



Witnessing death does not necessarily relieve the dis-comfort of death: analysis of the relationship between religiosity and thanatophobia in medicine undergraduate students

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Abstract

Introduction: It is known that very few issues related to death and religiosity/spirituality are addressed during medical graduation. Understanding the process of death and dying is still a problem for medical students before the terminal condition of a patient. Probably the medical students of the fifth graders overestimate their abilities, probably because they have not yet had contact with terminally ill patients or because they have not graduated, they do not take responsibility for the death of a patient they are following. In Brazil, many students believe that the topic of spirituality influences health, but they do not feel prepared to address this issue with patients. **Objective:** It was to analyze whether there is a relationship between religiosity and thanatophobia in medical students. It also analyzed whether there was a correlation between fear of death and specific religions, sex and age, and the index of religiosity with sex and age. **Methods:** Followed a prospective observational cross-sectional model, following the STROBE clinical research rules. This study was analyzed and approved by the Research Ethics Committee (CEP) according to a substantiated opinion number 2,031,705, and obtaining the patient's consent. **Results:** A total of 542 students (61.2% of the total) answered the questionnaire. Most were female (65.7%) and with a mean age of 22.31 (ranging from 17 to 39 years). The majority of students have a religion (90.1%) and 90.4% considered it important to address the issue of death and religiousness during graduation. In this study, it was observed that most students, in addition to having some kind of religion, consider it important to address the themes highlighted during the course. This was similar to the findings in other studies. There was no

statistically significant relationship between having a religion and being less afraid of death. However, students with higher levels of intrinsic religiosity showed greater discomfort when dealing with terminal patients. Furthermore, no studies comparing these two subjects were found. It was also found in this research that students with high levels of religiosity consider it more important to address the issues in question, with the majority being female students. **Conclusion:** It is necessary to include the topic in the medical academy, and it is essential to prepare a more humanistic and dedicated professional for patients, whether active or palliative treatment.

Keywords: Death. Religion. Spirituality. Palliative care. Medical students.

Introduction

Very few issues related to death and religiosity/spirituality are addressed during medical graduation. Understanding the process of death and dying is still a problem for medical students before the terminal condition of a patient. In a previous study, it was analyzed the need to include palliative care in medical training and it is concluded that the residents were more confident than all students in the medical school, except those in the fifth year [1]. The medical students of the fifth graders probably overestimate their abilities, probably because they have not yet had contact with terminally ill patients or because they have not graduated, they do not take responsibility for the death of a patient they are following [2].

In Brazil, many students believe that the topic of spirituality influences health, but they do not feel

prepared to address this issue with patients [3]. Physicians generally understand the spiritual component as an important factor for health, and 70% to 82% claim that this can influence the health-disease process [4]. However, medical schools prepare future health professionals to be science officers and little is taught about the biopsychosocial and spiritual reality [2].

A multicenter study involving 12 schools and 3,630 medical students showed that most students interviewed had a religious affiliation (66.1%) and 84.2% believed in God, followed by 38% who understood as a "search of meaning and significance for human life" and the other 20.5% believed in the "existence of the soul and life after death". The authors conclude that participants have a misconception about religion and spirituality, but emphasize the importance of including spirituality and health in medical courses [5].

To assess the student's fear of death and reflect on the future practice of medical students, Mason created a Thanatophobia scale, which qualifies the situation as positive or negative [6]. In a recent study of intensive care unit residents versus end-of-life patients, it was demonstrated that these professionals were not comfortable with end-of-life care and concepts. Furthermore, they did not show concern with the ethical, moral, and/or religious order of care at the end of life [7]. In another study, the author reinforces the importance of preparing medical professionals for the patient's death and end of life, as at some point we will also be "going there" [8].

Therefore, the present study aimed to analyze whether there is a relationship between religiosity and thanatophobia in medical students. Also, it analyzed whether there was a correlation between fear of death and specific religions, sex and age, and the index of religiosity with sex and age.

Methods

Study Design

This study followed a prospective observational cross-sectional model, following the rules of clinical research of the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology), available at: <https://www.strobe-statement.org/>.

Ethics Approval

This study was analyzed and approved by the Research Ethics Committee (CEP) according to a substantiated opinion number 2,031,705, and obtaining the patient's consent through the Informed Consent Form (TCLE) according to CNS/CONEP Resolution 466/12.

Interventions and Application of Questionnaires

After approval by the Research Ethics Committee, two questionnaires were applied: Duke Religiosity Scale (DUREL, modified) and Thanatophobia Scale (Mason). The first Scale defined Religiousness in three parameters: Organizational (OR) as the frequency of meetings in religious centers (churches, temples, masses, services, ceremonies, study groups, or prayer groups); Non-Organizational (NOR) addressing the individual's private religious activities (prayers, meditation, reading, television, radio, and internet); Intrinsic Religiosity (IR) which consists in seeking to live experiences according to religious beliefs [9]. The Thanatophobia Scale (Mason) consists of seven questions with a Likert Scale from 1 to 7 [6].

Both questionnaires were applied to the students from the first to the fifth year of medical school who accepted to participate in the study. Later, a non-parametric statistical analysis was performed to correlate the data. For statistical purposes, it was decided to group the answers into "high", "medium" and "low" scores.

Results

A total of 542 students (61.2% of the total) answered the questionnaire. Most were female (65.7%) and with a mean age of 22.31 (ranging from 17 to 39 years). The majority of students have a religion (90.1%) and 90.4% considered it important to address the issue of death and religiousness during graduation. Comparing students at the beginning of the course with interns, 68.5% of the latter have already witnessed death and declared discomfort with terminal patients (52.5%), while only 34.6% and 31.3% of first-year students witnessed death and became uncomfortable, respectively ($p=0.031$).

On the other hand, it was observed that those who had contact with death were less likely to work with terminal patients ($p = 0.033$). When we evaluated religiosity, we observed that the presence of high levels of intrinsic religiosity (50.0%) correlates with greater discomfort in dealing with terminal patients compared to those with low intrinsic religiosity (23.8%, $p = 0.032$). See **Table 1**.

When the degree of Organizational Religiosity (OR) was evaluated, it was noticed that the higher the OR of the individuals, the greater the importance of approaching the subjects ($p=0.034$). See **Table 2**.

Of the participants, 50% had high Intrinsic Religiosity (IR). When comparing IR with the importance of addressing themes, 93% with high IR considered it important to address them. Of those who did not consider it important to address the themes, 61% had

low RI. See **Table 3**.

Table 1. Intrinsic religiosity × Discomfort with the terminal patient.

	High discomfort	Low discomfort
High intrinsic religiosity (n=80)	40,0 *	40,0
Intrinsic Low Religiosity (n=21)	5,0	16,0
TOTAL	45,0	56,0

*statistically significant

Table 2. Importance of the death/religiosity/spirituality approach × Degree of organizational religiosity.

	Yes, it is important to address	It is not important to address
High Organizational Religiosity (n = 71)	67,0*	4,0
Low Organizational Religiosity (n = 71)	59,0	12,0
TOTAL	126,0	16,0

*statistically significant

Table 3. Importance of the death and religiosity/spirituality approach × Intrinsic religiosity.

	Yes, it is important to address	It is not important to address
High Intrinsic Religiosity (n=157)	146,0	11,0
Low Intrinsic Religiosity (n=39)	32,0	7,0
TOTAL	178,0	18,0

When comparing gender and importance in addressing these themes, women considered it more important to address them than men ($p < 0.001$). At the same time, 95% of women reported having a religion versus 79.6% of men ($p < 0.001$).

The predominance of women in religious matters was observed in all types of religiosity. Only 29.8% of men had a high OR against 62% of the female group ($p > 0.001$). In relation to high Non-Organizational Religiosity (NOR), the male group was 50 % versus 71.3% of women ($p > 0.001$). While considering RI, the numbers were higher RI for women (90%) and 55% for men ($p > 0.001$).

Regarding the thanatophobia indices, the answers were divided into high, medium and low scores, based on the Likert scale (1 and 2 = low, 3 to 5 medium and 6 and 7 high) for statistical purposes.

There was no statistically significant difference between having a religion and having a high or low rate of thanatophobia ($p = 0.076$). See **Table 4**.

Table 4. Thanatophobia × Have Religion.

	Have a religion	Don't have a religion
High thanatophobia (n=20)	20,0	0
Low thanatophobia (n=167)	144,0	23,0
TOTAL	164,0	23,0

Discussion

In this study, it was observed that most students, in addition to having some kind of religiosity, consider it important to address the themes highlighted during the course. This was similar to the findings in other studies [5,10,11].

There was no statistically significant relationship between having a religion and being less afraid of death. However, students with higher levels of intrinsic religiosity showed greater discomfort when dealing with terminal patients. Furthermore, no studies comparing these two subjects were found.

It was also found in this research that students with high levels of religiosity consider it more important to address the issues in question, with the majority being female students. Women were not only more religious, but they also had all three types of religiosity (organizational, non-organizational, and intrinsic) superior to men. Koenig has already discovered this in previous studies (1999) [9] and this finding is currently present in the world and Brazil [12,13].

Discussion about death in the medical curriculum is a subject that is little considered [14,15]. Most students like to add to their personal and professional life, spirituality, and religiosity, and suggested improving their skills to give and offer support during its formation [16]. Even with more contact, boarding students feel uncomfortable with terminal patients compared to beginning students. In this context, it is necessary and extremely important to include the subject in academic medicine, and it is essential to prepare more humanistic and dedicated professionals for patients, whether active or palliative treatment.

Conclusion

Regarding the objective of this study to compare religiosity and thanatophobia in medical students, the results showed that students considered the subject of religiosity and spirituality relevant throughout the course. There was no significant relationship between the student having a religion and the reduction in fear of death. It was also found that students with a high level of religiosity considered it more important to address the issue of religiosity and spirituality, with most

of them being female. Women also had the three types of religiosity (organizational, non-organizational, and intrinsic) superior to men. Also, in-house students are uncomfortable with terminal patients compared to beginning students. Therefore, it is necessary to include the topic in the medical academy, and it is essential to prepare a more humanistic and dedicated professional for patients, whether inactive or palliative care.

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Nil.

Ethics approval

This study was analyzed and approved by the Research Ethics Committee (CEP) according to a substantiated opinion number 4,375,418 and obtaining the patient's consent through the Informed Consent Form (TCLE) according to CNS/CONEP Resolution 466/12.

Informed consent

The patient signed the consent form.

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Data sharing statement

No additional data are available.

Conflict of interest

The authors declare no conflict of interest.

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