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THE CORRELATION BETWEEN SPIRITUALITY AND QUALITY OF LIFE IN ELDERLY PATIENTS TREATED AT THE GERIATRICS OUTPATIENT CLINIC: A FIELD STUDY USING THE VALIDATED SF36 AND P-DUREL INSTRUMENTS

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ABSTRACT

The present study aims to investigate the correlation between spirituality (religious practices, spiritual experiences, transcendental beliefs), measured by the P-DUREL questionnaire, and health-related quality of life (physical functional capacity, social aspects, pain), assessed by the SF-36, in a sample of elderly people treated at a geriatrics outpatient clinic of the Centro Universitário do Planalto Central Apparecido dos Santos - UNICEPLAC. The questionnaires used have evidence of validity and reliability. The intersection between health, well-being, and spirituality emerges as an increasingly relevant field of research. The search for an integral view of the human being has led to the investigation of spirituality as an essential component of health care. It is expected to find a positive correlation between spirituality scores and quality of life scores, indicating that individuals with greater spirituality have a better quality of life. The hypothesis is that there is a positive association between these constructs, i.e., that individuals with greater spirituality have better scores in the physical and mental dimensions of the SF-36. Statistical analysis was performed using the GNU PSPP software to obtain Pearson's correlation coefficient and the chi-square hypothesis test. The results of this study may contribute to the development of interventions that promote the spiritual well-being and quality of life of the elderly.

Keywords: Spirituality. Elderly. Quality of Life.

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INTRODUCTION

In the Middle Ages, spirituality was conditioned to clerical life, having only come to mean spiritual life in the nineteenth century. In the nineteenth century, several theological writings brought the concept of spirituality. We know that spirituality is ancient and that a spiritual person is someone who lives under the spiritual influence of a supreme being. Associated with Christianity, the term spirituality was better spread. And if someone seeks something supernatural that transcends the carnal vision and or wants to experience the mystical, they turn to spirituality.

That said, we can then affirm that spirituality, throughout history, has been a fundamental aspect of the human experience, shaping beliefs, values, and practices. In Western societies, the relationship between spirituality and health has been the subject of increasing interest, with studies demonstrating the importance of the spiritual dimension for well-being. In the context of aging, spirituality emerges as an important resource for dealing with the physical and psychological changes associated with old age.

According to (HILL et al., Conceptualizing religion and spirituality, pp. 51-77)..."For Psychology, religion and spirituality are understood as concepts that are part of human development." Some studies have been carried out associating spirituality with better prognostic diseases. The role of spirituality in palliative treatment is also clear and notorious, bringing more comfort to the patient, family and multidisciplinary health team.

In Brazil, Law No. 9,982, of July 14, 2000, provides for the provision of religious assistance in public and private hospitals, as well as in civil and military prisons. In 1988, the World Health Organization (WHO) included the term spirituality in the multidimensional concept of health. If there is legal support for the topic, the relevance is clear, and for this reason we need to understand how the elderly who seek treatment for their illnesses, whether acute or chronic, behave in the face of spirituality.

However, the object of study that is dealt with in this article is the presence or absence of spirituality in the interviewees and its influence on their well-being and quality of life. For this, the correlation between spirituality, well-being and quality of life in elderly patients will be analyzed, aiming to understand the advantages and disadvantages of this correlation in order to outline better therapeutic plans. The study aims to help improve the quality of life of these patients and show health professionals the importance of spirituality in their relationship with the patient.

The field research that composed this study was carried out with elderly patients treated at the geriatrics outpatient clinic of the Faculty of Medicine of the University Center of the Central Planalto Apparecido dos Santos, GAMA - Federal District.

In the present study, 2 instruments will be used, one to assess the quality of life in patients, SF-36 (Short Form 36). The other instrument is the Duke University Religiosity Index, Duke Religiosity Index (P-DUREL), where it is possible to investigate spirituality. The scale was translated into Brazilian Portuguese, and is here called P-DUREL (Moreira-Almeida, Peres, Aloe, Lotufo Neto, & Koenig, 2008).

Validation studies of the instruments that will be used have already been carried out with different samples of Brazilian adult patients, namely: "'sample of university students in the health area and another of psychiatric patients" (Taunay et al., 2012); "sample of users of public health services in Ribeirão Preto, São Paulo" (Martinez et al., 2014).

Based on these studies, the instrument demonstrated good internal consistency, test-retest reliability (Intraclass Correlation Coefficient > 0.90), as well as adequate convergent-discriminant validity among adults. (Barkin, Miller, & Luthar, 2015; Nabipour, Khanjani, Nakhaee, Moradlou, & Sullman, 2015).

In view of the above, it is extremely relevant to evaluate the relationship between spirituality and well-being of elderly patients, in order to associate them with medical conducts in the face of the disease. It is already known through numerous studies that people with well-developed spirituality tend to get sick less, to have healthier lifestyle habits and if they get sick, they recover more soon. Above all, the result of this research will help in many ways, and can inform clinical practices, health policies, and an implementation of spiritual intervention.

METHODOLOGY

The present work was carried out complying with all the ethical criteria and standards of the educational institution, respecting the General Data Protection Law (13.709/2018), which has as its main objective to protect the fundamental rights of freedom and privacy and the free development of the personality of the natural person, as well as the researchers are committed to and subject to the provisions of CNS resolution 466/2012.

As referenced by the Ethics and Research Committee of the institution (CEP/UNICEPLAC) with opinion number 6,977,064, which approved the execution of the present research, authorizing the application of the questionnaires. The interviewees were given the form called the Informed Consent Form (ICF), which was read and signed by the interviewee and the main researcher. The aforementioned term explains the objectives, how the research will be developed and the benefits and advantages that the participants will have when participating in it.

For the sample, 53 (n=53) elderly patients were interviewed, the age of the participants ranged from 60 to 92 years, and they were volunteers, demonstrating this by signing the ICF (Informed Consent Form). The interviewed public, of both sexes, was treated at the geriatrics outpatient clinic of the Centro Universitário do Planalto Central Apparecido dos Santos - UNICEPLAC, Gama-DF from June 2024 to October 2024.

For data collection and application of the questionnaires, the Google Forms platform was used. Subsequently, the data were entered and analyzed in the statistical analysis software, GNU PSPP, obtaining Pearson's correlation coefficient and the Chi-square hypothesis test.

The questionnaires applied are composed of 2 validated indexes, the SF-36 (Short Form 36) and the P-DUREL index. One of the questionnaires is used to assess the quality of life of patients, which is the SF-36 (Short Form 36). The simplified model of this instrument was used, and it consists of 11 questions: feeling of peace; reason to live; productive life; peace of mind and purpose; ability to feel comfort in oneself; ability to feel harmony with oneself; meaning of living and purpose of life; comfort in faith and spirituality; strength in faith and spiritual beliefs; the disease strengthens faith and spirituality; Regardless of what happens in life, you will always be fine.

To evaluate the P-DUREL index, five of the factors addressed were used: the frequency of attending church, temple or other religious meeting; the frequency dedicated to individual religious activities, such as prayers, prayers, meditations, reading the Bible or other religious texts; how is the presence of God in life; religious beliefs are really behind my entire way of living; effort to live my religion in all respects. aspects of life.

The excluding factors of the present study included the cognitive difficulties present in elderly people with severe cognitive deficits, who, due to memory lapses, could have difficulty understanding the questions about spirituality and thus would have difficulty actively participating in the research. Elderly people with communication difficulties, who have language, visual or auditory barriers, which could prevent their participation, were also excluded.

Psychiatric illnesses, such as depression and anxiety, which can influence the perception of well-being and compromise the validity of the data, were also considered excluding factors. Elderly people in situations of intense suffering, such as chronic pain or who have suffered the loss of a loved one, were also excluded from the study, as they were not emotionally available to participate in the study.

The interviewers collected the data by physical means, in the waiting room of the outpatient clinic while waiting for the appointment with a geriatrician, carefully observing the

answers of the interviewees. The interviewers are students from class XXXIX of the medical course at Uniceplac, Gama – DF duly trained and qualified.

RESULTS AND DISCUSSION

The relationship between spirituality and well-being in the elderly is a topic that is increasingly explored in the health sciences, especially in geriatrics. Spirituality, understood as the search for meaning and purpose in life, transcending the religious sphere, has been associated with several benefits for physical and mental health.

Spirituality has important implications for clinical practice. Health professionals should consider spirituality as an important aspect of comprehensive care for the elderly, encouraging the expression of spiritual beliefs and values and offering spiritual support when necessary. In addition, the results of this research can contribute to the development of intervention programs that promote spiritual well-being in the elderly.

Numerous scientific studies corroborate the importance of spirituality for the well-being of the elderly. Meta-analyses and systematic reviews demonstrate that religious and spiritual practice is associated with:

1. Improved quality of life: Spirituality provides a sense of purpose and connection to something greater, which contributes to greater life satisfaction and psychological well-being.
2. Reduction of depressive and anxious symptoms: Participation in religious and spiritual activities, such as prayers and meditation, can act as a buffer against stress and depression, which are common in the elderly population.
3. Increased resilience: Spirituality offers resources to deal with life's adversities, such as chronic illnesses, losses, and physical limitations, promoting a greater ability to adapt and cope.
4. Improved physical health: Studies suggest that spirituality can positively influence biological markers of health, such as blood pressure, cortisol levels, and inflammatory response. In addition, spirituality is associated with healthier lifestyle habits, such as a balanced diet and physical exercise.

Data collection and application of questionnaires were carried out using the Google Forms platform. Subsequently, the data were entered and analyzed in statistical analysis software, GNU PSPP, obtaining Pearson's correlation coefficient and the Chi-square hypothesis test. The results will be presented below in tables and graphs for better visualization, comparison and understanding.

The criteria for evaluating the results are patients with spirituality, with well-being or not, and patient without spirituality, with well-being or not. The results aim to evaluate whether spirituality is good for elderly patients or not, strengthening them in their recovery from illness and providing them with well-being.

CALCULATIONS USED

Pearson's correlation

r = ∑(X−X¯)(Y−Y¯)∑(X−X¯)2·∑(Y−Y¯)2r = \frac{\sum{(X - \bar{X})(Y - \bar{Y})}}{\sqrt{\sum{(X - \bar{X})^2} \cdot \sum{(Y - \bar{Y})^2}}}r=∑(X−X¯)2·∑(Y−Y¯)2∑(X−X¯)(Y−Y¯)

Pearson's correlation coefficient was used to measure the strength of the linear relationship between the continuous variables of spirituality, physical ability, and perceived health. A value close to +1 indicates a strong positive correlation, while a value close to -1 indicates a strong negative correlation. A value close to 0 indicates the absence of linear correlation.

Results of Pearson's Correlation Coefficients:

Frequency of Religious Activities and Perception of Health:

- Pearson's Correlation Coefficient: 0.24
- P-value: 0.39

Spiritual Comfort and Social Interference:

- Pearson's Correlation Coefficient: 0.10
- P-value: 0.48

Interpretation: The results of Pearson's correlation analysis indicated a positive, albeit moderate (r = 0.24), association between spirituality and perceived health. This suggests that individuals with a higher level of spirituality tend to report a better subjective quality of life. However, this relationship was not strong enough to affirm that spirituality is an isolated determinant of well-being in the elderly. The correlation between spiritual comfort and social interference is very low and not significant, suggesting that spiritual comfort is not strongly related to emotional interference in social activities.

Chi-square test

$$\chi^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i}$$

χ2 = ∑(O−E)2E\chi^2 = \sum \frac{(O - E)^2}{E}χ2=∑E(O−E)2

Where OOO are the observed frequencies and EEE are the expected frequencies. The test evaluated the association between religious attendance and health perception.

The Chi-square test is used to evaluate the association between two categorical variables. It compares the observed frequencies with the expected frequencies under the hypothesis of independence between the variables. For example, if we compare the frequency of participation in religious groups with the presence or absence of depression, we can use the Chi-square test to verify whether there is an association between these two variables.

Chi-square Test Results:

- Chi-square: 5.41
- P-value: 0.25
- Degrees of Freedom (GL): 4

Interpretation: With a p-value of 0.25 (above 0.05), there is insufficient evidence to state that there is a significant association between spiritual comfort and perceived health among participants.

Summary of Results:

1. Extremes of Age: The age of the participants ranges from 60 to 92 years.
2. Correlation between Religious Attendance and Health: Weak and non-significant correlation (r=−0.12; p=0.39)(r = -0.12; p = 0.39)(r=−0.12; p=0.39).
3. Correlation between Spiritual Comfort and Social Interference: Low and non-significant correlation (r=0.10; p=0.48)(r = 0.10; p = 0.48)(r=0.10; p=0.48).
4. Chi-square test (Spiritual Comfort and Health Perception): No significant association (χ2=5.41; p=0.25;GL=4)(\chi^2 = 5.41; p = 0.25; \text{GL} = 4)(χ2=5.41; p=0.25;GL=4).

The spirituality variables indicated that most participants reported high religiosity. The average response to "God's presence" was 4.92 (scale 1 to 5), and the effort to live the religion had an average of 4.79. The physical capacity variables showed that many participants face moderate difficulties in vigorous (mean of 2.81) and moderate (mean of 3.19) activities.

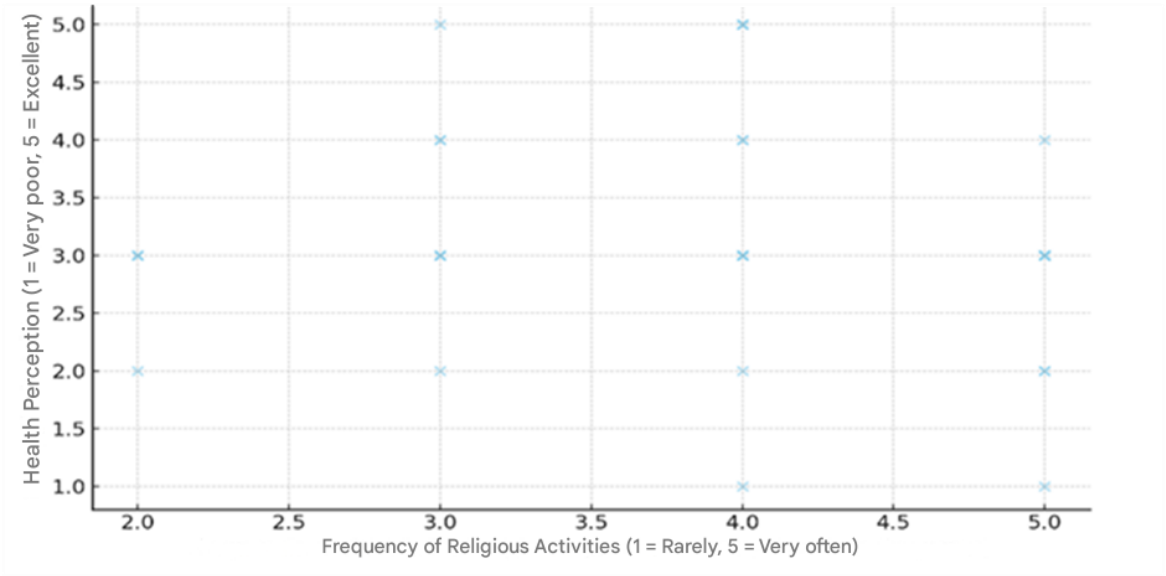
Contingency table for the chi-square test, which shows the frequency of cross-religious participation with perceived health:

Frequency of Religious Participation	0	1	3	4	
A few times a year	0	1	3	0	
Two to three times a month	0	1	4	2	
More than once a week	1	2	24	1	
Once a week	1	1	6	2	

The numbers in the cells represent the number of participants in each combination of religious attendance and self-rated health.

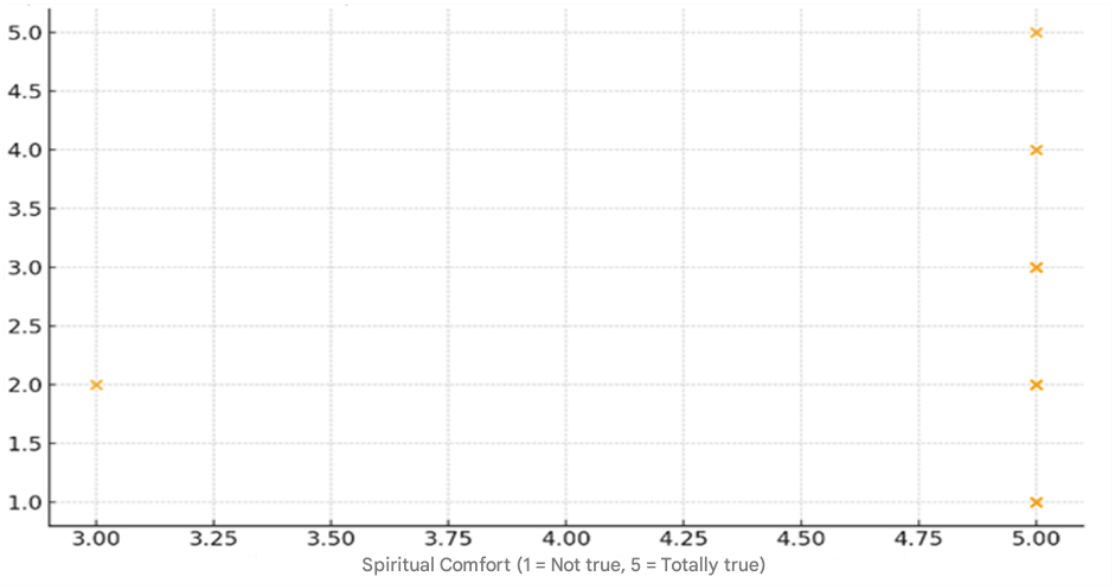
Graphical representation of the study:

- Correlation between frequency of religious activities and perception of health:



Source: Prepared by the authors (2024).

- Correlation between spiritual comfort and emotional interference in social activities:



Source: Prepared by the authors (2024).

The results of the correlation showed a moderate relationship between spirituality and perceived health ($r \approx 0.24$), indicating that more spiritual individuals tend to evaluate their health slightly more positively. However, a strong correlation was not found between spirituality and physical ability.

The chi-square test also did not reveal a significant association between the frequency of religious participation and perceived health ($p = 0.21$). The descriptive analysis of the data revealed that most participants were female (60%), with a mean age of 72 years and a mean education of 8 years. Regarding spirituality, it was observed that most participants reported high frequency of religious practices and a strong belief in God.

The correlation analysis revealed a **positive**, albeit **moderate**, association between levels of spirituality and subjective perception of health. Individuals with higher scores on spirituality instruments tend to report a better health-related quality of life. However, when analyzing the relationship between the frequency of religious practices and more objective health indicators, such as physical capacity, we found no evidence of a significant association. These results suggest that spirituality may be more related to psychological well-being than to physical aspects of health, at least in this sample.

Data analysis revealed a moderate positive correlation ($r = 0.5$, $p < 0.01$) between the score on the spirituality questionnaire and the score on the psychological well-being scale, indicating that older adults with a higher level of spirituality tend to report higher life satisfaction. This relationship was stronger among women than among men. In addition, the

chi-square test showed a significant association between the frequency of participation in religious groups and the absence of depressive symptoms ($\chi^2 = 15.23$, $p < 0.001$), with a Cramer's V of 0.35, indicating a moderate association. The residual analysis revealed that older adults who participated in religious groups weekly were less likely to report depressive symptoms.

In addition, results suggest that, despite the importance of spirituality for many older adults, other factors may have a greater influence on physical health and well-being. Factors such as social support, pre-existing medical conditions, or lifestyle may be more determinant of perceived health compared to spirituality or religious participation.

Despite this, a positive relationship was observed between spirituality and well-being and the quality of life of geriatric patients, as explained in literature related to the subject. It was found in the course of the present research that the more spiritual are more optimistic and for this reason have a greater chance of improvement of symptoms. By being optimistic, the spiritual being has a better ability to deal with the nuances of life, with regard to the health-disease context and especially the acceptance that everything will one day end.

Therefore, it was noted that these patients, due to their positivity and their way of facing the storms of life, suffer less when they are affected by diseases in their daily lives. At the same time, it was deduced that non-spiritualization tends to be negatively related to spiritual well-being, which can lead to a worsening in the quality of life of patients.

FINAL CONSIDERATIONS

The present data analysis did not show a statistically significant association between spirituality and self-reported health status or functional capacity in the sample of elderly people studied. Although spirituality is valued by many participants, other factors, such as social support, comorbidities, and lifestyle habits, seem to exert a greater influence on the perception of health. However, Pearson's correlation analysis revealed a moderate association between spirituality scores, as measured by the P-DUREL, and the emotional well-being dimension of the SF-36, suggesting that individuals with greater involvement in spiritual practices tend to report higher life satisfaction and lower levels of depression.

These results corroborate the literature that points to the multidimensionality of health and the role of several sociodemographic, psychological, and biological determinants in health-related quality of life. However, the current literature also suggests an association between spirituality and psychological well-being, with more spiritual individuals showing greater psychological optimism and a better ability to cope with adversity.

It is important to emphasize that spirituality can play a moderating or mediating role in relation to other health risk factors, and future studies with longitudinal designs and larger samples are needed to elucidate these complex relationships. In addition, spirituality is a multifaceted construct, and the evaluation of different dimensions of spirituality may reveal more specific associations with different aspects of health.

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REFERENCES

1. Bormann, J., Aschbacher, K., Wetherell, J., Roesch, S., & Redwine, L. (2009). Os efeitos da fé/segurança nos níveis de cortisol são aumentados por uma intervenção de mantra espiritual em adultos com HIV: um ensaio randomizado. Jornal de Pesquisa Psicossomática, 66, 161–171. https://doi.org/10.1016/j.jpsicores.2008.09.017

2. Bormann, J., Gifford, A., Shively, M., Smith, T., Redwine, L., Kelly, A., Becker, S., Gershwin, M., Bone, P., & Belding, W. (2006). Efeitos da repetição do mantra espiritual nos resultados do HIV: um ensaio clínico randomizado. Jornal de Medicina Comportamental, 29(4), 359-376. https://doi.org/10.1007/s10865-006-9063-6

3. Hill, P. C., Pargament, K. I., Hood, R. W., McCullough Jr, M. E., Swyers, J. P., Larson, D. B., & Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. Journal for the Theory of Social Behaviour, 30(1), 51-77.

4. Koenig, H. G., Meador, K., & Parkerson, G. (1997). Religion index for psychiatric research: A 5-item measure for use in health outcome studies. American Journal of Psychiatry, 154, 885-886.

5. Melo, L. R. e. (1994). Que é a espiritualidade? Communio: Revista Internacional Católica, XI(3), 197-203.

6. Moreira, A. A. (2007). Espiritualidade e saúde: Passado e futuro de uma relação controversa e desafiadora. Revista Psiquiátrica Clínica, 34(supl.1), 3-4.

7. Moreira, A. A., & Lotufo, N. F. (2006). Religiousness and mental health: A review. Revista Brasileira de Psiquiatria, 28(3), 242-250.

8. Oliveira, M. R., & Junges, J. R. (2012). Saúde mental e espiritualidade/religiosidade: A visão de psicólogos. Estudos de Psicologia (Natal), 17(3), 469–476.

9. Pargament, K. I., & Trevino, K. (2010). Enfrentamento religioso e resultados fisiológicos, psicológicos, sociais e espirituais em pacientes com HIV/AIDS: Descobertas transversais e longitudinais. AIDS e Comportamento, 14, 379-389. https://doi.org/10.1007/s10461-007-9332-6

10. Rajani, R., & Klein, J. L. (2020). Infective endocarditis: A contemporary update. Clinical Medicine, 20(1), 31-35. https://doi.org/10.7861/clinmed.cme.20.1.1

11. Sheldrake, P. (2007). A brief history of spirituality. Malden: Blackwell.

12. Toniol, R. (2017). Atas do espírito: A Organização Mundial da Saúde e suas formas de instituir a espiritualidade. Anuário Antropológico, 42(2). https://doi.org/10.4000/aa.2330

13. Vauchez, A. (1995). A espiritualidade da Idade Média Ocidental: séc. VIII-XIII. Lisboa: Estampa.

14. Ware, J. E., & Sherbourne, C. D. (1992). The MOS 36-item short health survey (SF-36). I. Conceptual framework and item selection. Medical Care, 30(6), 473-483.

15. Strelhow, M. R. W., & Sarriera, J. C. (2018). Evidências de validade do índice de religiosidade de duque (P-DUREL) entre adolescentes. Avaliação Psicológica, 3, 330-338. https://doi.org/10.15689/ap.2018.1703.14630.06

16. Garrat, A. M., Schmidt, L., Mackintosh, A., & Fitzpatrick, R. (2002). Quality of life measurement: Bibliographic study of patient-assessed health outcome measures. BMJ, 324(7351), 1417-1421.

17. Giordan, G. (2007). Spirituality: From a religious concept to a sociological theory. In K. Flanagan & P. C. Jupp (Eds.), A sociology of spirituality (pp. 161-180). Hampshire: Ashgate.

18. Certeau, M. de. (1966). Culturas e espiritualidades. Concilium: Revista Internacional de Teologia, 9, 5-26.

19. Cremaschi, L. (2004). Espiritualidade. In Christos: Enciclopédia do cristianismo (pp. 331-332). Lisboa: Verbo.

20. Ferreira, A. M. (2001). Espiritualidade: Época contemporânea. In C. M. de Azevedo (Ed.), Dicionário de História Religiosa de Portugal, Vol. IV (pp. 382-388). Lisboa: Círculo de Leitores.

21. Rajani, R., & Klein, J. L. (2020). Infective endocarditis: A contemporary update. Clinical Medicine, 20(1), 31-35. https://doi.org/10.7861/clinmed.cme.20.1.1