

# Spirituality and religiosity: knowledge of medical students

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## Abstract

The objective of this study was to investigate the knowledge of medical students about spirituality and religiosity in relation to patient care. It is an exploratory, descriptive, quantitative research, based on *Spirituality and Brazilian Medical Education*, developed in two Medical Schools of Ceará, Brazil. A total of 437 medical students answered a questionnaire, which was processed by descriptive analysis. The results showed that medical students know the meaning and relevance of spirituality and religiosity in the patient care process, however, they do not feel ready to approach the matter in a more complete way because of limitations in academic training. It is concluded that these students need to learn more about the subject for an effective approach to the patient and, therefore, it is important that medical schools add this subject to their curricula.

**Keywords:** Spirituality. Medicine. Teaching.

## Resumo

### Espiritualidade e religiosidade: saberes de estudantes de medicina

Este estudo objetivou investigar saberes de alunos de medicina sobre espiritualidade e religiosidade no cuidado ao paciente. Trata-se de pesquisa exploratória, descritiva, quantitativa, pautada no *Spirituality and Brazilian Medical Education*, desenvolvida em duas escolas médicas do Ceará, Brasil. Os 437 participantes preencheram questionário posteriormente processado por análise descritiva. Os resultados apontaram que esses estudantes conhecem os significados e a relevância de espiritualidade e religiosidade na assistência ao paciente, mas ainda não se sentem preparados para a abordagem completa, em virtude das limitações de aprendizagem na formação acadêmica. Conclui-se que precisam aprender mais sobre a temática para efetiva abordagem do assunto com o paciente. Para tanto, é importante que as escolas médicas acrescentem o tema à matriz curricular.

**Palavras-chave:** Espiritualidade. Medicina. Ensino.

## Resumen

### Espiritualidad y religiosidad: saberes de estudiantes de medicina

Este estudio tuvo como objetivo investigar los saberes de los estudiantes de medicina sobre espiritualidad y religiosidad en el cuidado del paciente. Se trata de una investigación exploratoria, descriptiva, cuantitativa, basada en la *Spirituality and Brazilian Medical Education*, desarrollada en dos Facultades Médicas de Ceará, Brasil. Los 437 participantes completaron un cuestionario procesado posteriormente por análisis descriptivo. Los resultados señalaron que estos estudiantes conocen los significados y la relevancia de la espiritualidad y la religiosidad en la asistencia al paciente, pero todavía no se sienten preparados para un abordaje completo, en virtud de las limitaciones del aprendizaje en la formación académica. Se concluye que necesitan aprender más sobre la temática para un abordaje efectivo del asunto con el paciente. Para ello, es importante que las facultades médicas añadan este tema a la matriz curricular.

**Palabras clave:** Espiritualidad. Medicina. Enseñanza.

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Declararam não haver conflito de interesse.

Religiosity and spirituality in the health of the individual became increasingly frequent patterns of society and in scientific research, once their importance and positive results in the health-disease process, generating well-being to the patient and a satisfactory prognosis was verified. As a consequence, several health and economic indicators in public services decrease, and there are lower rates of aggravation, complications, and deaths<sup>1</sup>.

As for the terms “spirituality” and “religiosity”, there are authors who conceptualize the former as the intrinsic search of the individual to understand questions concerning the finitude of life and its meanings, as well as the relations with the sacred or transcendent. Religiosity, however, involves practices in organizational institutions (such as churches) or non-organizational ones, by means of prayers and reading of religious books<sup>2</sup>.

In Brazil, there are several reasons to research the triad spirituality, religiosity, and health, such as the wide and varied religious expression<sup>3</sup>, openness to innovative works and studies that point to the benefits of these elements. The religious and spiritual dimension seems to strengthen confidence in the sense of existence and faith and help to avoid various situations of grievance<sup>1</sup>. From this perspective, it is evident that these two points are fundamental aspects of medical training and assistance. The great dissonance is that many health professionals do not accept or have difficulty addressing the issue with patients because of the scarcity of such information in the graduations.

There is a gap between attitudes and expectations about the relationship of spirituality, health and religiosity in the professional training and clinical practice of medical students<sup>4</sup>. A study pointed out that few Brazilian medical schools have courses that deal with the topics, and less than half addresses some points about the subject. Even so, most medical directors believe that the issue is important and should be part of the curriculum<sup>5</sup>.

Many Brazilian medical students believe that spirituality influences the health of patients and can be inserted into clinical practice. However, most feel unprepared to do so, stating that medical school does not always offer the necessary training<sup>4</sup>. The curriculum matrix can address this issue in the programmatic contents of the basic, clinical and boarding cycle. Another possibility is research, extension, and culture, such as academic-professional leagues, which allow students, teachers, patients, and society to reflect on topics

of common interest based on experiences, debates, and activities.

In this perspective, if students of the basic cycle develop the ability to deal with the subject from the time of entry to the higher level, they may become more motivated to contemplate religiosity and spirituality in dealing with patients during their academic-professional formation. It is also assumed that participating in other university actions favors the understanding of these three elements.

Studying the understanding of medical students about the spiritual and religious approach to patient care can contribute to ratifying the importance of this topic in medical curricula and disseminating the benefits of these aspects to health, which is the justification for this work.

## Methods

This is an exploratory, descriptive study with a quantitative approach, based on Spirituality and Brazilian Medical Education (SBAME) - a multi-center cross-sectional study involving 12 Brazilian medical schools, with the participation of 5,950 students between 2010 and 2011. The SBAME was coordinated by three institutions: Federal University of São Paulo (Unifesp), the Federal University of Juiz de Fora (UFJF) and the Medical Spiritist Association of Brazil<sup>4</sup>.

This research was developed in two medical schools, one public and one private, in the interior of Ceará, Brazil. A total of 437 medical students participated, after using the sample calculation to determine the sample in a finite population. The inclusion criteria were: to be a medical student enrolled in basic, clinical or internship modules, to be at least 18 years of age and to attend the course during data collection. In order to reach the objective of the research, the students completed a questionnaire later validated by SBAME, of which the Portuguese version was produced by Lucchetti and collaborators<sup>6</sup> in 2015.

Sociodemographic data (sex, age, family income, ethnicity, religious affiliation and year of graduation) were analyzed and the Duke Religiousness Index (Durel) was used. It is a measure of five items of religious involvement in three sub-scales: 1) organizational religious behavior - religious service (1 item); 2) non-organizational religious behavior - praying, reading the scriptures, meditating, among other practices (1 item); and 3) intrinsic religious motivation

(3 items). Response options are measured on the Likert scale of 5 or 6 points.

The concept of spirituality was assessed with close-ended question having five response options: 1) belief and relationship with God/religiosity; 2) search for meaning and meaning for human life; 3) belief in the existence of the soul and the afterlife; 4) belief in something that transcends matter; and 5) ethics and humanist posture.

All data were stored on a common basis and submitted to statistical analysis by the Epi-Info software, version 7. Descriptive statistics were used to measure categorized and analyzed information. For categorical variables, the descriptive statistics are derived from the eligible evidence in the sampling of the data (n) by means of numbers and percentages. When the total value exceeded 100% it is because the research subject could choose more than one option in the questionnaire. These data were presented in tables and compared with other studies and literature on the subject.

## Results

The analysis of the sociodemographic characteristics of the 437 participants showed a change in the predominant gender profile in the profession. It used to be more common to observe the presence of men attending medicine in the university setting, but in this study women stood out in both institutions of higher education, with 57%. The mean age was 22 years ( $\pm 4$  years), which suggests that young people are entering the course earlier (Table 1). Two participants did not report their age.

Students from 1st to 6th year participated in the study, being 48,5% of the basic cycle (1st and 2nd years) and 52,6% self-declared white. The family income ranged from 1 to more than 12 minimum wages, which at the time of the research was estimated at R\$ 788.00 and became R\$ 954.00 on January 1, 2018. The religious belief most present in both institutions was the Roman Catholic apostolic, which corresponded to 58,6% (Table 1).

**Table 1.** Sociodemographic characteristics of medical students from the interior of Ceará, Brazil (2015-2016)

Variable	Institution				Total	
	Public		Private		n	%
	n	%	n	%		
<b>Total</b>	<b>170</b>	<b>100</b>	<b>267</b>	<b>100</b>	<b>437</b>	<b>100</b>
<b>Sex</b>						
Female	86	50.6	163	61.0	249	57.0
Male	84	49.4	103	38.6	187	42.8
No information	–	–	1	0.4	1	0.2
<b>Age (years)</b>						
18 to 23	115	67.6	202	76.2	317	72.9
24 to 29	51	30.0	49	18.5	100	22.9
30 to 35	2	1.2	10	3.8	12	2.8
36 to 41	2	1.2	4	1.5	6	1.4
<b>Year in medical school</b>						
1 <sup>st</sup> .	37	21.8	79	29.6	116	26.5
2 <sup>nd</sup> .	28	16.5	68	25.5	96	22.0
3 <sup>rd</sup> .	43	25.3	66	24.7	109	24.9
4 <sup>th</sup> .	22	12.9	47	17.6	69	15.8
5 <sup>th</sup> .	22	12.9	7	2.6	29	6.7
6 <sup>th</sup> .	18	10.6	–	–	18	4.1
<b>Color/Ethnic background</b>						
Oriental	–	–	1	0.4	1	0.2
White	79	46.5	151	56.6	230	52.6
Black	8	4.7	15	5.6	23	5.3
Mulatto	35	20.6	52	19.5	87	19.9
Other	48	28.2	46	17.2	94	21.5
No information	–	–	2	0.7	2	0.5

continues...

**Table 1.** Continuation

Variable	Institution				Total	
	Public		Private		n	%
	n	%	n	%		
<b>Family income</b>						
Up to 1 minimum wage	2	1.2	5	1.9	7	1.6
1 to 3 minimum wages	39	22.9	61	22.8	100	22.9
4 to 7 minimum wages	54	31.8	112	42.0	166	38.0
8 to 12 minimum wages	31	18.3	49	18.3	80	18.3
+12 minimum wages	39	22.9	37	13.9	76	17.4
No information	5	2.9	3	1.1	8	1.8
<b>Religious belief</b>						
None, but believes in God	34	20.0	40	15.0	74	17.0
None, and does not believe in God	6	3.5	6	2.2	12	2.7
Evangelical/Protestant	20	11.7	27	10.2	47	10.8
Buddhist	1	0.6	–	–	1	0.2
Jewish	1	0.6	–	–	1	0.2
Spiritist	8	4.7	14	5.3	22	5.0
Muslim	1	0.6	1	0.4	2	0.5
Protestant	3	1.7	1	0.4	4	0.9
Catholic	85	50.0	171	64.1	256	58.6
Spiritualist	4	2.5	2	0.7	6	1.4
Other	6	3.5	3	1.1	9	2.0
No information	1	0.6	2	0.7	3	0.7

Table 2 presents what students understand by spirituality/religiosity and how it relates to health. The most frequent answers on the theme were: search for the meaning and sense of human life, belief and relationship with God/religiosity, and belief in something transcendent to matter. Regarding how they relate health and spirituality, the most chosen options were: humanization in medicine, quality of life, and positive or negative interference of religiosity in health. In the public institution, 20,8% of students associated these concepts with the humanization of medicine, but in the private institution, the frequency was 28,3%. The total value exceeds the sample since the participants had the opportunity to choose more than one answer in the questionnaire.

Still in Table 2, we have the opinion of the students researched on the spiritual and religious influence in the health of the patients, in the health-disease process and in the physician-patient relationship. Responses were also presented on the pertinence of this approach, the willingness and

preparation of students to carry it out, as well as their perception of how appropriate it is to pray with patients.

Of the total participants, 88% believed that the influence of spirituality and religiosity varied from very to extremely intense in the health of their patients. Of these, 81,4% thought this influence was generally positive and 15,6% believed it to be equally positive and negative. Most medical students (58,4%) agreed that the spirituality/religiosity of physicians interferes with great or enormous intensity in understanding the health-disease process and the doctor-patient relationship.

When questioned about the desire to approach the topic of faith/spirituality with patients, 48,8% of students responded to have that will often. However, when asked about feeling prepared for this approach, only 8,2% chose the very much prepared options. Still in this context, 58,1% consider this approach very relevant, and 66,6% thought it appropriate for the doctor to pray with his patient only when requested.

**Table 2.** Distribution of knowledge about spirituality, religiosity and health of participants. Cariri. Brazil (2015-2016)

Variable	Institution				Total	
	Public		Private			
	n	%	n	%	n	%
<b>Total</b>	<b>307</b>	<b>100</b>	<b>480</b>	<b>100</b>	<b>787</b>	<b>100</b>
<b>What do you understand by spirituality?</b>						
Ethical and humanistic posture	42	13.7	58	12.1	100	25.8
Seeking the meaning and sense of human life	88	28.7	117	24.4	205	53.1
Belief and relationship with God/religiosity	68	22.1	134	27.9	202	50.0
Belief in something transcendent to matter	81	26.4	101	21.0	182	47.4
Belief in the existence of the soul and in the afterlife	28	9.1	70	14.6	98	23.7
<b>Total</b>	<b>360</b>	<b>100</b>	<b>498</b>	<b>100</b>	<b>858</b>	<b>100</b>
<b>You relate the topic "health and spirituality" to:</b>						
Humanization of medicine	75	20.8	141	28.3	216	49.1
Quality of life	55	15.3	74	14.8	129	30.1
Total/holistic health	66	18.3	39	7.8	105	26.1
Positive or negative interference with religiosity in health	57	15.8	102	20.5	159	36.3
Transcendent/immaterial interference in health	58	16.1	66	13.2	124	29.3
Approach to living and dying	49	13.6	76	15.3	125	28.9
<b>Total</b>	<b>170</b>	<b>100</b>	<b>267</b>	<b>100</b>	<b>437</b>	<b>100</b>
<b>In general, how much do you think religion/spirituality influences on the health of your patients?</b>						
Extremely	45	26.5	83	31.1	128	29.3
Very much	99	58.2	157	58.8	256	58.7
More or less	20	11.8	22	8.2	42	9.6
A little	4	2.3	1	0.4	5	1.1
Very little or nothing	2	1.2	3	1.1	5	1.1
No information	–	–	1	0.4	1	0.2
<b>Is the influence of religion/spirituality on health generally positive or negative?</b>						
Generally positive	136	80.0	220	82.4	356	81.4
Generally negative	–	–	5	1.9	5	1.1
Equally positive and negative	31	18.2	37	13.8	68	15.6
There is no influence	1	0.6	1	0.4	2	0.5
No information	2	1.2	4	1.5	6	1.4
<b>In your opinion, how intensely does the spirituality/religiosity of physicians interfere with the understanding of the health-disease process and the doctor-patient relationship?</b>						
Huge intensity	30	17.6	49	18.3	79	18.1
Great intensity	73	42.9	103	38.6	176	40.3
Moderate intensity	43	25.4	84	31.5	127	29.1
It does not interfere	17	10.0	22	8.2	39	8.9
Não interfere	7	4.1	8	3.0	15	3.4
No information	–	–	1	0.4	1	0.2
<b>Do you feel like addressing the topic of faith / spirituality with patients?</b>						
Yes. Rarely	53	31.2	73	27.3	126	28.8
Yes. Often	73	42.9	140	52.5	213	48.8
No	43	25.3	54	20.2	97	22.2
No information	1	0.6	–	–	1	0.2

continues...

**Table 2.** Continuation

Variable	Institution				Total	
	Public		Private		n	%
	n	%	n	%		
<b>How prepared do you consider yourself to address religious/spiritual aspects with your patients?</b>						
Extremely prepared	2	1.2	5	1.9	7	1.6
Very prepared	6	3.5	23	8.6	29	6.6
Moderately prepared	76	44.7	123	46.1	199	45.6
A little prepared	69	40.6	97	36.4	166	38.0
Not prepared at all	11	6.5	11	4.1	22	5.0
Does not apply	6	3.5	6	2.2	12	2.7
No information	–	–	2	0.7	2	0.5
<b>How relevant do you think such an approach is?</b>						
Extremely relevant	29	17.1	27	10.1	56	12.8
Very relevant	75	44.1	123	46.1	198	45.3
Moderately relevant	47	27.6	96	36.0	143	32.7
Not relevant at all	15	8.9	17	6.4	32	7.3
Nada pertinente	4	2.3	2	0.7	6	1.4
No information	–	–	2	0.7	2	0.5
<b>When is it appropriate for the physician to pray with your patient?</b>						
Never	18	10.6	15	5.6	33	7.5
Only if the patient requests	117	68.8	174	65.2	291	66.6
Whenever the doctor thinks it is appropriate	35	20.6	78	29.2	113	25.9

Table 3 shows students' perceptions about clinical practice, health, and spirituality about ever having asked patients about it. Answers were also obtained about what discourages them from doing so and what tools or spiritual treatments might be recommended. In the same way as the data presented in the previous table, the total value exceeds the sample, since the participants could choose more than one option in the questionnaire.

Most of them (40,7%) have asked about the spirituality/religiosity of their patients. Participants were able to choose more than one option over what discouraged them from discussing the issue

with their patients. The most frequent responses were: lack of training, fear of imposing religious views on patients, and fear of offending patients.

Among the students of the public institution, the majority (24,2%) feel discouraged to discuss religion/spirituality with their patients due to the lack of training. In the private institution, 28,2% of respondents identified their fear of imposing religious views as the main disincentive. Scholars also chose more than one tool choice or spiritual treatment that they would recommend to patients. The most chosen options were: prayer (80,2%), religious reading (56,9%) and charity work in religious temples (25,9%).

**Table 3.** Knowledge of medical students of Cariri about clinical practice. health and spirituality. Brazil (2015-2016)

Variable	Institution				Total	
	Public		Private		n	%
	n	%	n	%		
Total	170	100	267	100	437	100
<b>Have you ever asked about the religion/spirituality of your patients?</b>						
Yes	78	45.9	100	37.5	178	40.7
No	40	23.5	69	25.8	109	25.0
Does not apply. I don't see patients	51	30.0	95	35.6	146	33.4
No information	1	0.6	3	1.1	4	0.9
<b>Total</b>	<b>376</b>	<b>100</b>	<b>556</b>	<b>100</b>	<b>932</b>	<b>200</b>

continues...

**Table 3.** Continuation

Variable	Institution				Total	
	Public		Private		n	%
	n	%	n	%		
<b>Do any of the following statements discourage you from discussing religion/spirituality with your patients?</b>						
Lack of knowledge	46	12.2	53	9.5	99	21.7
Lack of training	91	24.2	111	20	202	44.2
Lack of time	49	13	52	9.3	101	22.3
Discomfort with the topic	24	6.4	33	6	57	12.4
Fear of imposing viewpoints on the patients	72	19.2	157	28.2	229	47.4
Knowledge on religion is not relevant for medical treatment	5	1.3	4	0.7	9	2.0
It's not part of my work	9	2.4	5	0.9	14	3.3
Fear of insulting the patients	57	15.2	103	18.5	160	33.7
Fear that my colleagues may not approve	8	2.1	19	3.4	27	5.5
Other	9	2.4	8	1.5	17	3.9
No information	6	1.6	11	2.0	17	3.6
<b>Total</b>	<b>325</b>	<b>100</b>	<b>492</b>	<b>100</b>	<b>817</b>	<b>200</b>
<b>Which of the spiritual tools or treatments do you think could be recommended to your patients?</b>						
Prayer	125	38.5	205	41.7	330	80.2
Religious reading	87	26.8	148	30.1	235	56.9
Fluidic water/Energized water/Blessed water	16	4.9	29	5.9	45	10.8
Dis-obsession/Exorcism	10	3.1	5	1.0	15	4.1
Imposition of hands//Reiki/Johrei	21	6.5	20	4.1	41	8.6
Charity work in religious temples	42	12.9	64	13.0	106	25.9
Other	19	5.8	17	3.4	36	9.2
No information	5	1.5	4	0.8	9	2.3

## Discussion

At the undergraduate level in medicine - basic, clinical and internship - students from the Cariri region of Ceará are inserted in primary, secondary and tertiary care services. With that the objective is to learn collective health, clinical, and mainly to deal with the subjectivity of the patients, expressed in the biopsychosocial and spiritual questions.

The students who participated in the study had an average age that coincides with the common profile found in other medical courses<sup>7,8</sup>. The variable "family income" showed that middle-income students are having access to the course, which was not common in previous decades. The statement on religion reinforced that Catholicism continues to prevail among Brazilians, according to data from the Instituto Brasileiro de Geografia e Estatística - IBGE (Brazilian Institute of Geography and Statistics)<sup>9</sup>.

It was observed in the study that the understanding of students from both institutions on the topic is in accordance with the definition of a personal search for the meaning of life and desire to find meanings for the most varied questions of human existence in search of meaning for life<sup>10</sup>. As a result of this definition, the students related the influence of the patients' spirituality/religiosity to health and emphasized that humanization is essential to provide care.

This insight reinforces studies that demonstrate how religious beliefs have been aggregated into many aspects of health behaviors, such as disease process, medical treatment, medical decisions, and physician-patient relationship<sup>11</sup>. In addition, research indicates that humanization is indispensable for good results that the professional wants for their work, as well as to promote and/or recover the health of patients<sup>7</sup>.

A study by Espinha *et al.*<sup>12</sup> found that spirituality and religiosity influenced the health of

people who started having less depression, less hypertensive crises and post-surgical complications, and greater psychological well-being. Perhaps because they realize that these are ways of seeking meaning for life, patients turn to religion, to the belief in God, family, naturalism, humanism or even rationalism for that purpose<sup>8</sup>.

Participants in the present study recognized the relevance of spirituality/religiosity in promoting the health of patients; however, they still do not feel prepared to address the issue because they believe there are gaps in approaching the issue in the medical schools in which they are enrolled. Although they were incipient in this regard, they mentioned some spiritual tools and treatments that they would recommend to patients. Prayer/prayer, religious reading, and charity work in religious temples are considered the most common in the Catholic religion, a belief that prevailed in the study.

Spirituality is a human dimension that can put experiences of health and illness in a meaningful context. Medical students can benefit from understanding how important the subject is for patient care. The World Health Organization (WHO), the Joint Commission on Accreditation of Health Organizations (JCAHO) and the Association of American Medical Colleges (AAMC) recommend addressing spiritual issues in the clinical care and education of health professionals, as they are important for the health of many patients<sup>8</sup>.

With this recommendation, medical schools have begun to incorporate courses in spirituality and health in their curricula. Topics include the effect of spirituality/religiosity on health, ethical aspects of spirituality, religion, and health, spiritual history, the impact of spiritual and religious beliefs on health decision-making<sup>13</sup>. In 2006, the Federal University of Ceará (UFC) optional discipline Medicine and Spirituality<sup>14</sup>. The UFC was the first institution of Brazilian higher education to include a discipline focused on this subject in the curriculum.

For medical schools that do not have the theme in their curriculum, there are three possibilities: 1) insertion in the modules of the curricular matrix;

2) offer of extension activities and capacities, internships, practical experiences, scientific meetings, that is, complementary activities to professional training, provided for in the National Curricular Guidelines of the medical course<sup>15,16</sup>; and 3) academic leagues, such as the Academic League in Health and Spirituality created at the Federal University of Cariri. It is important that these schools ensure educational spaces for students to discuss and learn topics that go beyond the biomedical model<sup>8</sup>.

The main reason for including spirituality/religiosity in medical education is the need to better understand the role of this aspect in patient care in order to provide compassionate care considering the interaction of biopsychosocial factors in the life and spiritual history of each individual<sup>17</sup>. Studying spirituality is a way of seeing people and facts from a new perspective; is to reflect on essential and existential issues relevant to human education, to ethically recognize the beliefs and values of the people assisted<sup>8</sup>.

## Final considerations

In concluding the study on the knowledge of medical students on spirituality and religiosity in patient care, it is concluded that these students know the meanings and relevance of these aspects but do not yet feel sufficiently prepared for a complete approach. According to the participants, this fact is related to content limitations in academic training.

Understanding that the approach of spirituality and religiosity is essential for ethical, professional, humanistic and care formation, it is observed that some medical schools are already implanting the subject in the curricular matrices, thus following the updated DCN of the medical courses. As this study was conducted only in two medical schools, it is suggested that other studies be developed to find out how these students have worked on the topic while learning their skills, competencies, and attitudes in university education.

## Referências

1. Koenig HG, Hooten EG, Lindsay-Calkins E, Meador KG. Spirituality in medical school curricula: findings from a national survey. *Int J Psychiatry Med* [Internet]. 2010 [acesso 20 set 2015];40(4):391-8. Disponível: <https://bit.ly/2WJJDcL>
2. Koenig HG, King DE, Carson VB. *Handbook of religion and health*. 2ª ed. New York: Oxford University Press; 2012.




3. Netto SM, Moreira-Almeida A. Metodologia de pesquisa para estudos em espiritualidade e saúde. In: Santos FS, organizador. A arte de cuidar: saúde, espiritualidade e educação. Bragança Paulista: Comenius; 2010. p. 182-96.
4. Lucchetti G, Oliveira LR, Koenig HG, Leite JR, Lucchetti ALG. Medical students, spirituality and religiosity: results from the multicenter study SBRAME. BMC Med Educ [Internet]. 2013 [acesso 18 out 2015];13:162. Disponível: <https://bit.ly/2uNVGJY>
5. Tomasso CS, Beltrame IL, Lucchetti G. Conhecimentos e atitudes de docentes e alunos em enfermagem na interface espiritualidade, religiosidade e saúde. Rev Latinoam Enferm [Internet]. 2011 [acesso 12 nov 2015];19(5):1205-13. Disponível: <https://bit.ly/2CZVxaQ>
6. Lucchetti G, Granero Lucchetti AL, Peres MF, Leão FC, Moreira-Almeida A, Koenig HG. Validation of the Duke Religion Index: Durel (Portuguese version). J Relig Health [Internet]. 2012 [acesso 15 jan 2016];51(2):579-86. Disponível: <https://bit.ly/2UirZ34>
7. Garcia MAA, Ferreira FP, Ferronato FA. Experiências de humanização por estudantes de medicina. Trab Educ Saúde [Internet]. 2012 [acesso 19 maio 2017];10(1):87-106. Disponível: <https://bit.ly/2uL7pZl>
8. Reginato V, De Benedetto MAC, Gallian DMC. Espiritualidade e saúde: uma experiência na graduação em medicina e enfermagem. Trab Educ Saúde [Internet]. 2016 [acesso 19 maio 2017];14(1):237-55. Disponível: <https://bit.ly/2FPzpk5>
9. Instituto Brasileiro de Geografia e Estatística. Censo demográfico 2010: características gerais da população, religião e pessoas com deficiência. Rio de Janeiro: IBGE; 2010.
10. Silva DS, Crossetti MGO. A espiritualidade para pacientes no contexto dos cuidados paliativos: uma revisão integrativa. In: Waldman BF, Ferla AA, Silveira DT, Duarte ÊRM, Breigeiron MK, Gerhardt LM, organizadores. A enfermagem no Sistema Único de Saúde: desenvolvendo saberes e fazeres na formação profissional. Porto Alegre: Rede Unida; 2015. v. 5. p. 27-42.
11. Lucchetti G, Lucchetti AG, Badan-Neto AM, Peres PT, Peres MF, Moreira-Almeida A *et al.* Religiousness affects mental health, pain and quality of life in older people in an outpatient rehabilitation setting. J Rehabil Med [Internet]. 2011 [acesso 15 fev 2017];43(4):316-22. Disponível: <https://bit.ly/2TS9xct>
12. Espinha DCM, Camargo SM, Silva SPZ, Pavelqueires S, Lucchetti G. Opinião dos estudantes de enfermagem sobre saúde, espiritualidade e religiosidade. Rev Gaúcha Enferm [Internet]. 2013 [acesso 15 fev 2017];34(4):98-106. Disponível: <https://bit.ly/2K6pl6n>
13. Lucchetti G, Oliveira LR, Granero Lucchetti AL, Leite JR. Spirituality in medical education: new initiatives in Brazil. Clin Teach [Internet]. 2011 [acesso 10 jun 2017];8:212-4. Disponível: <https://bit.ly/2UfhLjQ>
14. Righetti S, Felipe C. Pode a fé curar? SBPC [Internet]. 10 maio 2005 [acesso 1º mar 2015]. Disponível: <https://bit.ly/2OWbP9L>
15. Dal-Farra RA, Geremia C. Educação em saúde e espiritualidade: proposições metodológicas. Rev Bras Educ Méd [Internet]. 2010 [acesso 11 mar 2018];34(4):587-97. Disponível: <https://bit.ly/2G3U2ut>
16. Conselho Nacional de Educação. Resolução nº 3, de 20 de junho de 2014. Institui Diretrizes Curriculares Nacionais do curso de graduação em medicina e dá outras providências [Internet]. Diário Oficial da União. Brasília, p. 8-11, 23 jun 2014 [acesso 18 abr 2019]. Seção 1. Disponível: <https://bit.ly/2k7LteN>
17. Zanetti GC, Lemos GL, Gotti ES, Tomé JM, Silva AP, Rezende EAMR. Percepção de acadêmicos de medicina e de outras áreas da saúde e humanas (ligadas à saúde) sobre as relações entre espiritualidade, religiosidade e saúde. Rev Bras Educ Méd [Internet]. 2018 [acesso 11 mar 2018];42(1):65-72. Disponível: <https://bit.ly/2OPhSNh>


#### Participation of the authors

Milena Silva Costa, Raphael Tavares Dantas and Arthur Fernandes da Silva prepared the study project and submitted it to the Ethics and Research Committee. Cecília Gomes dos Santos Alves and Eugênia Rodrigues Ferreira collected the data. All authors contributed to the analysis and interpretation of the data and final writing of the manuscript.


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