



# Spirituality in Clinical Practice: The Perspective of Brazilian Medical Students

Mary Rute Gomes Esperandio<sup>1</sup> · Yasmin Quiroga de Souza<sup>2</sup> ·  
Odenir Nadalin Jr.<sup>2</sup> · René Hefti<sup>3</sup>

Accepted: 21 November 2020

© Springer Science+Business Media, LLC, part of Springer Nature 2021

## Abstract

The purpose of this study was to evaluate the beliefs, opinions, and experiences of medical students from a Catholic confessional university concerning spirituality in medical practice. This is a descriptive and cross-sectional study with a sample of 323 undergraduate students, of which 162 were in their first two years of their studies and 161 in the final two years. A validated questionnaire consisting of 58 questions was applied. Although the spiritual dimension was recognized as important for patient care, 95% of students were not familiar with spiritual and religious issues. Advanced students reported that they had not received adequate training in this area. Therefore, this topic should be included in the medical curriculum, preferably in the first years.

**Keywords** Brazilian medical students · Spirituality/religiosity · Clinical practice

## Introduction

Studies on spirituality and health show growing evidence that patient's spirituality/religiosity (S/R) has an impact on the treatment outcome (Koenig et al. 2001, 2012). At the same time, studies have found that health professionals often separate spirituality from their care practices, even in contexts where S/R is part of the culture, such as in Brazil (Esperandio 2014; Esperandio and Machado 2018; Lucchetti et al. 2012, 2013, 2016). A possible reason for this separation is insecurity due to a lack of

---

✉ Mary Rute Gomes Esperandio  
mary.esperandio@pucpr.br

<sup>1</sup> Post-Graduate Program in Bioethics, Pontifical Catholic University of Paraná (PUCPR), Rua Imaculada Conceição, 1155 - Prado Velho, Curitiba, PR 80215-901, Brazil

<sup>2</sup> Pontifical Catholic University of Paraná (PUCPR), Rua Imaculada Conceição, 1155 - Prado Velho, Curitiba, PR 80215-901, Brazil

<sup>3</sup> Lecturer for Spiritual Care, University of Basel, Head of the Research Institute for Spirituality and Health (RISH), Langenthal, Switzerland

training during professional education. What do medical students themselves think about this subject? Do they consider spirituality a vital dimension to be integrated into patient care? What do they already know about the topic?

These questions will be addressed in this study. The main goal was to explore the beliefs, attitudes, and experiences of medical students from a private Catholic university, related to spirituality and medical practice.

First, it is necessary to clarify the notions of religion, religiosity, and spirituality employed in this study. Religion refers to a “social phenomenon defined by particular limits, expressed in a body of doctrines that are assumed by a faith community that shares the same beliefs” (Esperandio et al. 2017, p. 306–307). Religiosity derives from religion and refers to beliefs, values, and ethical–moral practices linked to an established religion. As for the term *spirituality*, we use the definition of the international consensus conference:

...a dynamic and intrinsic aspect of humanity through which persons seek ultimate meaning, purpose, and transcendence, and experience relationship to self, family, others, community, society, nature, and the significant or sacred. Spirituality is expressed through beliefs, values, traditions, and practices. (Puchalski et al. 2014, p. 646).

## Methods

This study was carried out with medical students of a private Catholic university in one of the state capitals of southern Brazil. All students in the first and last two years were invited to participate in the study ( $n=392$ ). 323 were included in the final analysis. Questionnaires that were either incomplete or had an unsigned Informed Consent Form were excluded.

The research was approved by the Research Ethics Committee of the institution. Process 1.825.680. Data collection was done from January to June 2017.

The study is a quantitative, descriptive, cross-sectional survey. This method conforms to the aim of producing quantitative data of a population with the purpose of “identifying which situations, events, attitudes or opinions are manifest [...]” (Freitas et al. 2000, p. 3).

The instrument used for data collection was based on the questionnaire by Curlin et al. (2005). In its final version, the questionnaire consisted of 57 closed-ended questions and one open-ended question, divided into three sections: (A) Students’ perspective on the relationship between S/R and health; (B) Religious profile of students; (C) Demographic data and medical practice.

For the assessment of intrinsic religiosity, five questions of the Huber and Huber (2012) Centrality of Religiosity Scale (CRS) were applied. Centrality of religiosity (CR) can be categorized into three groups: the “highly-religious” (4.0–5.0), the “religious” (2.1–3.9), and the “non-religious” (1.0–2.0).

The data collection ensured the anonymity of participants. Part of the data was obtained through printed questionnaires, but most collaborators opted for a digitalized format, accessing the questionnaire through a link distributed in the

classroom by a trained researcher involved in the project. The survey was hosted on the Qualtrics platform. This platform enables online participation and saves the data automatically in the database.

## Results

### Participants

The majority of the study participants were female (69%), self-declared as White (88%), Brown (6.5%), Mulatto (4.6%), and Black (0.9%). The predominantly white population is a result of the academic selection process and the student's financial background. The small percentage of black students is due to the racial quotas introduced by the government.

The total sample consisted of 323 students. 85 (26.1%) were in the first year of their medical studies, 77 (23.9%) in the second year, 81 (25.1%) in the fifth year, and 80 (24.8%) in the sixth year. The average age of the students was 22 years old, ranging from 17 to 45 falling into the following categories: 32.6% were between 17 and 20 years old; 43.2% between 21 and 24 years old; 20.5% between 25 and 28 years old; 3.7% between 29 and 45 years old.

### Religious Profile

Regarding the students' religious affiliation, Catholicism was predominant (40.3%), followed by those who affirm to believe in God but do not follow any religion (15.7%). The other students declared themselves as Spiritists (12.7%), Evangelicals (11.8%, including Protestants, Pentecostals, Neo-Pentecostals, and Adventists), Agnostics (6.2%) and Atheists (6.2%). Other religious groups represented in the sample (3.0%) were Buddhism, Afro Religions (*Umbanda*), Islam, Judaism, Jehovah's Witnesses, Mormons, and multiple affiliations.

29.9% of the students considered themselves as "more or less religious", 25.4% as "quite" or "very religious", 22.2% as "little religious" and 22.5% as "not religious at all". 52.1% claimed to be spiritual or very spiritual.

Regarding participation in religious services, 64.1% stated that they participate at least once a week, and 33.4% pray once a day. 72.8% of the medical students affirm belief in God, and 55.1% believe in life after death. In general, medical students say that they have received religious education in their childhood (93.5%), but only 54.2% still have the same religious affiliation.

According to the Centrality of Religiosity Scale (Huber and Huber 2012) mean religiosity of the student sample was 3.5 (SD = 1.0, range 1–5), characterizing the student population as *religious*. Female students had higher centrality of religiosity ( $m = 3.73$ ,  $SD = 0.98$ ) than male students ( $m = 2.99$ ,  $SD = 1.05$ ).

## Personal Beliefs and Opinions About the Relationship Between S/R and Health

The majority, 73.0% of the students, consider the practice of medicine as their vocation. A total of 53.6% of the students indicate that their religious beliefs influence their medical practice and 33.1% state that the practice of medicine has made them question their own religious beliefs.

Regarding the students' perspective on the relationship between S/R and health, 81.1% of them believe that religion and spirituality have an influence on patients' health, and 79.9% think that this influence is, generally, more positive than negative. Regarding the belief in the interference of a supernatural being into the health of patients, 46.4% believe in a possible interference, 22.6% do not believe in this possibility, and 31% have doubts about it.

## Attitudes and Behaviors Regarding Clinical Practice

A total of 82.4% of students agree on the importance of a holistic approach in patient care. They recognize the relevance of caring for all dimensions of the human being, therefore practicing a bio-psycho-socio-spiritual approach (Hefti 2013). Attitudes related to the integration of S/R in clinical practice are summarized in Table 1.

The student's answers regarding the interaction with patients when themes about religion and spirituality emerge are shown in Table 2. This table includes only the students who have already assisted patients.

Most of the students agreed (54.8%) or strongly agreed (33.1%) that they would be comfortable talking about the patient's religious/spiritual concerns if they were raised as an initiative of the patient. However, 46.1% of the students would not appreciate discussing spiritual/religious issues with their patients. Among the students who have assisted patients, 62.7% say they always listen carefully and empathically, but 50.2% try to change the subject delicately (sometimes: 35.3; often: 11.5; always 3.4, see Table 2).

## Clinical Practice

In general, medical students always (23.5%) or generally (49.5%) consider it appropriate for a physician to ask questions about the patient's spirituality/religiosity (see Table 1). Of the students who reported having seen patients during graduation, 41.2% had already addressed spiritual/religious issues. Most of them reported performing this approach sometimes (42.1%) or rarely (32.3%).

There are situations in which spiritual/religious issues are more often addressed. From the students' perspective, such situations include (in order of higher frequency): (1) terminality of life, (2) threatening diagnosis, (3) anxiety or depression, as described in Table 3.

Students reported that patients never (55.4%) or rarely (38.9%) seemed uncomfortable when inquiring about S/R. Among the reasons that discourage students

**Table 1** Attitudes regarding S/R in clinical practice

Attitudes	<i>n</i>	%
In general, is it appropriate or inappropriate for a physician to discuss religious/spiritual issues when the patient mentions them?		
Always appropriate	25	7.7
Generally appropriate	185	57.3
Generally inappropriate	104	32.2
Always inappropriate	9	2.8
In general, is it appropriate or inappropriate for a physician to ask questions about the patient's religion/spirituality?		
Always appropriate	76	23.5
Generally appropriate	160	49.5
Generally inappropriate	76	23.5
Always inappropriate	11	3.4
When would it be appropriate for a physician to talk about his or her own religious beliefs or experiences with a patient?		
Never	34	10.5
Only when asked by the patient	154	47.7
Whenever the physician feels it is appropriate	135	41.8
When would it be appropriate for a physician to pray with a patient??		
Never	19	5.9
Only when asked by the patient	202	62.5
Whenever the physician feels it is appropriate	102	31.6
To what extent do you agree or disagree with the following statement? "I would be comfortable talking about the patient's religious/spiritual concerns if they were raised by the patient."		
Totally agree	107	33.1
Agree	177	54.8
Disagree	37	11.5
Totally disagree	2	0.6

**Table 1** (continued)

Attitudes	<i>n</i>	%
To what extent do you agree or disagree with the following statement? "I appreciate discussing religious/spiritual issues with patients."		
Totally agree	17	5.3
Agree	118	36.5
Disagree	118	36.5
Totally disagree	39	12.0
It does not occur	31	9.6

**Table 2** Behavior regarding S/R in clinical practice

When religious/spiritual questions emerge in the discussion with the patient, how often do you respond in the ways described below:	<i>n</i>	%
<b>I listen carefully and empathically. (<i>n</i> = 236)</b>		
Never	0	0
Rarely	3	1.3
Sometimes	25	10.6
Often	60	25.4
Always	148	62.7
<b>I try to change the subject delicately. (<i>n</i> = 235)</b>		
Never	42	17.9
Rarely	75	31.9
Sometimes	83	35.3
Often	27	11.5
Always	8	3.4
<b>I encourage the patients in their own religious/spiritual beliefs and practices. (<i>n</i> = 231)</b>		
Never	13	5.6
Rarely	29	12.6
Sometimes	48	20.8
Often	69	29.9
Always	72	31.2
<b>I respectfully share my own religious ideas and experiences. (<i>n</i> = 230)</b>		
Never	69	30.0
Rarely	78	33.9
Sometimes	58	25.2
Often	18	7.8
Always	7	3.0
<b>I pray with the patient. (<i>n</i> = 211)</b>		
Never	143	67.8
Rarely	42	19.9
Sometimes	20	9.5
Often	2	0.9
Always	4	1.9

most from discussing religion/spirituality with patients is the concern about not embarrassing the patient the most prominent (see Fig. 1).

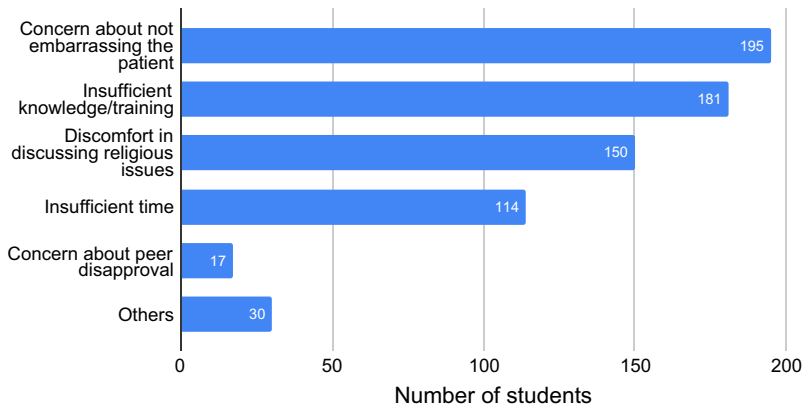
Further insight came from the open-ended question asking if there were anything else students would like to tell about their thoughts on spirituality and religion in medicine. Some of them highlighted that the patient's spirituality/religiosity should be respected or even encouraged, regardless of the physician's beliefs. Other students pointed out that physicians should not try to convince the patient about their own beliefs, as noted in their comments:

**Table 3** Situations in which S/R is addressed more frequently

You address religious/spiritual issues when the patient...	<i>n</i>	%
<b>Presents a simple health problem or injury. (<i>n</i> = 127)</b>		
Never	71	55.9
Rarely	35	27.6
Sometimes	13	10.2
Often	03	2.4
Always	05	3.9
<b>Faces a scary diagnosis or a crisis. (<i>n</i> = 121)</b>		
Never	11	9.1
Rarely	14	11.6
Sometimes	49	40.5
Often	32	26.4
Always	15	12.4
<b>Faces the terminality of life. (<i>n</i> = 109)</b>		
Never	6	5.5
Rarely	4	3.7
Sometimes	31	28.4
Often	44	40.4
Always	24	22
<b>Suffers from depression or anxiety. (<i>n</i> = 120)</b>		
Never	21	17.5
Rarely	18	15
Sometimes	40	33.3
Often	28	23.3
Always	13	10.8
<b>Comes because of a disease history or physical reasons. (<i>n</i> = 114)</b>		
Never	40	35.1
Rarely	29	25.4
Sometimes	26	22.8
Often	12	10.5
Always	7	6.1
<b>Faces an ethical dilemma. (<i>n</i> = 105)</b>		
Never	28	26.7
Rarely	17	16.2
Sometimes	36	34.3
Often	18	17.1
Always	6	5.7

Although being an atheist, I have experience of living with Catholics in the family. Although I do not believe there is any divine interference, it is visible that religion (perhaps a placebo) is very comforting in delicate situations involving life and death. In my opinion, the physician has the autonomy and





**Fig. 1** Reasons that discourage a spiritual approach ( $n = 235$ )

the right to believe or disbelieve what he or she wants but always has to consider the patient's beliefs (Male student, 20 years old, atheist, attending the 2nd year of the medical school).

For me, a physician should never criticize anyone's religion; on the contrary, he or she should encourage it, even if the physician does not share the same belief or any belief at all. The physician may be religious but should never let it interfere in the conduct with a patient (Female student, 23 years old, no religion, attending the 2nd year of the medical school).

Most of the participants, 87.6%, say they are not familiar with the role of a chaplain. The concept of *spiritual history* is also unknown to 81.2%. Some of them, 13.5%, claim to have heard of taking a *spiritual history* but do not know what it means.

## Education

A total of 95% of the students reported never having had any formal training on how to handle S/R issues and 66.2% have the opinion that the faculty of medicine does not provide adequate training on how to deal with these issues in patient care. 65.3% of students who consider it 'very important' or 'important' that the university trains students in addressing spiritual/religious issues with patients.

Of those who answered that they had received some formal training on spirituality/religiosity and medicine (5.3%), the majority indicated having received this training in the course of religious culture (43.5%), or through their religious tradition (21.8%). A student stated about the course of religious culture: "despite having the subject religious culture in the curriculum, we had no contact with the countless religions and much less a notion of how to deal with each individually." (Female student, 20 years old, Catholic, attending the 2nd year of the medical school).

Another difficulty is to discuss the subject in the medical environment due to the prejudice of students, physicians, and teachers: "There is a major

disagreement in the medical field related to the subject. Full of prejudice and intolerance” (Male student, 22 years old, Catholic, attending the 2nd year of the medical school).

### Centrality of Religiosity as a Main Promotor

Correlations between the centrality of religiosity, gender, and promptness to integrate religion and spirituality into patient’ care showed some interesting results.

The more religious students are, the more they tend to believe that it is appropriate for a physician to address spiritual/religious issues with their patients ( $r=0.172$   $p<0.003$ ) and feel more comfortable addressing these issues ( $r=0.257$   $p<0.001$ ). Students who considered themselves less religious tend to change the subject when the patient raises question about spirituality/religiosity ( $r=-0.286$   $p<0.001$ ). Those who are more religious encourage patients in their own beliefs ( $r=0.261$   $p<0.001$ ) and address these issues more often ( $r=0.175$   $p<0.011$ ).

### Comparisons Between Early and Late Years of Medical Students’ Education

There was no significant difference between the year of medical school (early or late years) and the centrality of religiosity measured by CRS.

In contrast, there is a significant negative correlation between the year of medical school and whether students have already addressed S/R issues in clinical practice. It is true for all the different clinical situations. The more advanced students addressed S/R issues less often than younger colleagues. (Table 4).

**Table 4** Comparisons between early and late years of medical students’ education

Students’ Self-Reported Behaviors	Year of the course	
	<i>n</i>	<i>r</i>
How often do you inquire about religious/spiritual issues?	133	-.420**
In the following clinical situations, how often do you inquire religious/spiritual issues when a patient		
Presents with a minor illness or injury?	127	-.318**
Faces a frightening diagnosis or crisis?	121	-.209*
Faces the end of life?	109	-.222*
Suffers from anxiety or depression?	120	-.260**
Comes for a history and physical?	114	-.360**
Faces an ethical dilemma?	105	-.302**

*r* = Pearson’s correlation coefficient;

\*  $p<0.05$

\*\*  $p<0.001$

## Discussion

### Study Population and Main Results

The majority of the student sample was white, predominantly female, with diverse religious affiliations. A significant number of students had no religion, being agnostics, and atheists. According to data from the Brazilian religion census, this diversity is characteristic of Brazil's southern region (IBGE 2010).

Students state that addressing a patient's spiritual dimension is appropriate and vital, and they believe that the influence of spirituality/religiosity on a patient's health is generally positive. In practice, however, over half of the students have never tried to address these issues with patients, indicating their difficulties in integrating this subject in everyday patient care.

Most students are open to listen when patients raise S/R issues. Nevertheless, many students do not know what to do with the information, so they delicately change the subject. There is a general fear of embarrassing patients when discussing spiritual/religious issues. Therefore, the cautious approach to the spiritual dimension in the students' clinical practice seems to be related to insecurity. Students do not know how to address spirituality in patient care due to a lack of specific training and a lack of "modeling" by their professors. These findings are in accordance with a survey by Lucchetti et al. (2012) describing the approach of spirituality and health in the curricula of 86 medical schools in Brazil. Banin et al. (2013) also highlight the fact that students do not only feel unprepared to approach spirituality, but professors also feel unprepared to discuss these issues with their students.

In another multicenter study conducted by Lucchetti et al. (2013) involving 12 Brazilian medical schools with data collected of 3,630 medical students, researchers found that 81% of the students from public universities have never participated in any activity related to "spirituality and health"; 83.4% believed that medical schools do not provide adequate training in this area, and 62.6% of them agreed about the importance of receiving training on this topic. In the present study, 65.3% of the students agreed on the necessity to receive training on this subject. This is a very similar result.

### Focus Shift and Lack of Essential Knowledge

The results of the study suggest that in the course of professional training, the dimension of spirituality seems to be losing importance for the medical professional. The students most likely and most open to integrate spiritual/religious issues in patient care are at the beginning of their medical studies. This reinforces the perception that a gradual transformation occurs: Concerns for the holistic human condition are replaced by the attention to biomedical issues. Therefore, it is not enough that ethical aspects and spiritual needs are discussed only concerning patient care. Healthcare professionals themselves have to be educated in Bioethics of Care, also integrating spiritual/religious issues.

Most of this study's participants do not know the meaning of the term "spiritual history" or how to conduct an interview focusing on spirituality as part of the patient history. One of the tools, among others that can be offered to medical students to and take a spiritual history is FICA (Puchalski et al. 2009, 2014; Hefti and Esperandio 2016). Such an instrument helps health professionals to investigate patients' beliefs and values, and provides at least a cursory understanding of the influence and meaning of spirituality in the processes of illness and recovery. It is fundamental to learn how to identify the patients' spiritual needs, resources and struggles to provide spiritual care. There are also practical recommendations that can guide medical students in dealing with possible spiritual/religious struggles (Abu-Raiya et al. 2015).

### Training in Spirituality and Health

Some students claimed to have received some training in spirituality and health during medical school but pointed out that this preparation was insufficient and poor. In fact, what students have reported as a "training" offered by the discipline of religious culture is not a training on the topic. Religious culture is one of the mandatory disciplines for all courses at the university. Syllabus aims to provide an overview of religions as a comprehensive part of peoples' culture. Its purpose is to favor an attitude of religious tolerance and respect toward all religions. Although this is a confessional Catholic university, data collection shows that there is no specific training in the medical curriculum focusing on the relationship between spirituality and health, the different religious beliefs and how to deal with them in the clinical setting.

In the Brazilian context, where some religious groups, e.g., Neo-Pentecostals, encourage abstinence from chemical drugs as a condition to receive prayer or to participate in healing rituals (Cerqueira-Santos et al. 2004; Esperandio and Machado 2018), comprehensive training in spirituality in health should be part of the medical curriculum in order to get a clear understanding of the impact of S/R on health, illness, and healing.

The *Academic League of Spirituality and Medicine*, founded by a group of students, tried to fill this gap by discussing this subject. This student initiative is another indicator of the students' interest in the topic and the necessity to integrate it into the medical curricula.

Several researchers pointed to the importance of spiritual care in different health contexts, e.g., in mental healthcare (Moreira-Almeida et al. 2006, 2016; Hefti 2011; Stroppa et al. 2018) or in Palliative Care (Puchalski et al. 2014; Steinhäuser et al. 2017; Balboni et al. 2017; Leget 2018; Gijssberts et al. 2019). Also, the World Health Organization (WPCA, WHO 2014) recognizes spirituality as an essential component of health in general and of best practices in Palliative Care. In our study, it is in the context of terminal illness that students encounter spiritual/religious issues most often.

It is relevant to understand that spiritual care is always an interdisciplinary endeavor (Hefti and Esperandio 2016). It means that approaching spirituality/religiosity in the clinical setting is the task of the entire multidisciplinary team. Issues requiring specific spiritual competencies, such as dealing with spiritual struggles or

crises, should be referred to a spiritual care specialist (chaplain/spiritual caregiver with adequate training). Brazilian medical students do not know about this new specialized field of spiritual care. Moreover, the provision of spiritual care in the Brazilian health care system has to be further developed.

### **Strength's and Limitations of the Study**

One of the strengths of this study is the robust number of medical students from different years of the medical school opening the opportunity to compare those at the beginning with those at the end of the medical course. Furthermore, the assessment of the medical students was made by a validated questionnaire (Curlin et al. 2005) covering different sections like student's religious profile, their perspective on the relationship between S/R and health, their attitudes, and behaviors toward clinical practice as well as demographic data. To assess and quantify religiosity, the Centrality of Religiosity Scale (Huber and Huber 2012), an internationally used and well-documented scale was used.

The major limitation of the study is the cross-sectional nature of the research design. Taking into account the mainly descriptive procedures, this limitation is not of importance. Another limitation is related to the closed-ended multiple-choice questions. It is possible that some students could not find the answer with which they identified most. Furthermore, the student sample originates from a single confessional private university. Therefore, generalizability is restricted to this type of university.

### **Conclusion**

The present study confirms findings from other national (Lucchetti et al. 2012, 2013; Esperandio 2014; Esperandio and Machado 2018; Costa et al. 2019) and international investigations (Neely and Minford 2008; Curlin et al. 2005; Cordero et al. 2018) regarding the relevance of addressing patient's spiritual dimension by healthcare professionals and students. An important reason for not integrating this dimension into healthcare is a lack of adequate training due to the neglect of the considerable volume of studies already published about the impact of S/R on health outcomes.

Brazilian medical students feel insecure in approaching S/R with their patients because they do not know how to integrate spiritual issues in clinical practice. However, most of the students are open to acquire the necessary competencies. Proper training will enable them to be effective and not to harm patients. Furthermore, health professionals' own spirituality/religiosity can interfere with caring for the patients, as several studies have shown (Spinelli et al. 2014; Esperandio and Machado 2018).

The final attempt of medical students' and health professionals' training must be to develop a holistic approach to patient care shifting from a biomedical to a bio-psycho-socio-spiritual perspective. It includes topics like the nature of illness and

suffering, meaning-making, hope, and transcendence. The complexity of the topic requires a conceptualized approach in the medical curriculum.

The results of this study have not only implications for medical education, but also for bioethics and theology. They must reflect on ethical issues related to the integration of spirituality and religion into health care. The impact of S/R on decision making, on the treatment, and how to provide care has to be taken into account. Furthermore, S/R cannot be “prescribed” and should not be “instrumentalized” in the healthcare context.

## Compliance with Ethical Standards

**Conflict of interest** The authors confirm that there are no conflicts of interest associated with this publication and no funding was received for this study.

**Ethical Approval** The study was approved by the Research Ethics Committee (Process 1.825.680; CAAE: 61839316.7.0000.0020) of the Pontifícia Universidade Católica do Paraná – PUCPR. Curitiba – PR, Brazil.

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

## References

- Abu-Raiya, H., Pargament, K. I., & Exline, J. J. (2015). Understanding and addressing religious and spiritual struggles in health care. *Health & Social Work, 40*(4), e126–e134. <https://doi.org/10.1093/hsw/hlv055>.
- Banin, L. B., Suzart, N. B., Banin, V. B., Guimarães, F. G., Mariotti, L. L., & Lucchetti, G. (2013). Spirituality: Do teachers and students hold the same opinion? *The Clinical Teacher, 10*(1), 3–8. <https://doi.org/10.1111/j.1743-498X.2012.00576.x>.
- Balboni, T., & T. A., Fitchett, G., Handzo, G. F., Johnson, K. S., Koenig, H. G., Pargament, K. I., Puchalski, C. M., Sinclair, S., Taylor, E. J., & Steinhauser, K. E. . (2017). State of the science of spirituality and palliative care research part II: Screening, assessment, and interventions. *Journal of Pain and Symptom Management, 54*(3), 441–453. <https://doi.org/10.1016/j.jpainsymman.2017.07.029>.
- Carqueira-Santos, E., Koller, S. H., & Pereira, M. T. L. N. (2004). Religião, saúde e cura: Um estudo entre neopentecostais. *Psicologia: ciência e profissão, 24*(3), 82–91.
- de Cordero, R., & D., Romero, B. B., de Matos, F. A., Costa, E., Espinha, D. C. M., Tomasso, C. de S., Lucchetti, A. L. G., & Lucchetti, G. . (2018). Opinions and attitudes on the relationship between spirituality, religiosity and health: A comparison between nursing students from Brazil and Portugal. *Journal of Clinical Nursing, 27*(13–14), 2804–2813. <https://doi.org/10.1111/jocn.14340>.
- Costa, M. S., Dantas, R. T., dos Alves, C. G., & S., Ferreira, E. R., & Silva, A. F. da. . (2019). Espiritualidade e religiosidade: Saberes de estudantes de medicina. *Revista Bioética, 27*(2), 350–358. <https://doi.org/10.1590/1983-80422019272319>.
- Curlin, F. A., Chin, M. H., Sellergren, S. A., Roach, C. J., & Lantos, J. D. (2005). The association of physicians' religious characteristics with their attitudes and self-reported behaviors regarding religion and spirituality in the clinical encounter. *Medical Care, 44*(5), 446–453. <https://doi.org/10.1097/01.mlr.0000207434.12450.ef>.
- Esperandio, M. (2014). Teologia e a pesquisa sobre espiritualidade e saúde: Um estudo piloto entre profissionais da saúde e pastoralistas. *Horizonte, 12*(35), 805–832. <https://doi.org/10.5752/P.2175-5841.2014v12n35p805>.

- Esperandio, M. R. G., Michel, R. B., Trebien, H. A. C., & Menegatti, C. L. (2017). Coping religioso/espiritual na antessala de UTI: Reflexões sobre a Integração da Espiritualidade nos Cuidados em Saúde. *Interações*, 12(22), 303–322. <https://doi.org/10.5752/P.1983-2478.2017v12n22p303>.
- Esperandio, M. R. G., & Machado, G. A. S. (2018). Brazilian physicians' beliefs and attitudes toward patients' spirituality: Implications for clinical practice. *Journal of Religion and Health*, 58(4), 1172–1187. <https://doi.org/10.1007/s10943-018-0707-y>.
- Freitas, H., Oliveira, M., Saccol, A. Z., & Moscarola, J. (2000). O método de pesquisa survey. *Revista de Administração*, 35(3), 105–112.
- Gijsberts, M.-J.H.E., Liefbroer, A. I., Otten, R., & Olsman, E. (2019). Spiritual care in palliative care: A systematic review of the recent European literature. *Medical Sciences*, 7(2), 25. <https://doi.org/10.3390/medsci7020025>.
- Hefti, R. (2011). Integrating religion and spirituality into mental health care psychiatry and psychotherapy. *Religions*, 2(4), 611–627. <https://doi.org/10.3390/rel2040611>.
- Hefti, R. (2013). The Extended Biopsychosocial Model – a whole person approach to psychosomatic medicine. *Psyche & Geloof*, 2(24), 119–130.
- Hefti, R., & Esperandio, M. R. G. (2016). The interdisciplinary spiritual care model – A holistic approach to patient care. *Horizonte*, 14(41), 13. <https://doi.org/10.5752/P.2175-5841.2016v14n41p13>.
- Huber, S., & Huber, O. W. (2012). *The Centrality of Religiosity Scale*. *Religions*, 3, 710–724.
- IBGE. 2010. Instituto Brasileiro de Geografia e Estatística. Censo Demográfico. Retrieved August 8 2019 from <https://censo2010.ibge.gov.br/resultados.html>.
- Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health*. New York: Oxford University Press.
- Koenig, H. G., King, D. E., & Carson, V. B. (2012). *Handbook of religion and health* (2nd ed.). Oxford: Oxford University Press.
- Leget, C. (2018). Spirituality in Palliative Care. In R. D. MacLeod & L. van den Block (Eds.), *Textbook of palliative care*. New York: Springer International Publishing.
- Lucchetti, G., Lucchetti, A. L. G., Espinha, D. C. M., de Oliveira, L. R., Leite, J. R., & Koenig, H. G. (2012). Spirituality and health in the curricula of medical schools in Brazil. *BMC Medical Education*, 12(1), 78. <https://doi.org/10.1186/1472-6920-12-78>.
- Lucchetti, G., Koenig, H. G., Leite, J. R., & Lucchetti, A. L. (2013). Medical students, spirituality and religiosity—results from the multicenter study SBAME. *BMC Medical Education*, 13(1), 162. <https://doi.org/10.1186/1472-6920-13-162>.
- Lucchetti, G., Ramakrishnan, P., Karimah, A., Oliveira, G. R., Dias, A., Rane, A., et al. (2016). Spirituality, religiosity, and health: A Comparison of physicians' attitudes in Brazil, India, and Indonesia. *International Journal of Behavioral Medicine*, 23(1), 63–70. <https://doi.org/10.1007/s12529-015-9491-1>.
- Moreira-Almeida, A., Lotufo Neto, F., & Koenig, H. G. (2006). Religiousness and mental health: A review. *Revista Brasileira de Psiquiatria*, 28(3), 242–250. <https://doi.org/10.1590/S1516-44462006005000006>.
- Moreira-Almeida, A., Sharma, A., van Rensburg, B. J., Verhagen, P. J., & Cook, C. C. H. (2016). WPA position statement on spirituality and religion in psychiatry. *World Psychiatry*, 15(1), 87–88. <https://doi.org/10.1002/wps.20304>.
- Neely, D., & Minford, E. J. (2008). Current status of teaching on spirituality in UK medical schools: Current status of teaching on spirituality. *Medical Education*, 42(2), 176–182. <https://doi.org/10.1111/j.1365-2923.2007.02980.x>.
- Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., Baird, P., Bull, J., 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.org/10.1089/jpm.2009.0142>.
- Puchalski, C. M., Vitillo, R., Hull, S. K., & Reller, N. (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>.
- Spinelli da, M. B. A., & S., Souza, A. I. de, Vanderlei, L. C. de M., & Vidal, S. A. . (2014). Características da oferta de contracepção de emergência na rede básica de saúde do Recife. *Nordeste do Brasil. Saúde e Sociedade*, 23(1), 227–237. <https://doi.org/10.1590/S0104-12902014000100018>.
- Steinhauser, K. E., Fitchett, G., Handzo, G. F., Johnson, K. S., Koenig, H. G., Pargament, K. I., et al. (2017). State of the science of spirituality and palliative care research part I: Definitions,

- measurement, and outcomes. *Journal of Pain and Symptom Management*, 54(3), 428–440. <https://doi.org/10.1016/j.jpainsymman.2017.07.028>.
- Stroppa, A., Colugnati, F. A., Koenig, H. G., & Moreira-Almeida, A. (2018). Religiosity, depression, and quality of life in bipolar disorder: A two-year prospective study. *Revista Brasileira de Psiquiatria*, 40(3), 238–243. <https://doi.org/10.1590/1516-4446-2017-2365>.
- Worldwide Palliative Care Alliance (WPCA); World Health Organization (WHO) (2014). Global atlas of palliative care at the end of life. London: WPCA, Retrieved from [https://www.who.int/nmh/Globa1\\_Atlas\\_of\\_Palliative\\_Care.pdf](https://www.who.int/nmh/Globa1_Atlas_of_Palliative_Care.pdf).

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.