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Spirituality in the continuing education of healthcare professionals: An approach to palliative care

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Abstract

Objective. A major barrier to the adoption of an approach that integrates spirituality into palliative care is the lack of preparation/education of healthcare professionals on the topic. This study aimed to evaluate the effectiveness of a continuing education activity for healthcare professionals addressing spirituality and spiritual care provision to patients and families within palliative care.

Method. We conducted an intervention study using a quantitative pre- and posttest design in a convenience sample of 52 healthcare professionals. Participants completed the Brazilian version of the Spiritual Care Competence Scale before and after attending a four-hour continuing education activity.

Result. Significant differences were observed between pre- and postintervention scores in the following dimensions: assessment and implementation of spiritual care, professionalization and improving the quality of spiritual care, personal support, and patient counseling ($p < 0.001$), and referral ($p = 0.003$).

Significance of results. The results of this study provide preliminary evidence of a positive effect of this educational intervention on the development of the competences needed by healthcare professionals to deliver a comprehensive approach centered on the patient/family, which includes attention to spirituality and spiritual care in the decision-making process.

Introduction

Palliative care is an approach that aims to improve the quality of life of patients and families facing life-threatening illnesses through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, whether physical, psychosocial, or spiritual (World Health Organization, 2005). Approaching spirituality and spiritual care is therefore essential to ensuring that care is focused on patients and their quality of life (Sepúlveda et al., 2002).

Owing to medical advances over the past several decades, many diseases that were once considered "death sentences" have become chronic conditions that require long-term intervention and care management (Richardson, 2014). Also, technological advances have made end-of-life care more complex by spurring widespread debate on the appropriateness of care procedures delivered to the patient, increasing attention to issues associated with bioethics (Goldim 2007, 2009), religious and spiritual needs of patients and their families at different stages of illness.

The concepts of spirituality and religion are not interchangeable or synonymous. Religion often refers to an organized system of faith, beliefs, practices, rituals, and language that characterizes a community, usually based on the belief in a divine being (Koenig, 2011). Spirituality, however, has been defined as "the dynamic dimension of human life that relates to the way persons (individual and community) experience, express and/or seek meaning, purpose and transcendence, and the way they connect to the moment, to self, to others, to nature, to the significant, and/or the sacred" (Puchalski et al., 2014).

Healthcare professionals acknowledge that meeting spiritual needs is an important part of palliative care, yet they state that they do not feel prepared to identify and include them in the decision-making process (Balboni et al., 2014). The main barriers to the adoption of an approach that integrates spiritual care provision into palliative care provision include lack of staff training in addressing spiritual needs as part of daily care routines, work overload, communication difficulties, ethical concerns and dilemmas, embarrassment from differences in personal beliefs between healthcare professionals and patients, and difficulty in identifying when patients want to talk about their religious beliefs and spiritual values (Balboni et al.,

2014; Best et al., 2016a, 2016b). These barriers can be overcome by adequately educating healthcare workers involved in the delivery of palliative care.

Many studies support the need to provide an educational foundation for healthcare professionals on how to assess and address the spiritual needs of patients and their families (Balboni et al., 2014; Baldacchino, 2008, 2011, 2015; Kelly, 2012; Lucchetti et al., 2013; Paal et al., 2014). Spiritual care training may also result in a more holistic approach to patient care; this general effect, in turn, may result in improved patient quality of life (Yang et al., 2017). Overall, studies indicate the need to develop and enhance spiritual care content in health curricula (Balboni et al., 2017; Baldacchino, 2015; Cobb et al., 2012; Kelly et al., 2012; Lucchetti et al., 2012; Paal et al., 2014); however, there are differences in the methods and level of teaching in spirituality and health within the different health-related professions and in different countries, creating a theoretical base that supports new research (Baldacchino, 2008, 2011, 2015; Barnett & Fortin, 2006; Bell et al., 2010; Bentur & Resnizky, 2010; Cobb et al., 2012; Elhardt et al., 2013; Kelly et al., 2012; Lucchetti et al., 2012; Paal et al., 2014; van Leeuwen et al., 2008).

Research in the field of spirituality and palliative care is at a critical and important juncture, with major limitations in the current body of knowledge of education processes at the intersection of spirituality and palliative care. The main gaps include a paucity of evidence-based spiritual care training curricula and the lack of standardized methods to assess spiritual care competences (Balboni et al., 2017). The aim of this study was therefore to evaluate the effectiveness of a continuing education activity for healthcare professionals on spirituality and spiritual care for patients/families in palliative care at a public hospital in southern Brazil.

Methods

Design and participants

We conducted an intervention study using a quantitative pre- and posttest design (Campbell & Stanley, 1963) in a convenience sample of 52 healthcare professionals from the Hospital de Clínicas de Porto Alegre (HCPA), a public teaching hospital in southern Brazil. The sample size was calculated to detect a difference of 0.8 points in the scores of the Brazilian version of the Spiritual Care Competence Scale (SCCS), with a 90% power, 5% significance level, and a pre- and posttest *SD* of 1.98 and 1.45, respectively, based on the study by van Leeuwen et al. (2008).

Healthcare workers from HCPA were invited by e-mail, by posters announcing the activity, and during team meetings to participate in the study. Eligible participants were all healthcare professionals aged 18 years or older working with patients in palliative care who had more than one year of experience in palliative care provision. Professionals not available at the time of recruitment for the study and those not agreeing to participate or refusing consent were excluded.

Written informed consent was obtained from all participants before their inclusion in the study. The study was conducted in accordance with the Declaration of Helsinki and was approved by the HCPA Research Ethics Committee (protocol number 12-0456).

Procedures

Baseline data were collected using a questionnaire for sociodemographic data and the SCCS-Brazilian version (Dezorzi et al., 2018). At the end of the continuing education activity, each participant completed the SCCS-Brazilian version again for assessment of the effectiveness of the intervention. The questionnaires were returned without names to ensure anonymity. A numerical code was generated for the respondents so that we could match their pre- and postintervention questionnaires.

The SCCS-Brazilian version contains 27 items scored on a 5-point Likert scale, ranging from completely disagree (1) to completely agree (5), for self-assessment of spiritual care competences. It consists of six dimensions: assessment and implementation of spiritual care, professionalization and improving the quality of spiritual care, personal support and patient counseling, referral to professionals, attitude toward patients' spirituality, and communication. The total score ranges from 27 to 135, with higher scores indicating higher levels of perceived competences (van Leeuwen et al., 2009; van Leeuwen & Akkerman, 2015). The SCCS-Brazilian version is a valid and reliable measure of spiritual care competencies, with good internal consistency, high reliability (total Cronbach's alpha of 0.92 and mean inter-item correlation of 0.29), and stability (test-retest with no statistically significant difference and intraclass correlation coefficient ranging from 0.67 to 0.84) (Dezorzi et al., 2018). This instrument has psychometric measures similar to those of the original version (van Leeuwen et al., 2009).

Structure and content of the continuing education activity

The continuing education activity for healthcare professionals was developed by the authors based on a comprehensive literature review, research on spirituality in palliative care, the authors' experience in oncology palliative care, and bioethics in clinical practice. The activity was titled "Spirituality and spiritual care for patients/families in palliative care: Reflections and proposals" and was conducted by a member of the HCPA Center for Interdisciplinary Health and Spirituality Studies.

The purpose of this activity was to help healthcare providers develop the competencies required to identify and meet the spiritual care needs of patients/families in palliative care. By the end of the activity, through both teaching and learning, the participants should be able to:

- Define palliative care, religion, spirituality, and spiritual care;
- Assess the religious and spiritual needs of the patient/family during palliative care;
- Identify spiritual distress during illness;
- Identify and deal with negative religious coping;
- Identify the effects of spiritual well-being and positive religious coping on the quality of life of patients/families;
- Integrate religious and spiritual needs into palliative care;
- Use e-books to support actions during daily care.

Multiple teaching methods were used for the continuing education intervention. Based on the recognition of the importance of using accessible tools to support educational actions on spirituality in the care of patients/families and given the unavailability of guides in Portuguese, we developed e-books for access on smartphones and tablets (Dezorzi et al., 2016a, 2016b). Briefly, the purpose of the e-books was to provide healthcare professionals with pedagogical materials that can be quickly accessed during daily care routines. The first e-book focuses on the conceptual basis of spirituality and religion. It also provides tools to help healthcare professionals assess the spiritual history of patients/families and integrate spiritual and religious needs into the care plan. The

second e-book, "Religions and creeds in Brazil: A short guide for healthcare professionals," is based on models such as the "A dictionary of patients' spiritual and cultural values for health care professionals" and the "Spiritual care: A multi-faith resource for healthcare staff," both freely available online. For quick access, information on the main religions and creeds in Brazil, according to data from the 2010 census of the Brazilian Institute of Geography and Statistics (IBGE, 2010), is presented in a concise and objective manner. The guide provides information on belief/value systems, daily practices/symbols, diet and eating/fasting habits, dressing/hygiene habits, pregnancy and birth customs, death customs, and health-related beliefs and practices. Such information is essential for the shared decision-making in care planning, focusing on patient autonomy and respect for the patient's beliefs.

The continuing education activity was conducted over two weekly meetings of two hours each. Each teaching session was supported by an animated PowerPoint presentation. The content of the e-books was also used to guide the expository/dialog meetings with an interdisciplinary approach. At the end of the activity, all participants received the links to the e-books, freely available on smartphone and tablet applications. The theoretical references used in the development of the continuing education activity were sent to the participants by e-mail. During the continuing education activity, participants could write down their suggestions on how to improve and integrate the activity into the institutional palliative care program.

Data analysis

Continuous variables were expressed as mean and *SD* if normally distributed or as median and interquartile range (25th–75th percentile) if asymmetrically distributed. Categorical variables were expressed as counts and percentages. Student's *t* test was used to compare the mean scores according to spiritual and religious beliefs. Pre- and postintervention continuous variables were compared using Student's *t* test for paired samples. Intervention effect sizes were calculated using Cohen's d (Cohen, 1988), with values <0.5 indicating a small effect size, 0.5–0.8 indicating a medium effect size, and >0.8 indicating a large effect size. Spearman correlation coefficients were calculated to assess the association between nonparametric variables. All statistical analyses were performed using SPSS, version 21.0 (SPSS Inc., Chicago, IL), at a significance level of 5%.

Results

Of the 52 participants who attended the first meeting, 42 also attended the second meeting and completed the activity. The mean age of the participants was 42.3 ($SD = 12.1$) years, and 78.8% ($n = 41$) were women. Regarding educational attainment, most respondents had completed a graduate certificate or certification (42.3%) or a master's degree (19.2%). The median length of professional experience was 15 (interquartile range, 5–28) years. Overall, 76.9% ($n = 40$) of the participants reported having spiritual and religious beliefs, whereas 17.3% ($n = 9$) reported having more than one belief at the same time (Table 1).

Only 25.0% ($n = 13$) of the participants had learned about spirituality and spiritual care provision during undergraduate education, and 46.2% ($n = 24$) reported participating in spirituality-related programs at the workplace. During daily care, 76.9% ($n = 40$) reported that they usually identify the spiritual and religious needs of their patients in palliative care, whereas 71.2% ($n = 37$) considered that their professional approach included attention to the spiritual needs of the patient/family. Furthermore, healthcare professionals considered their spiritual and religious needs were important (25.0%; $n = 13$) or extremely important (51.9%; $n = 27$) when dealing with stressors during palliative care (Table 1).

When the pre- and postintervention SCCS-Brazilian version scores were compared, significant differences were observed in the following dimensions: assessment and implementation of spiritual care, professionalization and improving the quality of spiritual care, personal support and patient counseling ($p < 0.001$), and referral ($p = 0.003$). There was also a significant difference in the total SCCS-Brazilian version score before and

Table 1. Characteristics of healthcare professionals participating in the study

Variables	$n = 52$
Age, mean (SD), years	42.3 (12.1)
Sex, *n* (%)	
Male	11 (21.2)
Female	41 (78.8)
Educational attainment, *n* (%)	
Regular high school diploma	4 (7.7)
Some college credit, no degree	3 (5.8)
Bachelor's degree	10 (19.2)
Graduate certificate or certification	22 (42.3)
Master's degree	10 (19.2)
Doctorate degree	2 (3.8)
Postdoctoral	1 (1.9)
Experience (25th–75th percentile), years	15 (5–28)
Spiritual and religious beliefs, *n* (%)	
Religious belief*	36 (69.2)
Nondenominational beliefs**	4 (7.7)
No spiritual or religious beliefs	12 (23.1)
More than one spiritual and religious beliefs, *n* (%)	9 (17.3)
Education on spirituality, *n* (%)	
During undergraduate education	13 (25.0)
During graduate education/professional training	18 (34.6)
At the institution where I work	24 (46.2)
Typically identifies spiritual and religious needs during care, *n* (%)	40 (76.9)
Importance of spiritual and religious needs when dealing with stressors in palliative care, *n* (%)	
Not important	4 (7.7)
Slightly important	0 (0.0)
Somewhat important	8 (15.4)
Important	13 (25.0)
Extremely important	27 (51.9)
Considers that the professional approach includes attention to the spiritual and religious needs of the patient/family, *n* (%)	37 (71.2)

*Catholic (62.5%), Spiritist (30%), Buddhist (5%), Evangelical (5%), Umbanda (2.5%).
**Higher/cosmic forces (7.5%), self-awareness (5%), doing good for others (5%), spiritual life philosophy (2.5%), agnostic (2.5%).

Table 2. Comparison of pre- and postintervention scores obtained by the healthcare professionals who completed the continuing education activity

Dimensions	Preintervention, mean (*SD*)	Postintervention, mean (*SD*)	*p*	ES
Assessment and implementation of spiritual care	20.6 (3.8)	22.8 (2.8)	<0.001	0.57
Professionalization and improving the quality of spiritual care	17.5 (4.5)	20.9 (4.7)	<0.001	0.67
Personal support and patient counseling	20.4 (4.2)	23.2 (3.0)	<0.001	0.63
Referral	9.9 (2.1)	11.1 (2.0)	0.003	0.55
Attitude toward patients' spirituality	18.7 (1.7)	18.8 (1.8)	0.849	0.03
Communication	9.1 (1.1)	9.1 (1.1)	0.822	0.04
Total	96.1 (12.9)	105.4 (12.8)	<0.001	0.61

ES, effect size.

after intervention ($p < 0.001$). The dimensions "attitude toward patients' spirituality" and "communication" showed no significant differences before and after the intervention (Table 2).

As shown in Table 3, the total score ($p = 0.034$) and the mean scores for spiritual and religious beliefs in the dimensions "personal support and patient counseling" ($p = 0.045$) and "referral" ($p = 0.038$) showed significant differences during the preintervention period, but only the "referral" dimension remained significant after intervention.

As shown in Table 4, there was a statistically significant positive association between educational attainment and the dimension "attitude toward patients' spirituality" ($p = 0.032$) before intervention, but this association was not maintained after intervention ($p = 0.192$). As for years of experience, there was a significant positive association with "assessment and implementation of spiritual care" ($p = 0.008$), "referral" ($p < 0.001$), and total score ($p = 0.018$), but these associations were not maintained after intervention.

Table 3. Association with spiritual and religious beliefs

Dimensions	Spiritual and religious beliefs, mean (*SD*)	No spiritual and religious beliefs, mean (*SD*)	*p*
Assessment and implementation of spiritual care			
Preintervention	21.0 (3.7)	19.1 (4.1)	0.144
Postintervention	23.2 (3.0)	21.6 (1.7)	0.133
Professionalization and improving the quality of spiritual care			
Preintervention	17.9 (4.6)	15.7 (3.8)	0.132
Postintervention	20.9 (4.7)	20.1 (3.9)	0.659
Personal support and patient counseling			
Preintervention	20.9 (4.7)	17.9 (4.6)	0.045
Postintervention	23.7 (3.8)	21.0 (3.7)	0.087
Referral			
Preintervention	10.2 (2.3)	8.6 (2.2)	0.038
Postintervention	11.5 (1.8)	9.7 (2.2)	0.013
Attitude toward patients' spirituality			
Preintervention	18.7 (1.7)	18.0 (2.4)	0.243
Postintervention	18.8 (1.8)	17.8 (1.6)	0.146
Communication			
Preintervention	9.1 (1.1)	9.0 (1.3)	0.739
Postintervention	9.1 (1.1)	8.8 (1.3)	0.397
Total			
Preintervention	97.8 (13.4)	88.3 (12.5)	0.034
Postintervention	107.2 (12.9)	99.1 (10.9)	0.096

Discussion

According to the present results, 76.9% of the participants had spiritual and religious beliefs, and 17.3% had more than one belief at the same time. These data are not commonly reported in other studies, which may be explained by Brazilian cultural aspects. In a study analyzing religious syncretism in a nationally representative sample of the Brazilian population, however, 10.4% of adults reported adhering to more than one religion (Moreira-Almeida et al. 2010). Furthermore, our data showed that 21% of the participants had no spiritual and religious beliefs. A multicenter study involving 12 Brazilian medical schools and 5,950 medical students showed that, regarding religious beliefs, 66.1% had a religious affiliation and 18.2% attended religious services frequently (Lucchetti et al., 2013). These results are different from those found in the general Brazilian population, in which 95% have a religious affiliation and 37% frequently attend religious services (Moreira-Almeida et al., 2010).

Healthcare professionals participating in this study recalled a few instances of learning about spirituality during their undergraduate studies. Even when working with patients/families in palliative care, only 46.2% of them had previously participated in educational or scientific events about spirituality in care. A study of physicians with special training in palliative care showed that more than one-half of the sample had previously received training or education in spiritual care, but only one-third had pursued further education on this topic in the previous two years. Among those seeking further information, the most common sources were spirituality seminars and reading about the topic (Best et al., 2016b). The paucity of knowledge on this subject is also illustrated by a survey-based study of 339 physicians and nurses caring for patients with advanced cancer, in which only 12% of nurses and 14% of physicians reported receiving specific spiritual care training (Balboni

Table 4. Association between educational attainment and years of experience

Dimensions	Educational attainment		Experience, years	
	r_s	p	r_s	p
Assessment and implementation of spiritual care				
Preintervention	−0.063	0.659	0.366	0.008
Postintervention	−0.006	0.969	0.024	0.880
Professionalization and improving the quality of spiritual care				
Preintervention	0.012	0.933	0.231	0.100
Postintervention	0.122	0.441	0.107	0.500
Personal support and patient counseling				
Preintervention	0.083	0.558	0.271	0.052
Postintervention	−0.036	0.823	−0.046	0.773
Referral				
Preintervention	−0.044	0.757	0.473	<0.001
Postintervention	−0.042	0.792	0.051	0.749
Attitude toward patients' spirituality				
Preintervention	0.298	0.032	0.112	0.429
Postintervention	0.205	0.192	0.074	0.640
Communication				
Preintervention	−0.027	0.851	−0.066	0.640
Postintervention	0.206	0.192	0.097	0.542
Total				
Preintervention	0.011	0.937	0.327	0.018
Postintervention	0.075	0.637	0.073	0.647

r_s, Spearman correlation coefficient.

et al., 2013). Similarly, a study involving nursing students and professors pointed to a lack of information on spirituality and suggested that courses on this subject should be included in the curricula (Tomasso et al., 2011).

Another important finding of our study was that, even though participants were poorly prepared as undergraduates and at the workplace to provide spiritual care, they were able to identify and meet the spiritual and religious needs of patients in palliative care (Table 1). These results are consistent with those of a previous study showing that most healthcare professionals would like to provide spiritual care to terminally ill patients (nurses = 74%, physicians = 60%); however, 39% of nurses and 41% of physicians reported delivering spiritual care less frequently than desired (Balboni et al., 2014).

In the same vein, the Multinational Association of Supportive Care in Cancer surveyed its members to determine their approach to spiritual care in caring for terminally ill patients. Of 271 respondents, 88 (33%) reported that they provide spiritual care most of the time; however, 33.6% reported that they seldom provide adequate spiritual care and 25.8% do not feel they can provide it adequately. Furthermore, 80 respondents (29.5%) claimed to have some kind of training or education regarding spiritual care (Ramondetta et al., 2013). A study involving members of the Australian and New Zealand Palliative Medicine Society showed that 54% of respondents thought they were seldom or never able to adequately provide spiritual care, and only 5% felt they could always provide it. These findings suggest that, although healthcare providers working primarily with patients in palliative care attributed a high level of importance to spiritual care, their ability to care for cancer patients in this regard remains a problem independently of context (Best et al., 2016b).

The dimensions "attitude toward patients' spirituality" and "communication" did not differ significantly before and after the intervention. This may be attributed to a preintervention self-evaluation at the highest levels scores, that is, the participants felt they performed well in these dimensions previously. The educational intervention therefore produced no significant changes in these dimensions of care.

The results of our continuing education activity suggest that the intervention was effective in developing the competences needed by healthcare providers to address and meet the spiritual needs of patients/families in palliative care. This was evident from the improved total SCCS-Brazilian version scores ($p < 0.001$) after participation in the continuing education activity. Based on the results, the statistically significant differences that existed before the intervention between professionals with spiritual and religious beliefs, different levels of education, and more professional experience disappeared after the intervention (Tables 3 and 4). Our data also demonstrate that the proposed continuing education activity is an effective strategy to minimize gaps in this area during traditional graduation/education programs and indicate that the path followed is in accordance with the 2009 Spiritual Care Consensus Conference recommendations to advance the delivery of spiritual care in the palliative care setting (Puchalski et al., 2009).

Strengths and limitations of the study

This study provides evidence of the importance of including topics such as spirituality and spiritual care in palliative care programs through continuing education activities in healthcare institutions. Based on the present results, however, it is not possible to conclusively determine that the improvements obtained after the educational intervention resulted in an approach that can effectively identify and address the spiritual and religious needs of patients/families in palliative care. Further studies are still required to determine the effect of this intervention on the provision of spiritual care and quality of life of patients/families in palliative care. In addition, because our findings are based on a small sample from a single center, these data cannot be generalized to other populations. Future research with a control group, a large sample, and other active methods of continuing education will be needed.

Conclusion

After comparing pre- and postintervention periods, results show that a continuing education activity with support materials for daily use can contribute to the development of competences that help healthcare professionals identify and meet spiritual and religious needs in palliative care. This study provides some evidence that may be useful to health educators in designing interventions to address spirituality and spiritual care, underscoring the need to include these themes into curricular bases and continuing education programs for palliative care within healthcare organizations.

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References

Balboni MJ, Sullivan A, Amobi A, *et al.* (2013) Why is spiritual care infrequent at the end of life? Spiritual care perceptions among patients, nurses, and physicians and the role of training. *Journal of Clinical Oncology* **31** (4):461–467. https://doi:10.1200/JCO.2012.44.6443.

Balboni MJ, Sullivan A, Enzinger AC, *et al.* (2014) Nurse and physician barriers to spiritual care provision at the end of life. *Journal of Pain and Symptom Management* **48**(3), 400–410. https://doi.org/10.1016/j.jpainsymman.2013.09.020.

Balboni TA, Fitchett G, Handzo GF, *et al.* (2017) State of the science of spirituality and palliative care research part II: Screening, assessment, and interventions. *Journal of Pain and Symptom Management* **54**, 441–453. https://doi.org/10.1016/j.jpainsymman.2017.07.029.

Baldacchino DR (2008) Teaching on the spiritual dimension in care to undergraduate nursing students: The content and teaching methods. *Nurse Education Today* **28**(5), 550–562. https://doi.org/10.1016/j.nedt.2007.09.003.

Baldacchino DR (2011) Teaching on spiritual care: The perceived impact on qualified nurses. *Nurse Education in Practice* **11**(1), 47–53. https://doi.org/10.1016/j.nepr.2010.06.008.

Baldacchino DR (2015) Spiritual care education of health care professionals. *Religions* **6**(2), 594–613. https://doi.org/10.3390/rel6020594.

Barnett KG and Fortin AH (2006) Spirituality and medicine: A workshop for medical students and residents. *Journal of General Internal Medicine* **21**(5), 481–485. https://doi.org/10.1111/j.1525-1497.2006.00431.x.

Bell D, Harbinson M, Toman G, *et al.* (2010) Wholeness of healing: An innovative student-selected component introducing United Kingdom medical students to the spiritual dimension in healthcare. *Southern Medical Journal* **103** (12), 1204–1209. https://doi.org/10.1097/SMJ.0b013e3181f968ce.

Bentur N and Resnizky S (2010) Challenges and achievements in the development of spiritual-care training and implementation in Israel. *Palliative Medicine* **24**(8), 771–776. https://doi.org/10.1177%2F0269216310380490.

Best M, Butow P, and Olver I (2016a) Doctors discussing religion and spirituality: A systematic literature review. *Palliative Medicine* **30**(4), 327–337. https://doi.org/10.1177/0269216315600912.

Best M, Butow P, and Olver I (2016b) Palliative care specialists' beliefs about spiritual care. *Support Care Cancer* **24**, 3295–3306. https://doi.org/10.1177/s00520-016-3135-0.

Campbell DT and Stanley JC (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin.

Cobb MR, Puchalski CM, and Rumbold B (2012) *Oxford textbook of spirituality in healthcare*. Oxford: Oxford University Press.

Cohen J (1988) *Statistical Power of analysis for the behavioral sciences*, 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates.

Dezorzi LW, Raymundo MM, and Goldim JR (2016a) *Espiritualidade na atenção a pacientes/famílias em cuidados paliativos: Um guia de apoio para profissionais da saúde* (Spirituality in the attention for patients/families in palliative care: A support guide for health professionals). Porto Alegre: WWLivros. Available from https://issuu.com/nucleointerdisciplinardebioetica/docs/espiritualidade_na_aten____o_a_paci.

Dezorzi LW, Raymundo MM, and Goldim JR (2016b) *Religiões e Credos no Brasil: um guia breve para profissionais de saúde* (Religions and creeds in Brazil: A brief guide for health professionals). Porto Alegre: WWLivros. Available from https://issuu.com/nucleointerdisciplinardebioetica/docs/religi__es_e_credos_no_brasil.

Dezorzi LW, Raymundo MM, Goldim JR, *et al.* (2018) Cross-cultural validation of the Brazilian version of the spiritual care competence scale. *Palliative and Supportive Care* 1–6. https://doi.org/10.1017/S1478951518000159.

Elhardt E, Riedner C, Paal P, *et al.* (2013) Training health professionals in taking a spiritual history. *Spiritual Care* **1**(1), 26–34.

Goldim JR (comp.) (2007) *Bioética e espiritualidade* (Bioethics and spirituality). Porto Alegre: EDIPUCRS.

Goldim JR (2009) *Bioética complexa: uma abordagem abrangente para o processo de tomada de decisão* (Complex bioethics: a comprehensive approach to the decision-making process). *Revista da AMRIGS* **53**(1), 58–63. Available from https://www.ufrgs.br/bioetica/complexamrigs09.pdf.

IBGE (Brazilian Institute of Geography and Statistics) (2010) Demographic census 2010: General characteristics of the population. Available from: https://ww2.ibge.gov.br/home/estatistica/populacao/censo2010.

Kelly E (2012) Competences in spiritual care education and training. In *Oxford textbook of spirituality in healthcare*. MR Cobb, CM Puchalski, B Rumbold (eds.), Oxford: Oxford University Press.

Koenig H (2011) Spirituality and health research: Methods, measurement, statistics and resources. West Conshohocken, PA: Tempelton Press.

Lucchetti G, Lucchetti A, Puchalski C (2012) Spirituality in medical education: Global reality? *Journal of Religion and Health* **51**(1), 3–19. https://doi.org/10.1007/s10943-011-9557-6.

Lucchetti G, Oliveira LR, Koenig HG, *et al.* (2013). Medical students, spirituality and religiosity--results from the multicenter study SBRAME. *BMC Medical Education* **13**, 162. https://doi.org/10.1186/1472-6920-13-162.

Moreira-Almeida A, Pinsky I, Zaleski M, *et al.* (2010) Religious involvement and sociodemographic factors: A Brazilian national survey. *Revista de Psiquatria Clínica* **37**(1), 12–15.

Paal P, Roser T, Frick E (2014) Developments in spiritual care education in German speaking countries. *BMC Medical Education* **14**, 112. https://doi.org/10.1186/1472-6920-14-112.

Puchalski C, Ferrell B, Virani R, *et al.* (2009) Improving the quality of spiritual care as a dimension of palliative care: the report of the consensus conference. *Journal of Palliative Medicine* **12**(10), 885–904. https://doi:10.1089/jpm.2009.0142.

Puchalski CM, Vitillo R, Hull SK, *et al.* (2014) Improving the spiritual dimension of whole person care: Reaching national and international consensus. *Journal of Palliative Medicine* **17**(6), 642–656. https://doi.org/10.1089/jpm.2014.9427.

Ramondetta LM, Sun C, Surbone A, *et al.* (2013) Surprising results regarding MASCC members' beliefs about spiritual care. *Supportive Care in Cancer* **21** (11), 2991–2998. https://doi.org/10.1007/s00520-013-1863-y.

Richardson P (2014) Spirituality, religion and palliative care. *Annals of Palliative Medicine* **3**(3), 150–159. https://doi.org/10.3978/j.issn.2224-5820.2014.07.05.

Sepúlveda C, Marlin A, Yoshida T, *et al.* (2002) Palliative care: perspective of the World Health Organization. *Journal of Pain and Symptom Management* **24**(2), 91–96. https://doi.org/10.1016/S0885-3924(02)00440-2.

Tomasso CS, Beltrame IL, and Lucchetti G (2011) Knowledge and attitudes of nursing professors and students concerning the interface between spirituality, religiosity and health. *Revista Latino-Americana de Enfermagem* **19** (5), 1205–1213. https://doi.org/10.1590/S0104-11692011000500019.

van Leeuwen R, Tiesinga LJ, Middel B, *et al.* (2008) The effectiveness of an educational programme for nursing students on developing competence in the provision of spiritual care. *Journal of Clinical Nursing* **17**(20), 2768–2781. https://doi.org/10.1111/j.1365-2702.2008.02366.x.

van Leeuwen R, Tiesinga LJ, Middel B, *et al.* (2009) The validity and reliability of an instrument to assess nursing competencies in spiritual care. *Journal of Clinical Nursing* **18**(20), 2857–2869. https://doi.org/10.1111/j.1365-2702.2008.02594.x.

van Leeuwen R and Akkerman AS (2015) Nurses' perceptions of spirituality and spiritual care in different health care settings in the Netherlands. *Religions* **6**(4), 1346–1357. https://doi.org/10.3390/rel6041346.

World Health Organization (2005) Definition of palliative care. Geneva: WHO. Available from www.who.int/cancer/palliative/definition/en/.

Yang GM, Tan YY, Cheung YB, *et al.* (2017) Effect of a spiritual care training program for staff on patient outcomes. *Palliative and Supportive Care* **15**(4), 434–443. https://doi.org/10.1017/S1478951516000894.