with an average increase of 37%, which corresponds to the effects of statins and physical rehabilitation after myocardial infarction[3].

Mechanisms of psychophysiological action of the E/R binomial in health promotion

In general, as primary mechanisms of action, studies describe that S/R involvement increases positive emotions (well-being, happiness, hope, optimism, self-esteem, meaning, purpose and sense of control over life, among others) and consequent attitudes (humility, altruism, compassion, empathy, kindness, gratitude and forgiveness, among others), which help to neutralize negative counterparts, improving quality of life and providing resources to deal with external adversities (difficult and stressful conditions) and internal adversities (genetic predisposition or vulnerability to mental and physical disorders). In addition to these psychological and emotional aspects, most religions have rules and regulations on life habits (healthy habits, no addictions, practice of prayer and meditation, among others) and social relationships, which protect individuals from possible disorders and stressful events, and provide group support in difficult times[3].

As a secondary mechanism of action, positive emotions arising from spiritual/religious practices influence health and can affect several physiological systems (neurological, immune, endocrine, metabolic and cardiovascular, among others) and their mediators[3,104-106].

In the central nervous system (CNS), S/R increases activity in the frontal cortex, cingulate gyrus and thalami, and decreases activity in the superior parietal cortex, which contains the primary somatosensory area. Increased activity in the frontal cortex is related to the focused attention required for prayer and meditation, while the decreased activity in the parietal cortices reflects the loss of a "clear, consistent cognition of the physical limitations of the self", which can result in subjective reports of "unity with God"[105].

The meditative state also increases serum levels of neurotransmitters, influencing spiritual awareness and producing mystical experiences. In addition to the areas of the brain previously mentioned, S/R involvement can activate brain structures involved in the regulation of autonomic nervous system functioning, reducing stress, anxiety and panic. In the prefrontal cortex, S/R can regulate dopamine levels and imbalances, such as Parkinson's disease, while dopaminergic disorders can influence S/R. Dopaminergic neurons also have a regulatory influence on the hypothalamic, autonomic and endocrine systems[105].

Given the bidirectional relationship between the CNS and the immuno-endocrine system, S/R involvement increases the immune response and decreases response to stress. In the cardiovascular system, it changes regional blood flow and glucose metabolism, reducing coronary risk, which is quantified in the reduction of C-reactive protein and fibrinogen[105].

In a systematic review, Hulett and Armer[106] analyzed studies on the effects of spiritually-based interventions on neuroimmunological outcomes in breast cancer patients, and quantified the changes according to biomarkers: yoga (↓ cortisol, IgA, IL-1, IL-1β, IL-6 and TNF-α; ↑CD56); guided imagery (↓ IL-1β; ↑IL-2, NK e CD4+/CD8+); mindfulness (↓cortisol, IL-4, IL-6, IL-10; ↑IL-2, NK, Th1/Th2, CD4+/CD8+ and interferon-gamma); among others.

Influence of the placebo effect on the outcomes of S/R on health

Etymologically, the term 'placebo' originates from the Latin *placeo, placere,* which means 'please'. The placebo effect is related to the improvement of symptoms and/or physiological function in response to supposedly non-specific and apparently inert factors. This effect can be attributed to the 'symbolism' that the therapy exerts on the psyche of individuals. In addition to the aspects related to the placebo intervention, other non-specific factors can also have positive effects on the response, such as: therapist-patient relationship, verbal suggestion, expectations of improvement and belief in treatment, among others[107-109].

The systematic performance of randomized controlled trials (RCTs) in the last decades, with the objective of evaluating the efficacy of several treatments, found significant improvements in control groups, highlighting the importance of the placebo effect. Meta-analysis that assessed the placebo response (% improvement) in RCTs of isolated diseases found placebo effects on ulcerative colitis (26.7%)[110], Crohn's disease (19%)[111], irritable bowel syndrome (40%)[112], major depression (29.7%)[113], bipolar disorder (31.2%)[114], chronic fatigue syndrome (19.6%)[115] and migraine (21%)[116], among others. A re-analysis of general systematic reviews showed that the placebo effect is relatively large and robust for ten clinical conditions (pain, obesity, asthma, hypertension, insomnia, nausea, depression, anxiety, phobia and smoking)[117].

Among the main psychological mechanisms of the placebo effect, unconscious conditioning and conscious expectation stand out[118-120]. In unconscious conditioning, the placebo response appears after repeated associations between sensory stimulus (type of treatment, color or shape of pills, among others) and effective treatment interventions (red morphine pill for pain treatment, for example). According to behaviorist principles, after the placebo intervention, the sensory stimulation triggers an automatic response similar to the effective treatment[121,122].

Including faith and belief in therapy, whatever it may be, the conscious expectation of improvement with a given intervention has an essential role in the placebo response and can be increased by positive verbal suggestions[123]. Studies indicate that unconscious conditioning and conscious expectation are adjunct and synergistic mechanisms of the placebo effect, as they act in different neurophysiological systems[124,125].

According to Fricchione and Stefano[126], thalamic sensory input induced by the expectation of active improvement activates the prefrontal cortex, stimulating the release of endorphins in the brain opioid system and the release of dopamine in the ventral tegmentum of the midbrain, a region originating from the mesolimbic-mesocortical dopaminergic system, which projects the stimulus to dorsal and ventral striatum. Thus, positive expectations increase the release of neuromodulators in brain areas responsible for movement, pleasure and physical or psychological pain, generating a placebo effect in Parkinson's disease, depression and pain disorders, respectively. On the other hand, stimulation of the mesolimbic-mesocortical dopaminergic system also modifies the stress response controlled by the hypothalamic-pituitary-adrenal and the amygdala-lateral hypothalamus-locus coeruleus axes, leading to placebo response in many psychosomatic disorders (hypertension, angina, inflammatory bowel disease and asthma, among others).

In depression, the placebo effect induces responses similar to antidepressants, with an increase in the release of the neurotransmitter serotonin in the prefrontal cortex, parietal cortex, anterior cingulate, posterior cingulate and posterior insula, and decreased serotonin in the thalamus, parahippocampus and subgenual cingulate[127-129].

As previously mentioned[105], studies suggest that spiritual experiences and practices involve a variety of neural systems that can induce neurophysiological effects similar to those involved in the placebo response. As in the placebo effect, the symbolism exerted by spirituality on the patient's faith, belief or conscious expectation indicates a possible mechanism of action of spiritual interventions and is considered a global and fundamental psychological concept that can explain the psychological and physiological mechanisms involved in the effects of S/R on health[130-132].

Therefore, in spiritual practices, the placebo effect can be associated with significant and impactful therapeutic effects, which must be valued in the clinical responses observed, so that specific effects of the different interventions can be distinguished from the non-specific effects generated by their symbolism[133,134].

Fundamental aspects for the integration of S/R in health care

According to Koenig[3], health professionals should be aware of the reasons for integrating S/R into patient care, familiar with the existing scientific evidence and trained to do this in a sensitive and routine manner. Regardless of any specific training of students and health professionals, some basic aspects should be observed so that spiritual issues can be addressed in an ethical and natural way in daily clinical practice and patient care.

Among these aspects, the author highlights that the health professional should: take a brief spiritual history and document it in the patient's medical record, so that other professionals can know about it; respect the patients' spiritual/religious beliefs uncovered during the spiritual history, without prejudice or criticism; conduct a spiritual history or contemplate a possible spiritual/religious intervention always in an impartial way, centered on the patient's will, avoiding any coercion or imposition of personal beliefs (or lack of belief); if the patient requests spiritual/religious interventions, confirm that their needs have been addressed and observe the evolution of their health status; among others.

In conclusion, Koenig[3] reiterates that "health professionals should learn about the beliefs and practices of different spiritual and religious traditions that relate to healthcare, especially the faith traditions of patients they are likely to encounter in their particular country or region of the country", as these "will have a direct impact on the type of care being provided, especially when patients are hospitalized, seriously ill or near death".

Following this indication, we will describe the

beliefs and practices of the spiritist doctrine or spiritism that relate to health care and health promotion, in view of the importance of this spiritual/religious approach in our environment. Serving as a synthesis of the knowledge on Spiritism that should be provided to health professionals, similar contents of other spiritual and religious traditions should be part of their training and/or specialization.

SPIRITIST DOCTRINE OR SPIRITISM

The spiritist doctrine or spiritism is a scientific, philosophical and religious doctrine that emerged in France in the middle of the 19th century, based on the studies and observations of the French educator Hippolyte Léon Denizard Rivail, also known by the pseudonym of Allan Kardec (1804-1869).

Kardec initially dedicated himself to the study of magnetism and scientific investigation of the so-called 'table-turning', events in which the movement of tables and other objects without human interference was observed. Then, Kardec became interested in other paranormal events or anomalous experiences and noted that many of them were not 'pathological', but rather events caused by disincarnate spirits or invisible intelligences that used individuals ('medium', from Latin 'intermediate') endowed with a particular feature ('mediumship' or 'ability to mediate') to manifest themselves in the corporeal world[135]. It is worth mentioning that several experiments demonstrate the existence of these paranormal events, spiritual experiences, altered states of consciousness or anomalous experiences[135-140], which are the focus in national[141,142] and international research centers[143].

After systematically studying hundreds of mediums and their various manifestations and comparing and analyzing the information obtained (premises of experimental and scientific methods), Kardec recognizes mediumship as a peculiar and inherent characteristic of the human being, a property evidenced in modern neurological studies[144-147]. He classified mediumistic phenomena according to their effects: a) of material, physical or objective effects, in which the medium has a passive participation in the phenomenon, only providing the fluidic body or ectoplasm* so that it can occur (materialization, transfiguration, levitation, apport, direct voice, direct writing, typtology and sematology, among others); b) of intelligent or subjective effects, in which the medium actively participates in the phenomenon, capturing and transmitting aspects and content from the spiritual plane through his own sensitive ability (intuiton, clairvoyance, clairaudience, psychography and psychophony, among others).

According to spiritism, mediumship is a psychic faculty that can be manifested in less or more intense manners and through a significant variety of types of manifestations. Kardec used mediums and their respective mediumships, mainly those related to phenomena of intelligent effects, to capture the knowledge transmitted by disincarnate spirits or invisible intelligences. This was an investigative and systematic method that allowed structuring a broad doctrine that addresses several scientific, philosophical and religious aspects of humanity.

As a result of Kardec's questions and dialogues with spirits or spiritual entities of high hierarchy, the spiritist codification is based on five fundamental works: *The Spirits Book* (1857)[148], which addresses the spiritist philosophy or the principles of the spiritist doctrine; *The Book on Mediums* (1859)[149], on experimental spiritism or mediumship; *The Gospel According to Spiritism* (1863)[150], which addresses ethical and moral maxims of christianity according to spiritism and its applications to different circumstances of life; *Heaven and Hell* (1865)[151], on Divine Justice according to spiritism; and *The Genesis, Miracles and Premonition According to Spiritism* (1868)[152], which addresses the spiritist view of these biblical concepts.

A doctrine based on the existence, manifestations and teaching of spirits, spiritism seeks to integrate science, philosophy and religion to the understanding of the reality around us, providing explanations on topics that are difficult to understand, at least according to materialist perspectives, such as: cause and origin of human suffering according to the law of karma or the law of cause and effect; immortality and moral and intellectual evolution of spirits through successive reincarnations; plurality of inhabited worlds; existence of spiritual planes for disincarnate spirits; possibility of communication between disincarnate and incarnate spirits through mediumship; triple nature of human beings (spirit/perispirit/substantial unity between physical body and vital principle); spiritual, psychological and emotional causes of physical and mental illnesses; influence of spiritual/religious beliefs and practices in coping with diseases and health promotion; among others.

Contributions of spiritism to the complementary treatment of physical and mental diseases

Spiritism is the third most common religion in Brazil (behind only catholicism and protestantism) and its therapies have been used by millions of people around the world as adjunct and complementary treatment of various physical and mental illnesses. These therapeutic practices include prayer, laying on of hands (passes or fluid therapy), fluidic or magnetized water, practice of charity/

* The term 'ectoplasm' (from the greek *ektós,* 'outside', and *plasma,* 'mold' or 'substance': substance or plasma exteriorized from the body) was introduced in parapsychology by the physiologist Charles Richet (Nobel Prize in Physiology or Medicine in 1913) to denote a whitish substance exteriorized from the body of certain individuals with special characteristics (sensitive or mediums), which allows the occurrence of paranormal events.

volunteering, spiritual education (incorporation of ethical and moral values) and disobsession (spiritual liberation)[153].

Spiritism includes a 'spiritual' origin for mental disorders, in addition to the well-known social, psychological and biological factors. Originated from past incarnations and negative influences of disincarnate spirits with whom the patient was associated in the past, this spiritual cause is called 'obsession' or 'possession' and is the result of the psychic interference of these spiritual entities in the physical and mental health of incarnate people. To dissolve this association between incarnate and disincarnate spirits (spiritual liberation), Spiritism uses disobsession as a spiritual therapy[154].

In Brazil, as well as in other countries, the tendency to consider anomalous experiences of trance and obsession as pathological disorders is historical. In the second half of the 20th century, Brazilian psychiatrists classified these experiences as symptoms of mental disorders[155]. More recently, specific diagnostic criteria and protocols have been developed to help differentiate pathological manifestations from healthy and culturally accepted spiritual manifestations[138,156], bringing a new understanding to these experiences. However, health professionals do not receive adequate training to deal with the spiritual aspects of their patients, including these anomalous experiences of trance and obsession. Such training could help avoid incorrect diagnoses and iatrogenesis[139].

Over the course of the 20th century, dozens of Spiritist psychiatric hospitals have appeared in Brazil. These hospitals seek to integrate conventional medical treatment and complementary spiritual or Spiritist therapy, with their own operational structure that involves health professionals and spiritual therapists. A study on this approach conducted in six important Brazilian spiritist psychiatric hospitals concluded that, although spiritual therapies are provided to those who are interested, the lack of standardized treatment protocols and scientific studies that prove the effectiveness of the approach remains a barrier to evaluate the impact of this integrative and complementary Spiritist treatment on mental health, quality of life, adherence and perceived quality of treatment[157].

Another study[158] assessed the characteristics of the spiritual treatment offered in spiritist centers in the city of São Paulo, with the objective of understanding how physical and mental health problems were addressed. Among the 365 spiritist centers that received the questionnaire, 55 (15.1%) were included in the final analysis. There was a mean of 261 people per week attending spiritual sessions in each center, totaling approximately 15,000 participants per week in the analyzed sample. The most common complementary spiritual treatment was disobsession (92.7%); the least common was spiritual surgery, present in only 5.5% of centers. The most frequent health problems reported by the participants were depression (45.1%), cancer (43.1%) and diseases in general (33.3%).

With the objective of describing the model of spiritual care for depression offered in Spiritist centers, Lucchetti et al.[159] carried out a descriptive study of the activities developed at the Spiritist Federation of the State of São Paulo (FEESP). The researchers visited the spiritual intervention sections, observed the therapies provided, listened to the spirits' communication and interviewed two patients. The assistance consisted of a 90-minute spiritual treatment session, which included lectures on spiritual education, disobsession, passes and individual advising on moral and ethical conduct. Both patients reported remission of depression during the interviews.

Therapeutic efficacy of complementary spiritist treatment: scientific evidence

With the objective of proving the therapeutic efficacy of the different integrative and complementary spiritist treatments, Lucchetti et al.[153] conducted a systematic review of scientific literature, selecting studies with the best methodological quality according to inclusion/exclusion criteria and to the Newcastle-Ottawa and Jadad score scales.

Due the low methodological quality of the 1,998 studies available, only 50 articles met the minimum selection criteria and were included in the final analysis: prayer (6/467), laying on of hands (11/288), fluid therapy (2/16), volunteering (10/283), disobsession (0/49) and spiritist education (21/961). It is worth noting that studies on volunteering describe the influence of the practice of brotherly love and charity on physical and mental health, while those related to spirit education highlight the impact of a virtuous life, based on moral values and positive emotions and attitudes, on health outcomes.

According to the authors[153], there is moderate to strong evidence that volunteering and spiritist education are linked to better health outcomes. Furthermore, laying on of hands and prayer also seem to be associated with positive results. However, the authors did not find studies of high methodological quality that evaluated the efficacy of fluid therapy and disobsession, even though these are the most common complementary spiritist treatments in spiritist centers (more than 90% of cases).

CONCLUSION

With this review, we sought to highlight the influence of S/R on physical and mental health and to describe the global overview of teaching, assistance and research in the area. Given the clinical importance of this phenomenon, doctors and other health professionals at all levels of education and care should be aware about its various aspects.

A number of reasons support this proposal, such as patients' beliefs and their demands in coping with diseases,

complementation of responses to conventional treatments and reduction of health costs, among others. In the field of bioethics, the autonomy of patients extends to their spiritual and religious values, which must be respected both in relation to the conduct and therapies proposed by health professionals and to their requests for complementary interventions in the area.

Studies in several countries demonstrate the benefits of including the topic of S/H in the training of doctors, nurses and other health professionals, observing the increasing inclusion of such subject in undergraduate and graduate courses and medical residency, in addition to extension courses, internships with practical training, informative lectures and other teaching-learning modalities.

In the field of research, studies indicate that S/R involvement helps patients deal with a variety of illnesses and stressful situations, such as chronic pain, anxiety, depression, substance abuse, cancer and end of life, among others.

However, considering the evident non-specific therapeutic effects (placebo effect or response) produced by spiritual and religious symbolism in the patients' psyche, studies with appropriate designs on all spiritual and religious interventions used regularly in health promotion should be carried out, so that specific therapeutic effects can be differentiated from improvements related to faith, belief or positive expectations, allowing to quantify the efficacy and effectiveness of such practices on different health conditions.

REFERENCES

1. Teixeira MZ. A natureza imaterial do homem: estudo comparativo do vitalismo homeopático com as principais concepções médicas e filosóficas. São Paulo: Editorial Petrus; 2000. http://www.homeozulian.med.br/homeozulian_visualizarlivroautor.asp?id=4.
2. Teixeira MZ. Antropologia médica vitalista: uma ampliação ao entendimento do processo de adoecimento humano. Rev Med (São Paulo). 2017;96(3):145-58. https://doi.org/10.11606/issn.1679-9836.v96i3p145-158.
3. Koenig HG. Religion, spirituality, and health: the research and clinical implications. ISRN Psychiatry. 2012;2012:278730. https://doi.org/10.5402/2012/278730.
4. World Health Organization (WHO). Constitution of the World Health Organization. Basic documents. Genève; 1946. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2567705/pdf/12571729.pdf.
5. World Health Organization (WHO). Amendments to the Constitution. Fifty-second world health assembly (Provisional agenda item 16). April, 7th; 1999. Available from: http://apps.who.int/gb/archive/pdf_files/wha52/ew24.pdf.
6. Bonelli RM, Koenig HG. Mental disorders, religion and spirituality 1990 to 2010: a systematic evidence-based review. J Relig Health. 2013;52(2):657-73. https://doi.org/10.1007/s10943-013-9691-4.
7. Pargament K, Lomax J. Understanding and addressing religion among people with mental illness. World Psychiatry. 2013;12(1):26-32. https://doi.org/10.1002/wps.20005.
8. Moreira-Almeida A, Sharma A, Rensburg B, Verhagen P, Cook C. WPA Position Statement on Spirituality and Religion in Psychiatry. World Psychiatry. 2016;15(1):87-8. https://doi.org/10.1002/wps.20304.
9. Royal College of Psychiatric. Spirituality and psychiatry special interest group. RCPSYCH; 1999. Available from: https://www.rcpsych.ac.uk/college/specialinterestgroups/spirituality.aspx.
10. American Psychiatric Association. Guidelines regarding possible conflict between psychiatrists' religious commitments and psychiatric practice. Am J Psychiatry. 1990;147(4):542. https://doi.org/10.1176/ajp.147.4.542.
11. Cordeiro Q. Creation of the section on spirituality and mental health at the Brazilian Psychiatric Association. Psyche Spirit. 2014;3(1):2-3. Available from: http://www.religionandpsychiatry.com/Psyche___Spirit_3_1___2014.pdf/.
12. Lukoff D, Lu F, Turner R. Toward a more culturally sensitive DSM-IV: psychoreligious and psychospiritual problems. J Nerv Ment Dis. 1992;180(11):673-82. http://psycnet.apa.org/doi/10.1097/00005053-199211000-00001.
13. Turner RP, Lukoff D, Barnhouse RT, Lu FG. Religious or spiritual problem. A culturally sensitive diagnostic category in the DSM-IV. J Nerv Ment Dis. 1995;183(7):435-44. http://psycnet.apa.org/doi/10.1097/00005053-199507000-00003.
14. Teixeira MZ, Lin CA, Martins MA. O ensino de práticas não-convencionais em saúde nas faculdades de medicina: panorama mundial e perspectivas brasileiras. Rev Bras Educ Med. 2004;28(1):51-60. Disponível em: http://www.educacaomedica.org.br/UserFiles/File/2004/volume28_1/ensinos_de_praticas.pdf.
15. Teixeira MZ, Lin CA, Martins MA. Homeopathy and acupuncture teaching at Faculdade de Medicina da Universidade de São Paulo: the undergraduates' attitudes. Sao Paulo Med J. 2005;123(2):77-82. http://dx.doi.org/10.1590/S1516-31802005000200009.
16. Teixeira MZ. Educação médica em terapêuticas não convencionais. Rev Med (São Paulo). 2013;92(4):224-35. https://doi.org/10.11606/issn.1679-9836.v92i4p224-235.
17. Instituto Brasileiro de Geografia e Estatística (IBGE). Censo demográfico 2010. Características gerais da população, religião e pessoas com deficiência. Rio de Janeiro: Ministério do Planejamento, Orçamento e Gestão, IBGE; 2010. p. 1-215. Disponível em: https://biblioteca.ibge.gov.br/visualizacao/periodicos/94/cd_2010_religiao_deficiencia.pdf.
18. King MB, Koenig HG. Conceptualising spirituality for medical research and health service provision. BMC Health Serv Res. 2009;9:116. https://doi.org/10.1186/1472-6963-9-116.
19. Koenig HG, Idler E, Kasl S, Hays JC, George LK, Musick M, Larson DB, Collins TR, Benson H. Religion, spirituality, and medicine: a rebuttal to skeptics. Int J Psychiatry Med. 1999;29(2):123-31. https://doi.org/10.2190/C2FB-95VW-FKYD-C8RV.
20. Ehman JW, Ott BB, Short TH, Ciampa RC, Hansen-Flaschen J. Do patients want physicians to inquire about their spiritual or religious beliefs if they become gravely ill? Arch Intern Med. 1999;159(15):1803-6. https://doi.org/10.1001/archinte.159.15.1803.
21. Koenig HG. Religion, spirituality and medicine: how are they related and what does it mean. Mayo Clin Proc. 2001;76(12):1189-91. https://doi.org/10.4065/76.12.1189.
22. Sulmasy DB. A biopsychosocial-spiritual model for the care of patients at the end of life. Gerontologist. 2002;42(Spec 3):24-33. https://doi.org/10.1093/geront/42.suppl_3.24.
23. Puchalski CM. Spirituality and the care of patients at the end-of-life: an essential component of care. Omega (Westport). 2007;56(1):33-46. https://www.ncbi.nlm.nih.gov/pubmed/18051018.
24. Woll ML, Hinshaw DB, Pawlik TM. Spirituality and religion in the care of surgical oncology patients with life-threatening or advanced illnesses. Ann Surg Oncol. 2008;15(11):3048-57. https://doi.org/10.1245/s10434-008-0130-9.
25. Verhagen PJ. The case for more effective relationships between psychiatry, religion and spirituality. Curr Opin Psychiatry. 2010;23(6):550-5. https://doi.org/10.1097/YCO.0b013e32833d8b04.
26. Best M, Butow P, Olver I. Doctors discussing religion and

spirituality: A systematic literature review. Palliat Med. 2016;30(4):327-37. https://doi.org/10.1177/0269216315600912.

27. Moreira-Almeida A. Espiritualidade e saúde: passado e futuro de uma relação controversa e desafiadora [editorial]. Rev Psiquiatr Clin. 2007;34(suppl1):3-4. http://dx.doi.org/10.1590/S0101-60832007000700001.
28. Curlin FA, Lawrence RE, Odell S, Chin MH, Lantos JD, Koenig HG, Meador KG. Religion, spirituality, and medicine: psychiatrists' and other physicians' differing observations, interpretations, and clinical approaches. Am J Psychiatry. 2007;164(12):1825-31. https://doi.org/10.1176/appi.ajp.2007.06122088.
29. Neeleman J, King M. Psychiatrists religious attitudes in relation to their clinical-practice - a survey of 231 psychiatrists. Acta Psychiatr Scand. 1993;88(6):420-4. https://doi.org/10.1111/j.1600-0447.1993.tb03484.x.
30. Baetz M, Griffin R, Bowen R, Marcoux G. Spirituality and psychiatry in Canada: Psychiatric practice compared with patient expectations. Can J Psychiatry. 2004;49(4):265-71. https://doi.org/10.1177/070674370404900407.
31. Durà-Vilà G, Hagger M, Dein S, Gerard L. Ethnicity, religion and clinical practice: a qualitative study of beliefs and attitudes of psychiatrists in the United Kingdom. Ment Health Relig Cult. 2011;14(01):53-64. https://doi.org/10.1080/13674676.2010.495111.
32. Menegatti-Chequini MC, Goncalves JPB, Leao FC, Peres MFP, Vallada H. A preliminary survey on the religious profile of Brazilian psychiatrists and their approach to patients' religiosity in clinical practice. BJPsych Open. 2016;2:346-52. https://doi.org/10.1192/bjpo.bp.116.002816.
33. Conselho Federal de Medicina (CFM). Código de ética médica: resolução CFM no 1.931/09. Brasília: CFM; 2010. http://www.rcem.cfm.org.br/index.php/cem-atual#cap5.
34. Souza ZS, Moraes MIDM. A ética médica e o respeito às crenças religiosas. Bioética. 1998;6(1):89-93. http://revistabioetica.cfm.org.br/index.php/revista_bioetica/article/view/329/397.
35. Chehaibar GZ. Bioética e crença religiosa: estudo da relação médico-paciente Testemunha de Jeová com potencial risco de a transfusão de sangue [tese]. São Paulo: Faculdade de Medicina da Universidade de São Paulo; 2010. Disponível em: http://www.teses.usp.br/teses/disponiveis/5/5131/tde-27082010-142544/pt-br.php.
36. Braghetta CC, Lucchetti G, Leão FC, Cândido Vallada, Vallada H, Cordeiro Q. Aspectos éticos e legais da assistência religiosa em hospitais psiquiátricos. Rev Psiq Clin. 2011;38(5):189-93. http://dx.doi.org/10.1590/S0101-60832011000500004.
37. Department of Health & Human Services (DHHS). Centers for Medicare & Medicaid Services (CMS). CMS Manual system. Pub 100-07 State Operations Certification. Appendix M-Guidance to Surveyors, Hospice; 2010. Available from: https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/downloads/R65SOMA.pdf.
38. Joint Commission Center for Transforming Healthcare. Medical record - spiritual assessment. 2017. Available from: https://www.jointcommission.org/standards_information/jcfaqdetails.aspx?StandardsFaqId=1492&ProgramId=46
39. d'Avila RL. A ética médica e a bioética como requisitos do ser moral: ensinando habilidades humanitárias em medicina. Bioética. 2010;18(2):311-27. http://revistabioetica.cfm.org.br/index.php/revista_bioetica/article/view/566.
40. Delgado-Guay MO. Spirituality and religiosity in supportive and palliative care. Curr Opin Support Palliat Care. 2014;8(3):308-13. https://doi.org/10.1097/SPC.0000000000000079.
41. Moreira-Almeida A, Koenig HG, Lucchetti G. Clinical implications of spirituality to mental health: review of evidence and practical guidelines. Rev Bras Psiquiatr. 2014;36(2):176-82. http://dx.doi.org/10.1590/1516-4446-2013-1255.
42. Braguetta CC. Desenvolvimento e validação de um instrumento para avaliar espiritualidade: Escala de Atitudes Relacionadas à Espiritualidade (ARES). [dissertação]. São Paulo: Faculdade de Medicina, Universidade de São Paulo; 2017. http://www.teses.usp.br/teses/disponiveis/5/5142/tde-05102017-112819/pt-br.php.
43. Puchalski CM, Larson DB. Developing curricula in spirituality and medicine. Acad Med. 1998;73(9):970-4. https://www.ncbi.nlm.nih.gov/pubmed/9759099.
44. Graves DL, Shue CK, Arnold L. The role of spirituality in patient care: incorporating spirituality training into medical school curriculum. Acad Med. 2002;77:1167. doi: 10.1097/00001888-200211000-00035.
45. Guck TP, Kavan MG. Medical student beliefs: spirituality's relationship to health and place in the medical school curriculum. Med Teach. 2006;28:702-7. https://doi.org/10.1080/01421590601047680.
46. Puchalski CM. Spirituality and medicine: curricula in medical education. J Cancer Educ. 2006;21(1):14–8. https://doi.org/10.1207/s15430154jce2101_6.
47. Schonfeld TL, Schmid KK, Boucher-Payne D. Incorporating spirituality into health sciences education. J Relig Health. 2016;55(1):85-96. https://doi.org/10.1007/s10943-014-9972-6.
48. Baldacchino DR. Teaching on the spiritual dimension in care to undergraduate nursing students: the content and teaching methods. Nurse Educ Today. 2008;28(5):550-62. https://doi.org/10.1016/j.nedt.2007.09.003.
49. Timmins F, Neill F. Teaching nursing students about spiritual care - a review of the literature. Nurse Educ Pract. 2013;13(6):499-505. https://doi.org/10.1016/j.nepr.2013.01.011.
50. Lucchetti G, Lucchetti AL, Puchalski CM. Spirituality in medical education: global reality? J Relig Health. 2012;51(1):3-19. https://doi.org/10.1007/s10943-011-9557-6.
51. Fortin AH, Barnett KG. Medical school curricula in spirituality and medicine. JAMA. 2004;291:2883. https://doi.org/10.1001/jama.291.23.2883.
52. Koenig HG, Hooten EG, Lindsay-Calkins E, Meador KG. Spirituality in medical school curricula: findings from a National Survey. Int J Psychiatry Med. 2010; 40:391-8. https://doi.org/10.2190/PM.40.4.c.
53. Neely D, Minford EJ. Current status of teaching on spirituality in UK medical schools. Med Educ. 2008:42(2): 176-82. https://doi.org/10.1111/j.1365-2923.2007.02980.x.
54. Lucchetti G, Lucchetti AL, Espinha DC, de Oliveira LR, Leite JR, Koenig HG. Spirituality and health in the curricula of medical schools in Brazil. BMC Med Educ. 2012;12:78. https://doi.org/10.1186/1472-6920-12-78.
55. Dal-Farra RA, Geremia C. Educação em saúde e espiritualidade: proposições metodológicas. Rev Bras Educ Med. 2010;34(4):587-97. http://dx.doi.org/10.1590/S0100-55022010000400015.
56. Wasner M., Longaker C., Fegg MJ, Borasio GD. Effects of spiritual care training for palliative care professionals. Palliat Med. 2005;19(2):99-104. https://doi.org/10.1191/0269216305pm995oa.
57. Acklin MW, Brown EC, Mauger PA. The role of religious values in coping with cancer. J Relig Health. 1983;22(4):322-33. https://doi.org/10.1007/BF02279928.
58. McCullough ME, Hoyt WT, Larson DB, Koenig HG, Thoresen C. Religious involvement and mortality: a meta-analytic review. Health Psychol. 2000;19(3):211-22. http://psycnet.apa.org/doi/10.1037/0278-6133.19.3.211.
59. Janiszewska J, Buss T, de Walden-Gałuszko K, Majkowicz M, Lichodziejewska-Niemierko M, Modlińska A. The religiousness as a way of coping with anxiety in women with breast cancer at different disease stages. Support Care Cancer. 2008;16(12):1361-6. https://doi.org/10.1007/s00520-008-0437-x.
60. PDQ Supportive and Palliative Care Editorial Board. Spirituality in Cancer Care (PDQ®): Patient version. 2015 May 18. PDQ Cancer Information Summaries [Internet]. Bethesda (MD): National Cancer Institute (US); 2002. Available from: http://www.ncbi.nlm.nih.gov/books/NBK66027/.

61. PDQ Supportive and Palliative Care Editorial Board. Spirituality in Cancer Care (PDQ®): Health Professional Version. 2016 Nov 9. PDQ Cancer Information Summaries [Internet]. Bethesda (MD): National Cancer Institute (US); 2002. Available from: http://www.ncbi.nlm.nih.gov/books/NBK66000/.
62. Kim Y, Wellisch DK, Spillers RL, Crammer C. Psychological distress of female cancer caregivers: effects of type of cancer and caregivers' spirituality. Support Care Cancer. 2007;15(12):1367-74. https://doi.org/10.1007/s00520-007-0265-4.
63. Kim Y, Carver CS, Cannady RS. Caregiving motivation predicts long-term spirituality and quality of life of the caregivers. Ann Behav Med. 2015;49(4):500-9. https://doi.org/10.1007/s12160-014-9674-z.
64. Tarakeshwar N, Vanderwerker LC, Paulk E, Pearce MJ, Kasl SV, Prigerson HG. Religious coping is associated with the quality of life of patients with advanced cancer. J Palliat Med. 2006;9(3):646-57. https://doi.org/10.1089/jpm.2006.9.646.
65. Hills J, Paice JA, Cameron JR, Shott S. Spirituality and distress in palliative care consultation. J Palliat Med. 2005;8(4):782-8. https://doi.org/10.1089/jpm.2005.8.782.
66. Trevino KM, Balboni M, Zollfrank A, Balboni T, Prigerson HG. Negative religious coping as a correlate of suicidal ideation in patients with advanced cancer. Psychooncology. 2014;23(8):936-45. https://doi.org/10.1002/pon.3505.
67. Laubmeier KK, Zakowski SG, Bair JP. The role of spirituality in the psychological adjustment to cancer: a test of the transactional model of stress and coping. Int J Behav Med. 2004;11(1):48-55. https://doi.org/10.1207/s15327558ijbm1101_6.
68. Brady MJ, Peterman AH, Fitchett G, Mo M, Cella D. A case for including spirituality in quality of life measurement in oncology. Psychooncology. 1999;8(5):417-28. doi: 10.1002/(sici)1099-1611(199909/10)8:5<417::aid-pon398>3.0.co;2-4.
69. O'Mahony S, Goulet J, Kornblith A, Abbatiello G, Clarke B, Kless-Siegel S, Breitbart W, Payne R. Desire for hastened death, cancer pain and depression: report of a longitudinal observational study. J Pain Symptom Manage. 2005;29(5):446-57. https://doi.org/10.1016/j.jpainsymman.2004.08.010.
70. Whitford HS, Olver IN, Peterson MJ. Spirituality as a core domain in the assessment of quality of life in oncology. Psychooncology. 2008;17(11):1121-8. https://doi.org/10.1002/pon.1322.
71. McCoubrie RC, Davies AN. Is there a correlation between spirituality and anxiety and depression in patients with advanced cancer? Support Care Cancer. 2006;14(4):379-85. https://doi.org/10.1007/s00520-005-0892-6.
72. Krupski TL, Kwan L, Fink A, Sonn GA, Maliski S, Litwin MS. Spirituality influences health related quality of life in men with prostate cancer. Psychooncology. 2006;15(2):121-31. https://doi.org/10.1002/pon.929.
73. Nelson CJ, Rosenfeld B, Breitbart W, Galietta M. Spirituality, religion, and depression in the terminally ill. Psychosomatics. 2002;43(3):213-20. https://doi.org/10.1176/appi.psy.43.3.213.
74. Yanez B, Edmondson D, Stanton AL, et al. Facets of spirituality as predictors of adjustment to cancer: relative contributions of having faith and finding meaning. J Consult Clin Psychol. 2009;77(4):730-41. https://doi.org/10.1037/a0015820.
75. Kim Y, Carver CS, Spillers RL, Crammer C, Zhou ES. Individual and dyadic relations between spiritual well-being and quality of life among cancer survivors and their spousal caregivers. Psychooncology. 2011;20(7):762-70. https://doi.org/10.1002/pon.1778.
76. Drutchas A, Anandarajah G. Spirituality and coping with chronic disease in pediatrics. R I Med J (2013). 2014;97(3):26-30. Available from: https://pdfs.semanticscholar.org/2a00/a8191ac706ed0982093a63430e57c7084ea5.pdf.
77. Damsma Bakker AA, van Leeuwen RRR, Roodbol PFP. The spirituality of children with chronic conditions: a qualitative meta-synthesis. J Pediatr Nurs. 2018;43:e106-e113. doi: 10.1016/j.pedn.2018.08.003.
78. Mueller PS, Plevak DJ, Rummans TA. Religious involvement, spirituality, and medicine: implications for clinical practice. Mayo Clin Proc. 2001;76(12):1225-35. https://doi.org/10.4065/76.12.1225.
79. Moreira-Almeida A, Lotufo Neto F, Koenig HG. Religiousness and mental health: a review. Rev Bras Psiquiatr. 2006;28(3):242-50. http://dx.doi.org/10.1590/S1516-44462006005000006.
80. Rew L, Wong YJ. A systematic review of associations among religiosity/spirituality and adolescent health attitudes and behaviors. J Adolesc Health. 2006;38(4):433-42. https://doi.org/10.1016/j.jadohealth.2005.02.004.
81. Yonker JE, Schnabelrauch CA, Dehaan LG. The relationship between spirituality and religiosity on psychological outcomes in adolescents and emerging adults: a meta-analytic review. J Adolesc. 2012;35(2):299-314. https://doi.org/10.1016/j.adolescence.2011.08.010.
82. Unterrainer HF, Lewis AJ, Fink A. Religious/spiritual well-being, personality and mental health: a review of results and conceptual issues. J Relig Health. 2014;53(2):382-92. https://doi.org/10.1007/s10943-012-9642-5.
83. 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. https://doi.org/10.1017/S0033291715001166.
84. AbdAleati NS, Mohd Zaharim N, Mydin YO. Religiousness and mental health: systematic review study. J Relig Health. 2016;55(6):1929-37. https://doi.org/10.1007/s10943-014-9896-1.
85. Wu A, Wang JY, Jia CX. Religion and completed suicide: a meta-analysis. PLoS One. 2015;10(6):e0131715. https://doi.org/10.1371/journal.pone.0131715.
86. Gearing RE, Alonzo D, Smolak A, McHugh K, Harmon S, Baldwin S. Association of religion with delusions and hallucinations in the context of schizophrenia: implications for engagement and adherence. Schizophr Res. 2011;126(1-3):150-63. https://doi.org/10.1016/j.schres.2010.11.005.
87. Smolak A, Gearing RE, Alonzo D, Baldwin S, Harmon S, McHugh K. Social support and religion: mental health service use and treatment of schizophrenia. Community Ment Health J. 2013;49(4):444-50. https://doi.org/10.1007/s10597-012-9536-8.
88. Yeung JW, Chan YC, Lee BL. Youth religiosity and substance use: a meta-analysis from 1995 to 2007. Psychol Rep. 2009;105(1):255-66. https://doi.org/10.2466/PR0.105.1.255-266.
89. Longshore D, Anglin MD, Conner BT. Are religiosity and spirituality useful constructs in drug treatment research? J Behav Health Serv Res. 2009;36(2):177-88. https://doi.org/10.1007/s11414-008-9152-0.
90. Haber JR, Koenig LB, Jacob T. Alcoholism, personality, and religion/spirituality: an integrative review. Curr Drug Abuse Rev. 2011;4(4):250-60. https://doi.org/10.2174/1874473711104040250.
91. Kub J, Solari-Twadell PA. Religiosity/spirituality and substance use in adolescence as related to positive development: a literature review. J Addict Nurs. 2013;24(4):247-62. https://doi.org/10.1097/JAN.0000000000000006.
92. Akrawi D, Bartrop R, Potter U, Touyz S. Religiosity, spirituality in relation to disordered eating and body image concerns: a systematic review. J Eat Disord. 2015;3:29. https://doi.org/10.1186/s40337-015-0064-0.
93. Schaefer FC, Blazer DG, Koenig HG. Religious and spiritual factors and the consequences of trauma: a review and model of the interrelationship. Int J Psychiatry Med. 2008;38(4):507-24. https://doi.org/10.2190/PM.38.4.i.
94. Agorastos A, Demiralay C, Huber CG. Influence of religious aspects and personal beliefs on psychological behavior: focus on anxiety disorders. Psychol Res Behav Manag. 2014;7:93-101. https://doi.org/10.2147/PRBM.S43666.
95. Bennett K, Shepherd J, Janca A. Personality disorders and

spirituality. Curr Opin Psychiatry. 2013;26(1):79-83. https://doi.org/10.1097/YCO.0b013e32835b2c17.

96. Cook CC. Religious psychopathology: The prevalence of religious content of delusions and hallucinations in mental disorder. Int J Soc Psychiatry. 2015;61(4):404-25. https://doi.org/10.1177/0020764015573089.

97. Visser A, Garssen B, Vingerhoets A. Spirituality and well-being in cancer patients: a review. Psychooncology. 2010;19(6):565-72. https://doi.org/10.1002/pon.1626.

98. Doolittle BR, Justice AC, Fiellin DA. Religion, spirituality, and HIV clinical outcomes: a systematic review of the literature. AIDS Behav. 2018;22(6):1792-1801. https://doi.org/10.1007/s10461-016-1651-z.

99. van Groenestijn AC, Kruitwagen-van Reenen ET, Visser-Meily JM, van den Berg LH, Schröder CD. Associations between psychological factors and health-related quality of life and global quality of life in patients with ALS: a systematic review. Health Qual Life Outcomes. 2016;14(1):107. https://doi.org/10.1186/s12955-016-0507-6.

100. Lucchetti G, Oliveira AB, Mercante JP, Peres MF. Anxiety and fear-avoidance in musculoskeletal pain. Curr Pain Headache Rep. 2012;16(5):399-406. https://doi.org/10.1007/s11916-012-0286-7.

101. Powell LH, Shahabi L, Thoresen CE. Religion and spirituality: linkages to physical health. Am Psychol. 2003;58(1):36-52. http://psycnet.apa.org/doi/10.1037/0003-066X.58.1.36.

102. Chida Y, Steptoe A, Powell LH. Religiosity/spirituality and mortality. A systematic quantitative review. Psychother Psychosom. 2009;78(2):81-90. https://doi.org/10.1159/000190791.

103. Lucchetti G, Lucchetti AL, Koenig HG. Impact of spirituality/religiosity on mortality: comparison with other health interventions. Explore (NY). 2011;7(4):234-8. https://doi.org/10.1016/j.explore.2011.04.005.

104. Seeman TE, Dubin LF, Seeman M. Religiosity/spirituality and health. A critical review of the evidence for biological pathways. Am Psychol. 2003;58(1):53-63. http://psycnet.apa.org/doi/10.1037/0003-066X.58.1.53.

105. Seybold KS. Physiological mechanisms involved in religiosity/spirituality and health. J Behav Med. 2007;30(4):303-9. https://doi.org/10.1007/s10865-007-9115-6.

106. Hulett JM, Armer JM. A systematic review of spiritually based interventions and psychoneuroimmunological outcomes in breast cancer survivorship. Integr Cancer Ther. 2016;15(4):405-423. https://doi.org/10.1177/1534735416636222.

107. Teixeira MZ. Bases psiconeurofisiológicas do fenômeno placebo-nocebo: evidências científicas que valorizam a humanização da relação médico-paciente. Rev Assoc Med Bras. 2009;55(1):13-8. http://dx.doi.org/10.1590/S0104-42302009000100008.

108. Teixeira MZ, Guedes CHFF, Barreto PV, Martins MA. The placebo effect and homeopathy. Homeopathy. 2010;99(2):119-29. https://doi.org/10.1016/j.homp.2010.02.001.

109. Teixeira MZ. Fenômeno placebo-nocebo: evidências psiconeurofisiológicas. ComCiência [online]. 2013;153:1-4. http://comciencia.scielo.br/scielo.php?script=sci_arttext&pid=S1519-76542013000900009&lng=pt&nrm=iso.

110. Ilnyckyj A, Greenberg H, Bernstein CN. Quantification of the placebo response in ulcerative colitis. Gastroenterology. 1997;112(6):1854-8. https://doi.org/10.1053/gast.1997.v112.pm9178676.

111. Su C, Lichtenstein GR, Krok K, Brensinger CM, Lewis JD. A meta-analysis of the placebo rates of remission and response in clinical trials of active Crohn's disease. Gastroenterology. 2004;126(5):1257-69. https://doi.org/10.1053/j.gastro.2004.01.024.

112. Patel SM, Stason WB, Legedza A, Ock SM, Kaptchuk TJ, Conboy L, Canenguez K, Park JK, Kelly E, Jacobson E, Kerr CE, Lembo AJ. The placebo effect in irritable bowel syndrome trials: a meta-analysis. Neurogastroenterol Motil. 2005;17(3):332-40. https://doi.org/10.1111/j.1365-2982.2005.00650.x.

113. Walsh BT, Seidman SN, Sysko R, Gould M. Placebo response in studies of major depression: variable, substantial, and growing. JAMA. 2002;287(14):1840-7. https://doi.org/10.1001/jama.287.14.1840.

114. Sysko R, Walsh BT. A systematic review of placebo response in studies of bipolar mania. J Clin Psychiatry. 2007;68(8):1213-7. doi: 10.4088/jcp.v68n0807.

115. Cho HJ, Hotopf M, Wessely S. The placebo response in the treatment of chronic fatigue syndrome: a systematic review and meta-analysis. Psychosom Med. 2005;67(2):301-13. https://doi.org/10.1097/01.psy.0000156969.76986.e0.

116. Macedo A, Baños JE, Farré M. Placebo response in the prophylaxis of migraine: a meta-analysis. Eur J Pain. 2008;12(1):68-75. https://doi.org/10.1016/j.ejpain.2007.03.002.

117. Wampold BE, Imel ZE, Minami T. The placebo effect: "relatively large" and "robust" enough to survive another assault. J Clin Psychol. 2007;63(4):401-3; discussion 405-8. https://doi.org/10.1002/jclp.20350.

118. Geers AL, Helfer SG, Weiland PE, Kosbab K. Expectations and placebo response: a laboratory investigation into the role of somatic focus. J Behav Med. 2006;29(2):171-8. https://doi.org/10.1007/s10865-005-9040-5.

119. de la Fuente-Fernandéz R. The placebo-reward hypothesis: dopamine and the placebo effect. Parkinsonism Relat Disord. 2009;15(Suppl 3):S72-4. https://doi.org/10.1016/S1353-8020(09)70785-0.

120. Dodd S, Dean OM, Vian J, Berk M. A review of the theoretical and biological understanding of the nocebo and placebo phenomena. Clin Ther. 2017;39(3):469-76. https://doi.org/10.1016/j.clinthera.2017.01.010.

121. Goebel MU, Trebst AE, Steiner J, Xie YF, Exton MS, Frede S, Canbay AE, Michel MC, Heemann U, Schedlowski M. Behavioral conditioning of immunosuppression is possible in humans. FASEB J. 2002;16:1869-73. https://doi.org/10.1096/fj.02-0389com.

122. Bąbel P, Bajcar EA, Adamczyk W, Kicman P, Lisińska N, Świder K, Colloca L. Classical conditioning without verbal suggestions elicits placebo analgesia and nocebo hyperalgesia. PLoS One. 2017;12(7):e0181856. https://doi.org/10.1371/journal.pone.0181856.

123. Colloca L, Lopiano L, Lanotte M, Benedetti F. Overt versus covert treatment for pain, anxiety, and Parkinson's disease. Lancet Neurol. 2004;3(11):679-84. https://doi.org/10.1016/S1474-4422(04)00908-1.

124. Amanzio M, Benedetti F. Neuropharmacological dissection of placebo analgesia: expectation-activated opioid systems versus conditioning-activated subsystems. J Neurosci. 1999;484-94. https://doi.org/10.1523/JNEUROSCI.19-01-00484.1999.

125. Benedetti F, Pollo A, Lopiano L, Lanotte M, Vighetti S, Rainero I. Conscious expectation and unconscious conditioning in analgesic, motor, and hormonal placebo/nocebo responses. J Neurosci. 2003;23:4315-23. https://doi.org/10.1523/JNEUROSCI.23-10-04315.2003.

126. Fricchione G, Stefano GB. Placebo neural systems: nitric oxide, morphine and the dopamine brain reward and motivation circutries. Med Sci Monit. 2005;11(5):MS54-65. Available from: https://www.medscimonit.com/download/index/idArt/16166.

127. Leuchter AF, Cook IA, Witte EA, Morgan M, Abrams M. Changes in brain function of depressed subjects during treatment with placebo. Am J Psychiatry. 2002;159(1):122-9. https://doi.org/10.1176/appi.ajp.159.1.122.

128. Mayberg HS, Silva JA, Brannan SK, et al. The functional neuroanatomy of the placebo effect. Am J Psychiatry. 2002;159(5):728-37. https://doi.org/10.1176/appi.ajp.159.5.728.

129. Kirsch I, Deacon BJ, Huedo-Medina TB, Scoboria A, Moore TJ, Johnson BT. Initial severity and antidepressant benefits: a meta-analysis of data submitted to the food and drug administration. PLoS Med 2008;5(2):e45. https://doi.org/10.1136/ebmh.11.3.66.

130. Kohls N, Sauer S, Offenbächer M, Giordano J. Spirituality: an overlooked predictor of placebo effects? Philos Trans R Soc Lond B Biol Sci. 2011;366(1572):1838-48. https://doi.org/10.1098/rstb.2010.0389.

131. Alling FA. The healing effects of belief in medical practices and spirituality. Explore (NY). 2015;11(4):273-80. https://doi.org/10.1016/j.explore.2015.04.002.

132. Green J, Wright H. From bench to bedside: converting placebo research into belief activation. J Altern Complement Med. 2017;23(8):575-580. https://doi.org/10.1089/acm.2016.0375.

133. Frisaldi E, Piedimonte A, Benedetti F. Placebo and nocebo effects: a complex interplay between psychological factors and neurochemical networks. Am J Clin Hypn. 2015;57(3):267-84. https://doi.org/10.1080/00029157.2014.976785.

134. Rossettini G, Carlino E, Testa M. Clinical relevance of contextual factors as triggers of placebo and nocebo effects in musculoskeletal pain. BMC Musculoskelet Disord. 2018;19(1):27. https://doi.org/10.1186/s12891-018-1943-8.

135. Moreira-Almeida A. Pesquisa em mediunidade e relação mente-cérebro: revisão das evidências. Rev Psiquiatr Clin. 2013;40(6):233-40. http://dx.doi.org/10.1590/S0101-60832013000600005.

136. Cardeña E, Lynn SJ, Krippner S. Varieties of anomalous experience: examining the scientific evidence. 2nd ed. Washington (DC): American Psychological Association; 2014. Available from: http://psycnet.apa.org/doi/10.1037/14258-000.

137. Daher JC Jr, Damiano RF, Lucchetti AL, Moreira-Almeida A, Lucchetti G. Research on experiences related to the possibility of consciousness beyond the brain: a bibliometric analysis of global scientific output. J Nerv Ment Dis. 2017;205(1):37-47. https://doi.org/10.1097/NMD.0000000000000625.

138. Moreira-Almeida A, Lotufo-Neto F. Methodological guidelines to investigate altered states of consciousness and anomalous experiences. Int Rev Psychiatry. 2017;29(3):283-92. https://doi.org/10.1080/09540261.2017.1285555.

139. Maraldi EO, Krippner S, Barros MCM, Cunha A. Dissociation from a cross-cultural perspective: implications of studies in brazil. J Nerv Ment Dis. 2017;205(7):558-67. https://doi.org/10.1097/NMD.0000000000000694.

140. Cardeña E. The experimental evidence for parapsychological phenomena: a review. Am Psychol. 2018;73(5):663-77. https://doi.org/10.1037/amp0000236.

141. Inter Psi-Laboratory of Anomalistic Psychology and Psychosocial Processes. Department of Social and Work Psychology. Institute of Psychology. University of São Paulo, Brazil. O que pesquisou aqui???? http://www.usp.br/interpsi/.

142. Research Center in Spirituality and Health (NUPES), School of Medicine, Federal University of Juiz de Fora (UFJF), Juiz de Fora, Brazil. O que pesquisou aqui???? http://www.ufjf.br/nupes/.

143. Department of Psychology, Center for Research on Consciousness and Anomalous Psychology (CERCAP), Faculty of Social Sciences, Lund University, Lund, Sweden. O que pesquisou aqui???? https://www.psy.lu.se/en/research/research-networks/cercap.

144. Peres JF, Moreira-Almeida A, Caixeta L, Leao F, Newberg A. Neuroimaging during trance state: a contribution to the study of dissociation. PLoS One. 2012;7(11):e49360. https://doi.org/10.1371/journal.pone.0049360.

145. Beischel J, Boccuzzi M, Biuso M, Rock AJ. Anomalous information reception by research mediums under blinded conditions II: replication and extension. Explore (NY). 2015;11(2):136-42. https://doi.org/10.1016/j.explore.2015.01.001.

146. Hove MJ, Stelzer J, Nierhaus T, et al. Brain network reconfiguration and perceptual decoupling during an absorptive state of consciousness. Cereb Cortex. 2016;26(7):3116-24. https://doi.org/10.1093/cercor/bhv137.

147. Mainieri AG, Peres JFP, Moreira-Almeida A, Mathiak K, Habel U, Kohn N. Neural correlates of psychotic-like experiences during spiritual-trance state. Psychiatry Res. 2017;266:101-7. https://doi.org/10.1016/j.pscychresns.2017.06.006.

148. Kardec A. O livro dos espíritos: filosofia espiritualista. Trad. Guillon Ribeiro. 93a ed. Brasília: FEB; 2013. Disponível em: http://www.febnet.org.br/wp-content/uploads/2014/05/Livro-dos-Espiritos.pdf.

149. Kardec A. O livro dos médiuns ou guia dos médiuns e dos evocadores. Trad. Guillon Ribeiro. 81a ed. Brasília: FEB, 2013. Disponível em: http://www.febnet.org.br/wp-content/uploads/2014/05/Livro-dos-Mediuns_Guillon.pdf.

150. Kardec A. O evangelho segundo o espiritismo. Trad. Guillon Ribeiro. 131a ed. Brasília: FEB; 2013. Disponível em: http://febnet.org.br/wp-content/themes/portalfeb-grid/obras/evangelho-guillon.pdf.

151. Kardec A. O céu e o inferno ou a justiça divina segundo o espiritismo. Trad. Manuel Justiniano Quintão. 61a ed. Brasília: FEB; 2013. Disponível em: http://www.febnet.org.br/wp-content/uploads/2014/05/ceu-e-inferno-Manuel-Quintao.pdf.

152. Kardec A. A gênese, os milagres e as predições segundo o espiritismo. Trad. Guillon Ribeiro. 53a ed. Brasília: FEB; 2013. Disponível em: http://www.febnet.org.br/wp-content/uploads/2012/07/A-genese_Guillon.pdf.

153. Lucchetti G, Lucchetti AL, Bassi RM, Nobre MR. Complementary spiritist therapy: systematic review of scientific evidence. Evid Based Complement Alternat Med. 2011;2011:835945. https://doi.org/10.1155/2011/835945.

154. Moreira-Almeida A, Lotufo Neto F. Spiritist views of mental disorders in Brazil. Transcult Psychiatry. 2005;42(4):570-95. https://doi.org/10.1177/1363461505058916.

155. Almeida AAS, Oda AMGR, Dalgalarrondo P. O olhar dos psiquiatras brasileiros sobre os fenômenos de transe e possessão. Rev Psiquatr Clin. 2007;34(1):34-41. http://dx.doi.org/10.1590/S0101-60832007000700006.

156. Moreira-Almeida A, Cardeña E. Differential diagnosis between non-pathological psychotic and spiritual experiences and mental disorders: a contribution from Latin American studies to the ICD-11. Rev Bras Psiquiatr. 2011;33(01):21-36. http://dx.doi.org/10.1590/S1516-44462011000500004.

157. Lucchetti G, Aguiar PR, Braghetta CC, Vallada CP, Moreira-Almeida A, Vallada H. Spiritist psychiatric hospitals in Brazil: integration of conventional psychiatric treatment and spiritual complementary therapy. Cult Med Psychiatry. 2012;36(1):124-35. https://doi.org/10.1007/s11013-011-9239-6.

158. Lucchetti AL, Lucchetti G, Leão FC, Peres MF, Vallada H. Mental and physical health and spiritual healing: an evaluation of complementary religious therapies provided by spiritist centers in the city of São Paulo, Brazil. Cult Med Psychiatry. 2016;40(3):404-21. https://doi.org/10.1007/s11013-015-9478-z.

159. Lucchetti AL, Peres MF, Vallada HP, Lucchetti G. Spiritual treatment for depression in brazil: an experience from spiritism. Explore (NY). 2015;11(5):377-86. https://doi.org/10.1016/j.explore.2015.07.002.

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