The influence of religiosity on health

Influência da religiosidade na saúde

Rômulo Romeu da Nóbrega Alves ¹ Humberto da Nóbrega Alves ² Raynner Rilke Duarte Barboza ³ Wedson de Medeiros Silva Souto ³

> Abstract *The relationship between religion and* health has been a subject of interest in the past and in the latest years becoming increasingly visible in the social, behavioral, and health sciences. Among several approaches to be considered, the present work provides a briefly discuss concerning the bond between health and religiosity in the cure process and diseases treatment. Several investigations show that religious participation is related with better outcomes for persons who are recovering from physical and mental illness, also the psychology science have committed special issues to positive correlations between religious belief and practice, mental and physical health and longevity. On the other hand, religion may also be associated with negative outcomes and the inappropriate use of health services as fanaticism, asceticism, mortifications and oppressive traditionalism. The potential for both positive and negative effects of spirituality on health, combined with the high levels of engagement with spirituality suggests that this area is ripe for future sustained research. Independent of the possible mechanisms, if individuals receive health profits by the religion; those should be motivated, respecting the individual faith of each one. Key words Relationship, Religious belief, Health,

Resumo Historicamente, as relações entre religião e saúde foram assuntos de interesse no passado e,atualmente, tornaram-se crescentemente visíveis nas reuniões sociais, de comportamento e ciências da saúde. Dentre as várias questões a serem consideradas, o presente trabalho apresenta uma breve discussão sobre as relações entre a saúde e a religiosidade no processo de cura e tratamento de doenças. Várias investigações mostram que a participação religiosa está relacionada a efeitos benéficos para pessoas que estão em recuperação de doenças físicas e mentais, inclusive a psicologia aborda questões especiais sobre as correlações positivas entre convicção e prática religiosa, saúde mental, física e longevidade. Por outro lado, a religião também pode ser associada a resultados negativos e usos impróprios de serviços de saúde, como fanatismo, asceticismo, mortificações e tradicionalismo opressivo. O potencial para efeitos positivos e negativos de espiritualismo em saúde, combinado com os altos níveis de compromisso com a espiritualidade, evidencia a necessidade de pesquisas futuras. Independente dos possíveis mecanismos, se os indivíduos lucram em termos de saúde por conta da religião, esses deveriam ser motivados, respeitando as convicções individuais de cada um.

Palavras-chave Relações, Crenças religiosas, Saúde, Espiritualidade

Biológicas (Zoologia), Universidade Federal da

Paraíba.

Spirituality

¹ Departamento de Biologia, Universidade Estadual da Paraíba. Av. das Baraúnas 351, Campus Universitário. 58109-753 Campina Grande PB. romulo_nobrega@yahoo.com.br ² Projovem/JP, Prefeitura Municipal de João Pessoa. ³ Programa de Pós Graduação em Ciências

Introduction

The relationship between religion and health has been of longstanding interest in the health, social, and behavioral sciences, spanning a period of >100 years¹⁻⁴. Research examining the relationships between religion and the health of individuals and populations has become increasingly visible in the social, behavioral, and health sciences⁵. Systematic programs of research investigate religious phenomena within the context of coherent theoretical and conceptual frameworks that describe the causes and consequences of religious involvement for health outcomes⁵. Despite sustained attention to these concerns, health research (i.e. epidemiological and medical research) is generally unfamiliar with extant developments in the conceptualization and measurement of religion involvement⁶.

There are many reasons why studies Religion and Health Relationships and their implications should be carried out and recorded. Among several approaches to be considered, this paper briefly discusses those concerning the bond between the health and the religiosity in the cure process and diseases treatment.

Religions and health in history

Historically, traditional cultures recognized the importance of belief and expectancy within the healing encounter and created complex rituals and ceremonies designed to elicit or foster the expectancy and participation of healer and patient, as well as the community as a whole. Spiritual healing techniques have been a fundamental component of the healing rituals of virtually all societies since the advent of man7. Early Egyptian and Greek civilizations depicted the ancient healing practice of the laying on of hands in their hieroglyphics, pictographs and cuneiform writings8. Biblical reference to healing performed by Jesus, Peter, John and others helped make spiritual healing a commonly accepted practice of early Christianity9. Whether used for curing illness or preventing disease, the primary purpose of most forms of spiritual healing was to maintain the physical, psychological and spiritual well-being of the individual and the community.

Traditionally, spiritual healing practitioners believed that illness manifested on the physical level due to an imbalance in the psychological or spiritual aspects of the individual. The role of the healer was to correct this imbalance by utilizing culturally accepted and proven methods of healing^{10,11}. Within this framework, the diagnosis of illness and the development of a treatment regimen were undertaken from a holistic perspective which cultivated the patient's belief and expectancy of healing¹²⁻¹⁴.

With the advent of modern medicine, however, the significance of cultivating belief and expectancy within the healing encounter was abandoned in reliance upon a reductionist, mechanistic and non-ritualistic approach to healing¹⁵. This approach ignored the psychological and spiritual aspects of health and focused on biological abnormalities and specific microorganisms as the primary cause of disease⁷. Recently, however, research within the field of mind/body medicine has re-examined the relationship between the individual's psychological and spiritual perspective and their physical health^{16,17}.

Religion and health researches

Despite recognized methodological and analytical issues⁵, overall the findings indicate a consistent and salutary influence of religious factors on individual and population health^{3,18}. In the past several years, systematic research on religious involvement and physical and mental health has begun to explore the functional mechanisms linking these constructs¹⁹⁻²⁴.

In recent years, several books have been published^{21,25-31} and major journals in public health and medicine have featured empirical research, literature reviews, and special issues on these and related topics^{3,19-21,27,28,32-36}. There are a number of excellent reviews of studies of religious and spiritual healing and the nature, functional properties, and efficacy of various healing modalities³⁷.

Studies involving Christian denominations and sects currently dominate research into the effects of religion on health³⁸⁻⁴⁰. Evidence from epidemiological and clinical studies and medical research supports the impact of religious affiliation and involvement on a diverse array of mental and physical health indicators and disease states. This literature encompasses studies of cancer, hypertension, stroke, other cardiovascular conditions, gastrointestinal diseases, overall and cause-specific mortality, indicators of physical disability, self ratings of health status, and reports of symptomatology⁴¹⁻⁵², encompassing numerous disease entities or types of rates²³.

Several investigations indicate that religious involvement is associated with better outcomes

for persons who are recovering from physical and mental illness⁵³⁻⁵⁵. One recent study of immune system function in a sample of older adults⁵⁶ found a weak association between religious-service attendance and immune system status, independent of effects of depression and negative life events. Overall, better physical health status, as measured by a variety of indicators, is moderately associated with higher levels of religious involvement, even when defined by numerous indicators and examined within diverse groups (i.e. as defined by clinical disorder, gender, age cohort, denomination, race/ethnicity, and social class) within the population^{6,20,23}.

Evidence concerning the impact of religion on indicators of mental health²² indicates strong positive associations between religious involvement and mental health outcomes. Studies (primarily epidemiologic) indicate that religious factors have a salutary influence on a diverse set of outcomes, including depression, drug and alcohol use, delinquent behavior, suicide, psychological distress, and certain functional psychiatric diagnoses⁵⁷⁻⁶⁰.

Religious strategies may be particularly important for coping with mental and physical illness and disability. Persons who use religious coping appear to handle their conditions more effectively than those who do not^{53,61,62}.

Several studies indicate that religious coping is significant for mental and physical health outcomes for a variety of life circumstances, especially health problems^{53,63} and bereavement^{64,65}. Religious coping also appears to reduce levels of depression and anxiety^{60,66} in connection with bereavement and other loss events⁶⁷.

The significance and relationship of a given religious factor to health outcomes will potentially vary across distinct social categories (e.g. race/ethnicity, denomination, age, social class, and region)⁵. That religion is instrumental in shaping behaviors (e.g. risk taking and protective behaviors) that are consequential for physical and mental health. This includes directly and formally proscribing specific behaviors that are health risks (e.g. dietary restrictions and prohibitions against the use of alcohol and tobacco), as well as encouraging behaviors that are conducive to health (e.g. regular exercise). These distinctive patterns of lifestyle and health behaviors could result in lower rates of chronic and acute illnesses within identified religious groups⁵. Additionally, religious adherents may have reduced risk for stressful life circumstances because religious teachings embody general guidelines for behavior (e.g. moderation and conformity) that discourage individual deviance and encourage interpersonal harmony⁶⁸.

Participation in religious groups confers a number of benefits in terms of enhanced social resources. These advantages include the size of one's social networks, frequency of interactions with network members, both actual and anticipated (subjective-support) exchanges of various types of informal and formal assistance (i.e. instrumental, socioemotional, and appraisal assistance), and positive perceptions of support relationships (e.g. satisfaction and anticipated help)^{68,69}.

The use of religion to promote individual and community healing (i.e. restorative activities) has been associated with the experience of strong, positive emotions regarding the self, such as feelings of self-worth, competence, and connection with others⁷⁰.

While the literature contains over two hundred experimental studies examining various forms of spiritual healing such as Therapeutic Touch, Intercessory Prayer, Reiki, LeShan, etc. only a small percentage of these studies have attempted to systematically assess the outcome of spiritual healing therapies and correlate the results with psychological aspects of health and illness including patient and healer belief or expectancy⁷¹⁻⁷⁵.

Research in religion and health has suggested positive relationships, and most recently has concentrated on the experience of religion, or spirituality⁷⁶. Levin^{77,78} investigated the effects of religiosity on numerous conditions, including chronic disease, functional disability, psychological wellbeing, and subjective perceptions of health, while controlling for age, race, ethnicity, gender, social class, denomination, as well as other social and psychological factors. Kaplan⁷⁹ found religious protections, such as increased hope, social personal regulation, and regulation of depression, fear and anxiety, to have positive effects on a patient's cardiovascular system. Benson⁸⁰ showed how prayer provided emotional comfort, and thus, improved health. Idler81 concluded that religious beliefs may indeed alter a person's perception of illness and disabilities and provide greater comfort. Koenig66 detailed the numerous ways that the "healing power of faith" can improve one's health, including relaxation effects, coping and social support. An increasing replication of studies finds a correlation between religious belief and practice and mental and physical health and longevity82.

Several major journals in the field of psychology have recently devoted special issues to posi-

tive correlations between religious belief and practice and mental and physical health and longevity⁸². In addition, this research suggests that religious belief and practice involve both ordinary psychological processes and unique psychological-spiritual contents. On one hand, religion exerts its influence through common psychological channels like social support, healthy behavior, a sense of coherence, and medical compliance. On the other hand, by orienting motivation towards matters of ultimate concern and attributing sacredness to ordinary activities, religion also plays a distinctive role in human life⁸².

Along with the presumed benefits of religious involvement for health, religion may also be associated with negative outcomes, such as poorer mental and physical health status, negative coping behaviors, and inappropriate use of health services^{20,21}. Ness⁸³ verified negative and positive aspects of the religious convictions in the physical and mental health; among the negatives could be mentioned the fanaticism, asceticism, mortifications and oppressive traditionalism; the positive aspects are personal health, community health, complementarity of the religious conceptions with the medical conceptions of human well being.

In summary, the religion seems to be a psychosocial factor and the biological benefit in the recovery of the physical and mental diseases. Independent of the possible mechanisms, if individuals receive health profits by the religion; those should be motivated, respecting the faith individuality of each one.

Investigations of religion and health have ethical and practical implications that should be addressed by the public, health professionals, the research community, and the clergy. Future research directions point to promising new areas

of investigation that could bridge the constructs of religion and health. The potential for both positive and negative effects of spirituality on health, combined with the high levels of engagement with spirituality, suggests that this area is ripe for future sustained research. Additional prospective studies are also needed to enhance our understanding of the temporal ordering of the relationship between exposure to spirituality and the timing of health consequences, and to strengthen our confidence in causal inferences.

Conclusion

In summary, the religion seems to be a psychosocial factor and the biological benefit in the recovery of the physical and mental diseases. Independent of the possible mechanisms, if individuals receive health profits by the religion; those should be motivated, respecting the faith individuality of each one. Investigations of religion and health have ethical and practical implications that should be addressed by the lay public, health professionals, the research community, and the clergy. Future research directions point to promising new areas of investigation that could bridge the constructs of religion and health.

The potential for both positive and negative effects of spirituality on health, combined with the high levels of engagement with spirituality suggests that this area is ripe for future sustained research. Additional prospective studies are also needed to enhance our understanding of the temporal ordering of the relationship between exposure to spirituality and the timing of health consequences, and to strengthen our confidence in causal inferences.

Collaborators

RRN Alves and HN Alves worked in the bibliographical classification, conception and the article final composition; RRD Barboza worked in the conception, final composition and final language translation of the article; WMS Souto worked in the conception, composition and final formatting.

References

- Levin JS, Schiller PL. Is there a religious factor in health?. J. Relig. Health 1987; 26:9-36.
- Levin JS, Tobin SH. Religion and psychological wellbeing. In: Kimble MA, McFadden SH, Ellor JW, Seeber JJ, editors. Aging, Spirituality, and Religion: A Handbook Minneapolis: Fortress; 1996. p. 30–46.
- Levin JS, Vanderpool HY. Is frequent religious attendance really conducive to better health: toward an epidemiology of religion. *Soc. Sci. Med.* 1987; 24:589-600
- Levin JS, Vanderpool HY. Is religion therapeutically significant for hypertension? Soc. Sci. Med. 1989; 29:69–78.
- Chatters LM. Religion and health: public health research and practice. *Annu. Rev. Public Health* 2000; 21:335–367.
- Matthews DA, McCullough ME, Larson DB, Koenig HG, Swyers JP, Milano MG. Religious commitment and health status. *Arch. Fam. Med.* 1998; 7:118–124.
- Wirth DP. Implementing spiritual healing in modern medical practice. *Adv. J. Mind-Body Health* 1993; 9:69-81.
- Krieger D. The imprimatur of nursing. Am. J. Nursing 1975; 5: 784-787.
- Bresler DE. Free Yourself From Pain. 1st ed. New York: Simon & Schuster; 1979.
- Krippner S, Villoldo A. *The Realms of Healing* 3rd ed. Millbrae: Celestial Arts; 1976.
- Achterberg J. Imagery in Healing: Shamanism and Modern Medicine. 1st ed. Boston: New Science Library; 1985.
- Pelletier K. Mind as Healer, Mind as Slayer. 8th ed. New York: Dell; 1977.
- Kleinman A. Patients and Healers in the Context of Culture: an Exploration of the Borderland Between Anthropology, Medicine, and Psychiatry. Berkeley: University of California Press; 1980.
- Kleinman A, Eisenberg L, Good B. Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research. *Ann. Int. Med.* 1978; 88:251-258
- Myers SS, Benson H. Psychological factors in healing: a new perspective on an old debate. *Behav. Med.* 1991; 18:5-11.
- Ader R, Felten DL, Cohen N. Psychoneuroimmunology. 2nd ed. New York: Academic Press; 1991.
- Houldin AD, Lev E, Prystowsky MB, Redei E, Lowery BJ. Psychoneuroimmunology: a review of literature. *Holist. Nursing Pract.* 1991; 5:10-21.
- Levin JS, Chatters LM, Ellison CG, Taylor RJ. Religious involvement, health outcomes, and public health practice. *Curr. Issues Public Health* 1996; 2:220–225.
- Chatters LM, Levin JS, Ellison CG. Public health and health education in faith communities. *Health Behav. Educ.* 1998; 25:689–699.
- Ellison CG, Levin JS. The religion health connection: evidence, theory and future directions. *Health Educ. Behav.* 1998: 25:700–720.
- Levin JS. Religion and health: is there an association, is it valid and is it causal?. Soc. Sci. Med. 1994; 38:1475–1482.

- Levin JS, Chatters LM. Research on religion and mental health: an overview of empirical findings and theoretical issues. In: Koenig HG. *Handbook of Religion and Mental Health*. San Diego: Academic; 1998. p. 34–50.
- Levin JS, Chatters LM, Ellison CG, Taylor RJ. Religious involvement, health outcomes, and public health practice. *Curr. Issues Public Health* 1996; 2:220–225.
- Newberg AB, d'Aquili EG. The neuropsychology of spiritual experience. In: Koenig HG. *Handbook of Religion and Mental Health*. San Diego: Academic; 1998. p. 75–94.
- Koenig HG. Research on Religion and Aging Westport: Greenwood; 1995.
- Koenig HG. Religious attitudes and practices of hospitalized medically ill older adults. *Int. J. Geri*atr. Psychiatry 1998; 13:213-224.
- Levin JS, Tobin SH. Religion and psychological wellbeing. In: Kimble MA, McFadden SH, Ellor JW, Seeber JJ, editors. Aging Spirituality, and Religion: A Handbook Minneapolis: Fortress; 1996. p. 30–46.
- Levin JS, Vanderpool HY. Religious factors in physical health and the prevention of illness. In: Pargament KI, Maton KI, Hess RE, editors. *Religion and Prevention in Mental Health: Research, Vision, and Action.* New York: Haworth; 1992. p. 83–103.
- Pargament KI. The Psychology of Religion and Coping Theory, Research, Practice. New York: Guilford; 1997. 548 p.
- Pargament KI, Maton KI, Hess RE, editors. Religion and Prevention in Mental Health. New York: Haworth; 1992.
- Schumaker JF, editor. Religion and Mental Health. New York: Oxford University Press; 1992.
- Larson DB, Sherrill KA, Lyons JS, Craigie FC Jr, Theilman SB. Associations between dimensions of religious commitment and mental health reported in the American Journal of Psychiatry and Archives of General Psychiatry: 1978–1989. Am. J. Psych. 1992; 149:557–559.
- Levin JS. Religious factors in aging, adjustment, and health: a theoretical overview. *J. Rel. Aging* 1988; 4:133–146.
- McFadden SH. Religion, spirituality and aging. In: Birren JE, Schaie KW. *Handbook of the Psychology of Aging*. San Diego: Academic; 1996. p. 162–77.
- Vanderpool HY, Levin JS. Religion and medicine: how are they related? J. Relig. Health 1990; 29:9–20.
- Weaver AJ, Samford JA, Larson DB, Lucas LA, Koenig HG, Patrick V. A systematic review of research on religion in four major psychiatric journals, 1991– 1995. J. Nerv. Ment. Dis 1998; 186:187–189.
- Jonas WB, Levin LK. Essentials of Complementary and Alternative Medicine. Baltimore: Lippincott, Williams & Wilkins; 1999.
- Gorsuch RL. Measurement in psychology of religion revisited. J. Psychol. Christianity 1990; 9:82–92.

- 39. Hill PC. An overview of measurement issues and scales in the scientific study of spirituality. In: Studying Spirituality and Alcohol. Bethesda: National Institute of Alcohol Abuse and Alcoholism/Fetzer Institute; 1999.
- Hood RW Jr, Spilka B, Hunsberger B, Gorsuch RL. *The Psychology of Religion: An Empirical Approach*. New York: Guilford; 1996.
- Bryant S, Rakowski W. Predictors of mortality among elderly African Americans. *Res. Aging* 1992; 14:50– 67
- Colantonio A, Kasl SV, Ostfeld AM. Depression symptoms and other psychosocial factors as predictors of stroke in the elderly. *Am. J. Epidemiol.* 1992; 136:884–894.
- Craigie FC, Larson DB, Lieu IY. References to religion in the *Journal of Family Practice* dimensions and valence of spirituality. *J. Fam. Pract.* 1990; 30:477–480.
- Dwyer JW, Clarke LL, Miller MK. The effect of religious concentration and affiliation on county cancer mortality rates. *J. Health Soc. Behav.* 1990; 31:185-202
- Ferraro KF, Albrecht-Jensen CM. Does religion influence adult health? *J. Sci. Stud. Relig* 1991; 30:193–202
- Hummer RA, Nam CB, Ellison CG. Religious involvement and U.S. adult mortality. *Demography* 1999; 36:273–285.
- Kennedy GJ, Kelman HR, Thomas C, Chen J. The relation of religious preference and practice to depressive symptoms among 1,855 older adults. *J. Gerontol. B Psychol. Sci.* 1996; 51:301–308.
- Koenig HG, Hays JC, George LK, Blazer DG, Larson DB, Landerman LR. Modeling the cross-sectional relationships between religion, physical health, social support, and depressive symptoms. Am. J. Geriatr. Psych. 1997; 5:131-145.
- Koenig HG, Hays JC, Larson DB, Cohen HJ, Blazer DG. The relationship between religious activities and blood pressure in older adults. *Int. J. Psych. Med.* 1998; 28:189–213.
- Krause N. Neighborhood deterioration, religious coping, and changes in health during later life. Gerontology 1998a; 38:653-664.
- Krause N. Stressors in highly valued roles, religious coping, and mortality. *Psychol. Aging* 1998b; 13:242– 255.
- Larson DB, Koenig HG, Kaplan BH, Greenberg RF, Logue E, Tyroler HA. The impact of religion on blood pressure status in men. *J. Relig. Health* 1989; 28:265–278.
- Oxman TE, Freedman DH, Manheimer ED. Lack of social participation or religious strength and comfort as risk factors after cardiac surgery in the elderly. *Psychosom. Med.* 1995; 57:5–15.

- Pressman P, Lyons JS, Larson DB, Strain JS. Religious beliefs, depression, and ambulation status in elderly women with broken hips. *Am. J. Psych.* 1990; 147:758–760
- Propst LR, Ostrom R, Watkins P, Dean T, Mashburn D. Comparative efficacy of religious and nonreligious cognitive behavioral therapy for the treatment of clinical depression in religious individuals. *J. Consult. Clin. Psychol.* 1992; 60:94–103.
- Koenig HG, Cohen HJ, George LK, Hays JC, Larson DB, Blazer DG. Attendance at religious services, interleukin- 6, and other biological parameters of immune function in older adults. *Int. J. Psych. Med.* 1997; 27:233–250.
- Cochran JK, Beegley L, Bock EW. The influence of religious stability and homogamy on the relationship between religiosity and alcohol use among Protestants. *J. Sci. Stud. Relig.* 1992; 32:441–456.
- 58. Gartner JD, Larson DB, Allen GD. Religious commitment and mental health: a review of the empirical literature. *J. Psychol. Theol.* 1991; 19:6–25
- Idler EL, Kasl SV. Religion among disabled and nondisabled persons II: Attendance at religious services as predictors of the course of disability. J. Gerontol. 1997; 52b:S306–S316.
- Williams DR, Larson DB, Buckler RE, Heckman RC, Pyle CM. Religion and psychological distress in a community sample. *Soc. Sci. Med.* 1991; 32:1257– 1262.
- Pargament KI, Ensing DS, Falgout K, Olsen H, Reilly B, Van Haitsma K, Warren R. Religious coping efforts as predictors of the outcomes of significant negative life events. *Am. J. Commun. Psych.* 1990; 18:793–824
- Pargament KI, Smith BW, Koenig HG, Perez L. Patterns of positive and negative coping with major life stressors. *J. Sci. Stud. Relig.* 1998; 37:710–724.
- Koenig HG, Cohen HJ, Blazer DG, Kudler HS, Krishnan KPP, Sibert TE. Religious coping and cognitive symptoms of depression in elderly medical patients. *Psychosomatics* 1995; 36:369–375.
- Krause N. Stress, religiosity, and psychological wellbeing among older blacks. *J. Aging Health* 1992; 4:412–439.
- McIntosh DN, Silver RC, Wortman CB. Religion's role in adjustment to a negative life event: coping with the loss of a child. *J. Pers. Soc. Psych.* 1993; 65:812-821.
- 66. Koenig, HG. The Healing Power of Faith: Science Explores Medicine's Last Great Frontier. New York: Simon & Schuster; 1999.
- Mattlin JA, Wethington E, Kessler R. Situational determinants of coping and coping effectiveness. J. Health Soc. Behav. 1990; 31:103–122.
- Ellison CG. Religion, the life-stress paradigm, and the study of depression. In: Levin JS, editor. *Reli*gion in *Aging and Health: Theoretical Foundations* and *Methodological Frontiers*. Thousand Oaks: Sage; 1994. p. 78–121

- Ellison CG, George LK. Religious involvement, social ties, and social support in a southeastern community. *J. Sci. Stud. Relig.* 1994; 33:46–61.
- Maton KI, Wells E. Religion as a community resource for well-being: prevention, healing and empowerment pathways. J. Soc. Issues 1995; 51:177-193.
- Benor DJ. Survey of spiritual healing research. Complement. Med. Res. 1990; 4:9-33.
- Wirth DP, Cram JR. Multi-site electromyographic analysis of noncontact therapeutic touch. *Int. J. Psychosom.* 1993; 40:47-55.
- Wirth DP, Cram JR. Psychophysiology of nontraditional prayer. *Int. J. Psychosom.* 1994; 41: 68-75.
- Solfvin J. Mental healing. In: Krippner S, editor. Advances in Parapsychological Research. Jefferson: McFarland: 1984.
- Wirth DP, Barrett MJ. Complementary healing therapies. *Int. J. Psychosom.* 1994; 41:61-67.
- Sutherland J, Poloma MM, Pendleton B. Religion, Spirituality, and Alternative Health Practices: The Baby Boomer and Cold War Cohorts. *J Relig Health* 2003; 42:315-338.
- Levin JS. Religion in Aging and Health: Theoretical Foundations and Methodological Frontiers Thousand Oaks: Sage; 1994.
- Levin JS. Religion, Health, and Psychological Well-Being in Older Adults. *J Aging Health* 1998; 10:504– 531.
- Kaplan BH. A Note on Religious Beliefs and Coronary Heart Disease. JS C Med Assoc 1976; 72:60–64.
- Benson H. *The Relaxation Response*. New York: William Morrow; 1975.
- Idler EL. Religious Involvement and Health of the Elderly: Some Hypotheses and an Initial Test. Social Forces 1987; 66:226–238.
- Jones JW. Religion, Health, and the Psychology of Religion: How the Research on Religion and Health Helps Us Understand Religion. *J Relig Health* 2004; 43(4):317-328.
- Ness PHV. Religion and public health. *J Relig Health* 1999; 38(1):15-26.