



## The Importance of Religiosity / Spirituality in the Prognosis of Heart Patients: An Approach to the Covid-19 Pandemic

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**Abstract: Introduction:** Religious and spiritual beliefs have long been held to deal with difficult situations. Studies have shown that psychiatric disorders in the short and long term can be reduced by the practice of religiosity and spirituality (R/S). R/S can influence cardiovascular and pro-inflammatory markers, hypertension, obesity, and diabetes. Studies have shown an 18-25% reduction in mortality rates with R/S practices. **Objective:** This chapter sought to bring together the main results published on the influence of religiosity and spirituality on the cardiac health of patients at risk during the COVID-19 pandemic. **Development:** R/S practices may be associated with clinical outcomes with less progression of CVD, being a protective predictor. However, R/S is in most medical services neglected in cardiac rehabilitation programs. The results showed that increases in religiosity were associated with increases in weight and QoL in patients who underwent cardiac procedures. The findings suggested that higher levels of R/S might be related to improved QoL among patients with CVD. **Conclusion:** The studies covered in this chapter revealed that religiosity and spirituality can act positively on several fronts in the COVID-19 pandemic, influencing the mental and physical health of patients with heart and cardiovascular diseases, in addition to helping to develop preventive and therapeutic measures. Health professionals and managers must be able to address these beliefs, seeking to understand them in each of their patients, offering comprehensive care.

**Keywords:** Cardiovascular diseases, Religiosity, Spirituality, Cardiac procedures, SARS-CoV-2, COVID-19.

## Introduction

In the current scenario of the pandemic caused by SARS-Cov-2 (COVID-19), the lack of a specific treatment or an effective vaccine, associated with a drastic change in social behavior due to blockades and quarantines, has led the world population to a situation of extreme economic, physical and emotional vulnerability [1,2]. Thus, strategies were created to mitigate these impacts on the population, such as support groups, online courses, use of social networks, web meetings, yoga practice, meditation, and other religious and spiritual activities [3]. In this aspect, religious and spiritual beliefs have been held for a long time to deal with difficult situations [4], however, there is still no scientific evidence on the role of religiosity and spirituality (R/S) in physical and mental health during the pandemic of COVID-19, although some studies have already demonstrated the importance of R/S in this serious worldwide problem [5].

In this sense, studies show that spiritual suffering and other emotional disturbances can increase vulnerability to infections [6-9]. Thus, religious faith is a powerful tool to provide good health and well-being [10-12], and as a consequence, there are a reduction in depression, anxiety, sleep disorders, use and abuse of toxic substances, and suicides [12,13]. In this regard, studies have shown that psychiatric disorders in the short and long term [14-16] can be reduced by the practice of R/S. Thus, studies have shown a reduction in serum levels of pro-inflammatory cytokines and an increase in immune functions [17-19]. Furthermore, religious practices and spirituality are associated with increased CD4 cell count, reduced viral load, and reduced mortality [20].

In this context, cardiovascular diseases (CVD), hypertension, diabetes, obesity,

advanced age, respiratory diseases, physical inactivity, and oncological diseases are among the main factors associated with the increased risk of death in COVID-19 [21-23]. R/S can influence cardiovascular and pro-inflammatory markers, hypertension, obesity, and diabetes [24,25]. Furthermore, R/S also seems to influence hospital and public health outcomes, providing better social, psychological, and physical health support, even reducing the number of hospitalizations and the length of each hospital stay [26,27]. Also, meta-analysis studies have shown an 18-25% reduction in mortality rates [28-33]. In addition, systematic review studies have shown that R/S are able to improve outcomes in physical and mental health [34-37].

There is an urgent need to discover, evaluate and improve mechanically targeted interventions to address the social, psychological, and neuroscientific aspects of this pandemic, including tailored psychological interventions to improve well-being and minimize cardiovascular risks in society. Therefore, this chapter sought to gather the main results published on the influence of R/S on the cardiac health of patients at risk during the COVID-19 pandemic.

## Development

R/S practices may be associated with clinical outcomes with less disease progression [38]. In this context, R/S can be a protective predictor of CVD. However, R/S is neglected in most medical services in cardiac rehabilitation (CR) programs [39,40]. To scientifically support the importance of R/S practices for the recovery of cardiac patients, a study evaluated the role of R/S in 105 individuals with a first myocardial infarction or coronary artery bypass surgery who were

referred to a program of 12-week CR [41]. The results support the development of spiritual care interventions for cardiac patients, as well as the assessment of the impact of these interventions on the medical and psychological outcomes of these patients [41].

Despite this, some patients may not be religious or consider that medical treatment should be R/S free. Thus, spiritual care interventions must be individualized [41]. However, patients with stronger religious beliefs tend to be more meticulous about their lifestyle changes and adherence to best practices [42].

In this context, forty-three (43) patients with first-time myocardial infarction or coronary artery bypass surgery performed R/S, quality of life (QoL), and weight practices in a cardiac rehabilitation program before, 1, and 2 years later. The results showed that increases in religiosity were associated with increases in weight and QoL [43].

Furthermore, a systematic review study evaluated 15 articles on the association between R/S and quality of life (QoL) in patients with CVD. Thus, ten studies reported a significant positive association between R/S and QoL, with greater spiritual well-being, intrinsic religiosity, and church attendance positively related to mental and emotional well-being. Therefore, the findings suggested that higher levels of R/S may be related to improved QoL among patients with CVD [44].

Also, a study of 105 patients longitudinally analyzed the effects of R/S in post-myocardial infarction and post-CABG surgery patients during a 12-week cardiac rehabilitation program. The demonstrated relationships between R/S and religious coping and outcomes in cardiac patients provide compelling support for the development of spiritual care interventions for cardiac patients and assessment of the impact of these interventions on the physiological, medical, and psychological outcomes of these patients [41].

Added to this, a cross-sectional study assessed whether R/S can influence treatment adherence in outpatients with heart failure. Patients were assessed for quality of life, depression, religiosity, and spirituality using validated questionnaires. One hundred and thirty (130) patients ( $60 \pm 13$  years; 67% male) were interviewed. An adequate adherence score was observed in 38.5% of patients. The study identified that the combination of R/S and personal beliefs were independent predictors of adherence when adjusted for demographic data, clinical characteristics, and psychosocial instruments. R/S and personal beliefs were the only variables consistently associated with medication adherence in a cohort of outpatients with heart failure, leading to improved patterns of adherence in the complex management of heart failure [45].

Furthermore, it was investigated whether being religious/spiritual is an independent predictor of patient-reported outcomes (PROs) in a large international sample of adults with congenital heart disease, whether the individual level of importance of religion/spirituality is an independent predictor for PROs, and whether these relationships are moderated by the degree to which the respective countries are religious or secular. Thus, the APPROACH-IS was a cross-sectional study, with 4,028 patients from 15 countries. Patients completed questionnaires to measure perceived health status; psychological functioning; health behaviors; and quality of life. Overall, 49.2% of patients considered themselves religious/spiritual. Being religious/spiritual and considering religion/spirituality important in life was positively associated with quality of life, life satisfaction, and health behaviors. However, among patients living in more secular countries, R/S was negatively associated with physical and mental health [46].

Finally, the COVID-19 pandemic has had a significant impact on religious practices

around the world, especially in the urgent need to develop religious faith in the most critical moments of patients with chronic diseases, such as heart disease. Thus, an article showed the impact of COVID-19 on social manifestations of religiosity and, therefore, affecting the spiritual health of patients, not being able to participate in expressions of devotion, such as pilgrimages and religious tourism [47].

## Conclusion

The studies covered in this chapter revealed that religiosity and spirituality can act positively on several fronts in the COVID-19 pandemic, influencing the mental and physical health of patients with heart and cardiovascular diseases, in addition to helping to develop preventive and therapeutic measures. Health professionals and managers must be able to address these beliefs, seeking to understand them in each of their patients, offering comprehensive care.

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