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# INTERACTION OF HEALTH AND RELIGION IN THE MODERN WORLD

## WAYS OF RAPPROCHEMENT

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### Abstract

Spirituality is the fourth aspect of health, along with the physical, mental and social ones. At the same time, religiosity is a private manifestation of spirituality. The purpose of the study is to find out the relationship between health care on the one hand, and spirituality, religious life, a subjective feeling of happiness and good health indicators, on the other. A review of literary sources shows that positive values, beliefs, and the power of faith contribute to health and happiness. Religious participation and spiritual practices have a positive effect on the survival of the sick, low disease incidence, prolonged remissions of chronic diseases, lower anxiety and depression level, healthy lifestyle and compliance. At the same time, better results in treating patients are achieved when doctors and patients have common spiritual and/or religious attitudes.

*Keywords:* care, spirituality, religion, culture, health

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### 1. Introduction

Medicine (Latin ‘*medicina*’ from the phrase ‘*ars medicina*’) is defined as ‘art of healing’, a section of Biology that studies the diagnosis, treatment and prevention of diseases, ways to maintain and promote people’s health and working capacity, prolong life and alleviate suffering from physical and mental illness [1]. The word ‘*medicine*’ is also associated with the Indo-European word ‘*med*’, which means ‘middle’. It means a remedy (measure) of healing, which occupies an intermediate position between miracle and knowledge. Medicine studies man. This knowledge is not limited to natural science and suggests a moral dimension [2]. According to Hippocrates “where there is love for people there is love for one’s art” [3].

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## **2. Christianity and Medicine**

Christian dogma has formed a tradition of ontological understanding of morality. That is why the main Christian moral value is love for God and neighbour. This is the basic principle of being, the law of ‘world order’, without which human life itself loses its meaning. In Christian ethics, the meaning of human life lies in serving one’s neighbour. In this regard, medical practice, the purpose of which is associated with charity, humanity and the salvation of life is a unique profession, mostly focused on Christian values. Studies have shown that the relationship between attitudes toward Christianity and the feeling of happiness was expressed through the meaning of life [4]. It is natural, that the first model of the healthcare social institute, as an active manifestation of charity and philanthropy, was implemented in Christian monasteries [2].

## **3. The level of religiosity - health and happiness**

Epidemiological studies in the field of religion and health show that there is a large number of works performed at a high methodological level and demonstrating an increasing interest in the religious and spiritual manifestations of a person at the time of illness and a variety of health and well-being during the recovery phase [5-7].

True religiosity connected with religious attendance duration and frequency is characterized by the best health manifestations according to the global index of activity restriction (OR = 0.86, 95%; CI: 0.75, 0.98) and depression (OR = 0.80, 95%; CI: 0.69, 0.93) [8]. On the other hand, prayer without religious attendance implies much weaker or zero associations between health practices and religious and spiritual influence on health [9]. Some papers show that people who only pray without religious participation or have no religious education may have worse results in the future: they suffer from depression (OR = 1.46, 95%; CI: 1.15, 1.86) [10]. In contrast, religious participation improves health indicators. The mortality analysis in two large longitudinal studies in Finland [11] and Denmark [12], whose level of religiosity is relatively low, shows a protective role of religious attendance. This suggests that it is an important social determinant of health [13].

A model of more integrated religiosity with consistent involvement in religious practice, religious education and prayer is accompanied by fewer physical limitations in a person’s daily life (OR = 0.76.95%, CI: 0.58, 0.99) and a lower degree of developing depression risk (OR = 0.77.95%, CI: 0.64, 0.92). [10]. Particular attention should be paid to the data of longitudinal studies, which indicate that those who are depressed are later more likely to stop attending religious services [14-16].

A number of explanations were proposed in connection with the association between religious participation and health. Thus, data from a longitudinal mediation analysis [17] suggest that improving social support, reducing tobacco use, more optimism and less depression can be important

mechanisms for believers' health preservation [18]. Other proposed mechanisms include deeper understanding of meaning and purpose of life and greater self-control when attending religious services [6, 19].

A number of papers cite evidence that residents of more religious countries may have a lower level of life satisfaction [20, 21]. The authors try to explain the data obtained by the economic situation in the country [20]. Indeed, Diener et al.'s study uses the level of both individual and public religiosity, as well as the existence of domestic and industrial difficulties. It gives grounds to say that these processes are connected with each other, though with a large share of subjectivity. In any case, data on both the attendance of some religious services and nationally aggregated data of individual attendance or religiosity are necessary to study the recreational effects of attending these services throughout the country.

When we broaden the scope of this problem from Europe to other regions of the world, the analysis carried out does provide some evidence that the associations between religion and health may be stronger in more religious regions. Similar information was obtained through cross-cultural analysis based on individual health self-assessment data [21, 22].

Maximizing citizens' happiness and their life satisfaction is the most important sign of social progress [23-25]. Many researchers believe that it has the greatest impact on the people's subjective well-being, alongside with religion [26, 27]. If happiness is most closely associated with emotions, feelings, or moods [28], then life satisfaction is associated with cognitive assessment and people's judgment about their lives [29].

Empirical studies have shown a positive impact of religion/spirituality on the subjective well-being of people. A large-scale study of Ngamaba and Soni [30] provides evidence that, from the point of view of happiness, people who consider themselves Protestants and Buddhists, possessed a higher feeling of happiness compared to any other group. As for satisfaction with life, Catholics, Protestants and Buddhists felt more life-satisfied than any other group. On the other hand, those who declared themselves Orthodox were not so happy and satisfied with their lives as others. Similar data are cited by other authors, based on international studies [31, 32]. Emotional well-being was more pronounced among Protestants than among Catholics. According to previous studies, Christian Protestants experienced positive emotions more often than Catholics [31, 33]. However, both Protestants and Catholics were equally satisfied with their lives.

Thus, peoples' subjective well-being depends largely on religiousness and the country standard of life. Religious communities that promote advanced values, such as free choice, positive emotions dominance, a sense of gratitude, and strong social ties, can improve life quality for their members. As for the state, it can use health condition, financial satisfaction of the family and freedom of choice as tools to improve its citizens' attitude to life.

#### **4. Culture, Medicine and religion**

A growing multicultural society sets a difficult task for health care providers to guarantee proper care to people with different life experiences, beliefs, value systems, religion, language and health care concepts [34]. Religious beliefs and practices are the foundation of many people's lives, and quality care requires health workers to be both culturally sensitive and culturally competent [35].

The concept of cultural competence and its importance for various patients and families has been especially developed in the last decade. Studies show that cultural competence includes not only accumulated knowledge of cultural practices, but also takes into account the physician's own beliefs [36, 37]. It should always be considered together with various personal, medical and national cultures that clinical practice abounds in [38]. A deep understanding of cultural factors (ethnicity, religion, value systems and nationality) should allow for an adequate understanding of the population mental health. Therefore, cultural competence cannot be divorced from the patient. However, the works often use the essentialist definition of culture, which describes and interprets the concept of health and welfare in relation to (ethical) ethnic, cultural and or racial classifications. In these terms, the culture of health research is often associated with the diagnosis, evaluation and treatment of pre-determined ethnic or cultural groups [39].

A number of works postulate a hypothesis that protective factors aimed at preserving health are more numerous in regions with a high level of religious services attendance viewed in the context of person-culture [40]. The person-culture association is likely to play a certain protective role. But it only states that this combination may be of protective character in some regions and does not describe it in detail. It also does not explain why this effect is almost universally protective in nature from the very beginning.

#### **5. Global health and religion**

Global health is characterized by the global geographical coverage with an emphasis on interdisciplinary cooperation and multilateral coordination, in terms of both clinical care and prevention [41, 42]. Global health care, based on social justice ethics, aims to improve health and achieve equality of all mankind in the field of health [41]. The inscription on the granite wall in the World Health Organization (WHO) entrance hall in Geneva "The attainment of the highest possible level of health by all people" points to the core essence of global health. Global health is based on a deep sense of the ties between people, which overcomes the barriers of race, religion, economy and nationality [43]. The universal language used by global health to describe this phenomenon is evidence of its spirituality and compassion, which is proclaimed by all major religious denominations [44].

Global health often originates from the 19<sup>th</sup> and early 20<sup>th</sup> century missionary medicine. It expressed its spiritual vision and purpose in distinctly religious, initially evangelical Christian terms [45]. The connection between religious institutions and spirituality that nourish religion is inherently complex. Religion is an important social determinant of health, though not sufficiently recognized. It is not only a source of social support and capital but also a powerful regulator of individual and group human behaviour [46].

Undoubtedly, religion influence on global health has been ambiguous. On the one hand, religious communities provide a significant share of health care in many regions of the world [45, 47], especially for marginalized, ignored by society people who are inadequately served by public institutions. Religion can sometimes interfere with basic health tasks. Religious beliefs reinforce intragroup and non-group prejudice. They sometimes interfere with HIV/AIDS treatment and prevention and stigmatize those who suffer from it [48]. Religious ideology is also used to justify child immunization rejection from vector-borne and deadly infections and to counteract family planning and reproductive health services. Despite all their advantages, short-term missions of health professionals and volunteers were criticized for lack of long-term effectiveness, ignoring cultural values and naivety, as well as for undermining rather than strengthening local health systems [45]. In addition, secularism in the health protection system often considers the religious component associated with existential information to be insignificant in medical practice. Even in palliative care, where existential problems are believed to be essential components of holistic care, there are certain difficulties related to the fear of disrupting the patient's privacy [49].

In response to the controversial history, modern global health, seeking equality in health for all nations, still fears religion and its powerful potential which is able to impair the achievements of global health. This area is largely secular, pluralistic, scientifically based, result-oriented, structurally complex and mainly funded by the public sector. In this context, open expression of one's religious beliefs or spiritual values is not encouraged. Indeed, spiritual care is often considered a distraction from much more important practical work to ensure equity in health care and social justice. However, there have been accumulated data about religious participation as a powerful social determinant of health [50, 51]. However, in most public health programmes the role of religion is given relatively little attention due to the frequent obstacles to the development of breakthrough medical technologies, especially when discussing the challenges in maintaining health. Thus, the new realities of modern medical science and practice, such as resuscitation, transplantation, medical genetics and artificial insemination, which reach new levels of influence and control of human life, are in conflict with traditional moral and ideological principles.

Thus, religious participation in general and religious service attendance in particular, is a powerful additional health resource that influences results, ranging from achieving longevity and reducing depression, to surviving cancer and preventing suicide. To neglect it in discussing public health and social

determinants, such as health, is to miss the important aspect of preserving and prolonging a person’s lifespan.

## 6. Medicine, religion and spirituality

Medicine, interacting with religion, preserves confidence in recovery for many people and significantly improves the quality of life. Recently, Pargament defined spirituality as a “sacred zone”, which concerns “the ideas of God, higher powers, divinity and transcendental reality” [52]. In addition, H. Koenig sees spirituality as something different from all other things , such as humanism, values, morality, and mental health, because of its connection with the sacred, the transcendent. “Spirituality is closely associated with the supernatural and religion, although it goes beyond religion”. [53] Spirituality is an idea that has a broader meaning than religiosity. Unlike religiosity, spirituality implies the realization of non-religious goals, such as identity, belonging, health, or well-being [54]. This means that a person can develop spiritually without being religious. In this regard, noteworthy data suggest that spiritual suffering causes more harm than external trouble and can significantly worsen a person’s condition [55]. Spirituality makes a significant contribution to psychological well-being, social connections and sanity, as well as to workplace management. But otherwise, spiritual experience is an essential element of religious development [56]. Spirituality is the link between the personal perception of the disease and its interpretation from the standpoint of evidence-based medicine [4]. This is all the more important because, despite the decrease in religious service attendance, a growing number of people (76% in 2000) admit having spiritual and religious experience (Table 1) [57].

**Table 1.** Answers to questions about observing and interpreting the relationship between religion, spirituality and health [58].

Questions	Answers	Frequency (%)
<b>1. General remarks</b>		
How often does disease experience increase and focus patients` awareness on religion/spirituality?	often/always	64
	sometimes	34
	seldom/never	2
How often have your patients mentioned such religion/spirituality issues as God, prayer, meditation, the Bible, etc.?	often/always	25
	sometimes	51
	seldom/never	24
<b>2. General interpretations</b>		
How much does religion/spirituality influence patients` health in your opinion?	much/very much	56

	not very much	35
	little/no influence	9
Is the influence of religion/spirituality on health generally positive or negative?	positive	85
	negative	1
	indefinite	12
	no influence	2
Do you think God or another supernatural being ever interferes with the health of patients?	yes	54
	no	28
	nobody knows	18
<b>3. Potential positive effects of religion/spirituality</b>		
Does religion/spirituality help prevent 'serious' medical outcomes like heart attacks, infections, or even death?	often/ always	6
	sometimes	33
	seldom/never	61
Does religion/spirituality help patients cope with and endure illness and suffering?	often/always	76
	sometimes	23
	seldom/never	1
Does religion/spirituality have a positive, encouraging psychological effect on patients?	often/always	74
	sometimes	25
	seldom/never	1
How often did your patients get emotional or practical support from their religious community?	often/always	55
	sometimes	41
	seldom/never	4
<b>4. Potential negative effects of religion/spirituality</b>		
Does religion/spirituality cause guilt, anxiety, or other negative emotions that lead to an increase in patient suffering?	often/always	7
	sometimes	38
	seldom/never	55
Does religion/spirituality cause patients to refuse, delay or prohibit drug therapy?	often/always	2
	sometimes	30
	seldom/never	68
How often have your patients used religion/spirituality as a reason not to take responsibility for their health?	often/always	4
	sometimes	29
	seldom/never	67

Caring for the spiritual needs of patients and solving their existential problems correlate with better psychological and spiritual adaptation. WHO declares: "Until recently, medical professions basically followed a medical

model focusing on drugs and surgery in patient treatment. They attached less importance to beliefs and faith in healing, as well as to a doctor, and to a doctor – patient relationship. This reductionist or mechanistic view of patients is no longer satisfactory. Patients and physicians have begun to recognize the value of such elements as faith, hope and compassion in the healing process.” [46] According to some research 93% of cancer patients admitted that religion helped support their hopes for recovery [6].

The link between improved health and spirituality is found in 60-80% of cases in both correlational and longitudinal studies. The basic meaning of spirituality in medicine and health care has been gaining increasing recognition in recent years [59]. At the same time, palliative [60] and ordinary medical care [61] are at the forefront. Solving spiritual problems is associated with improving the well-being and life quality of patients with mental illness, heart disease, cancer and others [62-64]. Spiritual problems are among the most pressing for patients facing a catastrophic illness and decease, as well as for their families and carers [21].

The medical field is based on the key issues of personal health and integrity, the meaning of life and death [21]. The spiritual aspect of these questions is also extremely important. Spiritual component quality improvement is one of the palliative care key issues. In this case, spirituality acts as an important sphere of life, which reflects people’s desire to express attitudes towards themselves, other people and nature [22].

Great importance is also attached to the importance of spirituality for medical professionals. Almost sixty years ago, Abraham Comes reminded delegates to the congress of the American Medical Association that “in order to heal a person, you must first be a person” [65]. In addition to increasing the ability of doctors to perceive and satisfy their patients’ spiritual needs, spirituality offers ways to combat stress and feeling of loss, as well as protection against burnout [66]. In this regard, centres for the study and promotion of spirituality in health care were established in a number of large medical institutions [67]. In addition, spirituality standards were proposed in medical education and clinical practice [59].

Among the chronic patients in rural areas, there is an obvious positive relation between spirituality and hope [68]. In HIV-infected people hope positively correlated with spiritual well-being [69], while in women with breast cancer, hope correlated with individual awareness of the inner ego and a feeling of connection with ‘Higher Power’ [70].

The main strategies that support hope are close relationships with other people, the ability to relax, determination, possessing courage and serenity, clear goals, spiritual beliefs (faith), the ability to return to positive memories, respect and accept the individuality of others [71].



## **7. Doctors` religiosity and the psychological impact on the patient**

Studies have shown that doctors often believe that religion has a positive effect on patients` health. Thus, the results of two clinical studies in one of the academic medical centres suggest that the overwhelming majority of respondent doctors agreed that regular exercise, proper nutrition and quitting smoking in religious patients have a positive effect on health [72, 73]. Religion in this case “provides a support system for patients/families during a crisis” [73]. In contrast, far fewer physicians agree that religious participation reduces morbidity and mortality of patients. H.G. Koenig et al. cite evidence that respondent family doctors are more likely to believe that religion affects mental health (67%) more than physical one (42%) in elderly patients [74]. Regarding physicians` religiosity, B. Siegel et al. found that paediatricians with a higher level of religiousness and spirituality were more likely to believe in the importance of faith in healing [75]. Besides, paediatric patients were willing to discuss religion issues and spirituality with their doctors.

Most conscientious doctors believe that God intervenes in the health of patients. This suggests how religious beliefs can influence patients care in the clinic and give them and their relatives steady hope for life and the departure from life [76]. Compared with their secular colleagues, religious physicians are more likely to share such hopes and understand their background. Religious doctors are much more likely to report that they regularly show interest and discuss religion and spirituality issues with patients [58].

The Association of American Medical Colleges recommends that physicians recognize that their own spirituality “... may affect their attitudes toward patients and patient care” [Association of American Medical Colleges, Contemporary Issues in Medicine: Communication in Medicine: Medical School Objectives, Project Report III, Oct. 1999, <http://www.aamc.org/meded/msop/msop3.pdf>]. Of particular interest is the work of A. Farr et al. [77]. Doctors, as a rule, explain the impact of religious faith and spirituality by the fact that it is religiosity that provides understanding and making decisions related to the disease and the community in which the disease is overcome and tolerated. In addition, the experience of doctors varies according to the extent to which patients and doctors come together around religious consent. This type of aggregation will occur by default due to regional religious differences between patients and doctors. Patients and doctors with common religious beliefs can also unite on a more conscious basis. Patients under stronger and more positive religious influence are more likely to seek out religious doctors and talk to them about the benefits of their religious experience. Similarly, patients under more limited or negative religious influence are more likely to choose secular doctors and talk to them about the dangers of their religious experience. While religious doctors more often ask their patients about their problems and team up with them based on religious consent, doctors with different creeds rely on various clinical evidence regarding religion and health.

Thus, in modern health care the need for a number of programmes related to the topic under discussion has increased. They concern health preservation, the overcoming of negative external influences on a person, health indicator and palliative care improvement through spirituality, moral, culture and religion. This can maintain patients' quality of life throughout its length. Health and happiness of a person are in many respects connected with religiosity, which often prescribes the rules of the most optimal human behaviour in society.

In the modern world there is a need for closer interaction between the system of state medicine and religion in the quest to achieve global health. Understanding religiosity basics by the medical staff makes it possible to achieve better treatment results due to the higher spiritual closeness and belief in the victory over diseases. It also reduces the degree of doctors and nurses' professional burnout.

## References

- [1] A.M. Prokhorov (ed.), *Soviet Encyclopedic Dictionary*, 4<sup>th</sup> edn., Izdatelinstvo Sovetskaya Entsiklopediya, Moscow, 1988, 790.
- [2] I. Siluyanova, *Modern medicine and Orthodoxy*, Compound of the Holy Trinity St. Sergius Lavra, Moscow, 1998, 105.
- [3] G.A. Zakharyin, *Clinical lectures and selected articles*, 2<sup>nd</sup> edn., Pechatnaya A.i. Snegiryovoy, Moscow, 1910, 1.
- [4] S. French and S. Joseph, *Mental Health, Religion and Culture*, **2(2)** (1999) 117–120.
- [5] E.L. Idler (ed.), *Religion as a Social Determinant of Public Health*, Oxford University Press, New York, 2014, 464.
- [6] T.J. VanderWeele, *Religion and health: a synthesis*, in *Spirituality and Religion within the Culture of Medicine: From Evidence to Practice*, J.R. Peteet & M.J. Balboni (eds.), Oxford University Press, New York, 2017, 357–401.
- [7] T.J. VanderWeele, J.W. Jackson and S. Li, *Soc. Psych. Psych. Epid.*, **51(11)** (2016) 1457–1466.
- [8] T.J. VanderWeele, *Eur. J. Epidemiol.*, **32(10)** (2017) 857–861.
- [9] T.J. VanderWeele, J. Yu, Y.C. Cozier, L. Wise, M.A. Argentieri, L. Rosenberg, J.R. Palmer and A.E. Shields, *Am. J. Epidemiol.*, **185** (2017) 515–522.
- [10] L.J. Ahrenfeldt, S. Möller, K. Andersen-Ranberg, A.R. Vitved, R. Lindahl-Jacobsen and N.C. Hvidt, *Eur. J. Epidemiol.*, **32(10)** (2017) 921–929.
- [11] T. Teinonen, T. Vahlberg, R. Isoaho and S.L. Kivela, *Age Ageing*, **34(4)** (2005) 406–409.
- [12] P. la Cour, K. Avlund and K. Schultz-Larsen, *Soc. Sci. Med.*, **62(1)** (2006) 157–164.
- [13] T.J. VanderWeele and H.G. Koenig, *Am. J. Public Health*, **107(1)** (2017) 47–49.
- [14] J. Maselko, R.D. Hayward, A. Hanlon, S. Buka and K. Meador, *Am. J. Epidemiol.*, **175(6)** (2012) 576–83.
- [15] S. Li, O.I. Okereke, S.C. Chang, I. Kawachi and T.J. Vander Weele, *Annals of Behavioral Medicine*, **50(6)** (2016) 876–884.
- [16] T.J. VanderWeele, *Am. J. Epidemiol.*, **177(3)** (2013) 275–276.
- [17] T.J. VanderWeele, *Explanation in Causal Inference: Methods for Mediation and Interaction*, Oxford University Press, New York, 2015, 706.

- [18] S. Li, M. Stamfer, D.R. Williams and T.J. VanderWeele, *JAMA Intern. Med.*, **176(6)** (2016) 777–785.
- [19] H.G. Koenig, D.E. King and V.B. Carson, *Handbook of Religion and Health*, vol. 2, Oxford University Press, Oxford, 2012, 1169.
- [20] E. Diener, L. Tay and D.G. Myers, *J. Pers. Soc. Psychol.*, **101(6)** (2011) 1278–1290.
- [21] G.L. Fricchione, *Compassion and Healing in Medicine and Society: On the Nature and Use of Attachment Solutions to Separation Challenges*, Johns Hopkins University Press, Baltimore, 2011.
- [22] C. Puchalski, B. Ferrell, R. Virani, S. Otis-Green, P. Baird, J. Bull, H. Chochinov, G. Handzo, H. Nelson-Becker, M. Prince-Paul, K. Pugliese and D. Sulmasy, *J. Palliat. Med.*, **12(10)** (2009) 885–904.
- [23] B. Greve, *Introduction*, in *Happiness and social policy in Europe*, B. Greve (ed.), Edward Elgar, Cheltenham, 2010, 1–10.
- [24] J.E. Stiglitz and A. Rigged, *Sci Am.*, **319(5)** (2018) 56–61.
- [25] R. Veenhoven, *Sociological theories of subjective well-being*, in *The science of subjective well-being*, M. Eid & R.J. Larsen (eds.), The Guilford Press, London, 2008, 17–43.
- [26] D. Tovar-Murray, *Journal of Spirituality in Mental Health*, **13(3)** (2011) 182–192.
- [27] S. Flèche and R. Layard, *Kyklos*, **70(1)** (2017) 27–41.
- [28] B. Gustafsson, M. Johansson and E. Palmer, *Ageing Soc.*, **29(24)** (2009) 539.
- [29] D. Coburn, *Social Science and Medicine*, **58(51)** (2004) 41–56.
- [30] K.H. Ngamaba and D. Soni, *J. Relig. Health*, **57(6)** (2018) 2118–2139.
- [31] A.L. Ferriss, *Soc. Indic. Res.*, **60(1–3)** (2002) 275–280.
- [32] J. Rozer and G. Kraaykamp, *Soc. Indic. Res.*, **113(3)** (2013) 1009–1023.
- [33] E.S. Metzl, *Psychol. Aesthet. Crea.*, **3(2)** (2009) 112–123.
- [34] L. Wiener, D.G. McConnell, L. Latella and E. Ludi, *Palliat. Support. Care*, **11(1)** (2013) 47–67.
- [35] N. Contro, B. Davies, J. Larson and B. Sourkes, *Journal of Social Work in End-of-Life & Palliative Care*, **6(3–4)** (2010) 185–204.
- [36] A. Surbone, *Support. Care Cancer*, **16(3)** (2008) 235–240.
- [37] A.K. Kumagai and M.L. Lypson, *Acad. Med.*, **84(6)** (2009) 782–787.
- [38] J. Taylor, *Acad. Med.*, **78(6)** (2003) 555–559.
- [39] C.H. Mayer and D. Geldenhuys, *Int. Rev. Psychiatr.*, **26(3)** (2014) 263–264.
- [40] O. Stavrova, *Soc. Psychol. Pers. Sci.*, **6(8)** (2015) 911–922.
- [41] J.P. Koplan, T.C. Bond, M.H. Merson, K.S. Reddy, M.H. Rodriguez, N.K. Sewankambo and J.N. Wasserheit, *Lancet*, **373(9679)** (2009) 1993–1995.
- [42] R. Beaglehole and R. Bonita, *Lancet*, **387(10021)** (2016) 848.
- [43] D.G. Addiss and J.J. Amon, *Health Hum. Rights*, **21(1)** (2019) 19–32.
- [44] K.A. Armstrong, *The Spiral Staircase: My Climb out of Darkness*, Random House, New York, 2004, 336.
- [45] P.J. Brown, *Religion and Global Health*, in *Religion as a Social Determinant of Global Health*, E. Idler (ed.), Oxford University Press, Oxford, 2014, 273–297.
- [46] E. Idler, *Religion: The Invisible Social Determinant*, in *Religion as a Social Determinant of Global Health*, E. Idler (ed.), Oxford University Press, Oxford, 2014, 1–23.
- [47] S. Mwenda, *Contact*, **190** (2011) 2–3.
- [48] G. Dalmida and S. Thurman, *HIV/AIDS*, in *Religion as a Social Determinant of Global Health*, E. Idler (ed.), Oxford University Press, Oxford, 2014, 369–381.
- [49] A. Lilja, V. DeMarinis, A. Lehti and A. Forssén, *BMJ Open*, **6** (2016) e011647.

- [50] S.G. Post, C.M. Puchalski and D.B. Larson, *Ann. Intern. Med.*, **132(1)** (2000) 578–583.
- [51] F.A. Curlin and D.E. Hall, *J. Gen. Intern. Med.*, **20(4)** (2005) 370–374.
- [52] K.I. Pargament, *Spiritually integrated psychotherapy: Understanding and addressing the sacred*, Guilford, New York, 2007, 384.
- [53] H.G. Koenig, *Int. J. Appl. Psychoanal. Stud.*, **7(2)** (2010) 116–122.
- [54] R. Sawatzky, P.A. Ratner and L. Chiu, *Soc. Ind. Res.*, **72(2)** (2005) 153–188.
- [55] R. Hebert, B. Zdaniuk, R. Schulz and M. Scheier, *J. Palliat. Med.*, **12(6)** (2009) 537–545.
- [56] M. Wnuk and J.T. Marcinkowski, *J. Relig. Health*, **53(1)** (2014) 56–67.
- [57] D. Hay and K. Hunt, *Understanding the spirituality of people who don't go to church: a report on the findings of the adults' spirituality project*, University of Nottingham, Nottingham, 2000, 32.
- [58] F.A. Curlin, M.H. Chin, S.A. Sellergren, C.J. Roach and J.D. Lantos, *Med. Care*, **44(5)** (2006) 446–453.
- [59] C. Puchalski, R. Vitillo, S.K. Hull and N. Reller, *J. Palliat. Med.*, **17(6)** (2014) 654–656.
- [60] A. Edwards, N. Pang, V. Shiu and C. Chan, *J. Palliat. Med.*, **24(8)** (2010) 753–770.
- [61] L.P. Lewinson, W. McSherry and P. Kevern, *Nurs. Educ. Today*, **35(6)** (2015) 806–814.
- [62] A. Moreira-Almeida, H.G. Koenig and G. Lucchetti, *Rev. Bras. Psiquiatr.*, **36(2)** (2014) 176–182.
- [63] J.J. Naghi, K.J. Philip, A. Phan, L. Cleenewerck and E.R. Schwarz, *Journal of Religion and Health*, **51(4)** (2012) 1124–1136.
- [64] K.M. Piderman, S. Kung, S.M. Jenkins, T.T. Euerle, T.J. Yoder, G.M. Kwete and M.I. Lapid, *Curr. Oncol. Rep.*, **17(2)** (2015) 6.
- [65] D.P. Sulmasy, *The Rebirth of the Clinic: An Introduction to Spirituality in Healthcare*, Georgetown University Press, Washington DC, 2006, 262.
- [66] B.R. Doolittle, D.M. Windish and C.B. Selig, *Journal of Graduate Medical Education*, **5(2)** (2013) 257–261.
- [67] C.M. Puchalski, *Proc. (Bayl. Univ. Med. Cent.)*, **14(4)** (2001) 352–357.
- [68] C. Craig, C. Weinert, J. Walton and B. Drewnski-Robinson, *Journal of Holistic Nursing*, **24(1)** (1999) 27–35.
- [69] A.M. Abdel-Khalek, *Soc. Behav. Personal.*, **34(2)** (2006) 139–150.
- [70] L.M. Gibson, *Appl. Nurs. Res.*, **16(4)** (2003) 236–244.
- [71] K. Herth, *J. Adv. Nurs.*, **15(11)** (1990) 1250–1259.
- [72] J.T. Chibnall and C.A. Brooks, *South Med. J.*, **94(4)** (2001) 374–379.
- [73] C.A. Armbruster, J.T. Chibnall and S. Leggett, *Pediatrics*, **111** (2003) e227–e235.
- [74] H.G. Koenig, L.B. Bearon and R. Dayringer, *J. Fam. Pract.*, **28(4)** (1989) 441–448.
- [75] B. Siegel, A.J. Tenenbaum, A. Jamanka, L. Barnes, C. Hubbard and B. Zuckerman, *Ambul. Pediatr.*, **2(1)** (2002) 5–10.
- [76] D.P. Sulmasy, *JAMA*, **296(11)** (2006) 1385–1392.
- [77] F.A. Curlin, S.A. Sellergren, J.D. Lantos and M.H. Chin, *Arch. Intern. Med.*, **167(7)** (2007) 649–654.