

Scientific Studies that Show a Positive Effect of Religion on Health

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Scientific studies over the last four decades have examined the role of both public and private religious expression on health and longevity. The studies have shown that the practice of religious activity improves health and increases longevity. The effect is seen even when other social/psychological differences are taken into account. For example, one 16-year study examined mortality rates in 11 religious vs. 11 secular kibbutzim in Israel. Although both communities were demographically-matched and provided similar levels of social support, three time more people died in the secular kibbutzim compared to the religious kibbutzim. The following is a short list of some recent studies that have shown the positive influence of religion on health and longevity.

Tully J, Viner RM, Coen PG, Stuart JM, Zambon M, Peckham C, Booth C, Klein N, Kaczmarek E, Booy R. 2006. Risk and Protective Factors for Meningococcal Disease in Adolescents: Matched Cohort Study. [*BMJ* 332: 445-450.](#)

A study of meningococcal disease in adolescents in the UK showed that religious observance was as effective as meningococcal vaccination for preventing meningococcal disease.

O'Connor P.J., N.P. Pronk, A. Tan, and R.P. Whitebird. 2005. Characteristics of adults who use prayer as an alternative therapy. [*Am. J. Health Promot.* 19:369-375.](#)

A study of prayer use by patients showed that 47% of study subjects prayed for their health, and 90% of these believed prayer improved their health. Those who prayed had significantly less smoking and alcohol use and more preventive care visits, influenza immunizations, vegetable intake, satisfaction with care, and social support, and were more likely to have a regular primary care provider. The study concluded that those who pray had more favorable health-related behaviors, preventive service use, and satisfaction with care.

Krucoff, M. W., et al. 2005. Music, imagery, touch, and prayer as adjuncts to interventional cardiac care: the Monitoring and Actualisation of Noetic Trainings (MANTRA) II randomised study. [*Lancet* 366:211-217.](#)

This double blind study used prayer in combination with music, imagery, and touch in four randomly assigned groups of cardiac patients. Intercessory prayer groups included Christian, Muslim, Jewish, and Buddhist religious traditions. Overall, the study found no significant effect of prayer. However, major adverse cardiac events were reduced in the prayer group (23% to 27%), as were death and readmission rates (33% to 35%). The inclusion of intercessors of multiple religious traditions may have reduced the effectiveness of prayer, especially since Buddhists (who do not believe in God) were included in the study.

D'Souza, R.F. and A. Rodrigo. 2004. Spiritually augmented cognitive behavioural therapy. [*Australas Psychiatry* 12: 148-152.](#)

This study used spiritually augmented cognitive behavior therapy in a mental health study. The study demonstrated that spiritually augmented cognitive behavior therapy helped reduce hopelessness and despair, improved treatment collaboration, reduced relapse, and enhanced functional recovery.

Palmer, R. F., D. Katerndahl, and J. Morgan-Kidd. 2004. A Randomized Trial of the Effects of Remote Intercessory Prayer: Interactions with Personal Beliefs on Problem-Specific Outcomes and Functional Status. [*J. Alt. Compl. Med.* 10: 438-448.](#)

A randomized clinical trial found a significant reduction in the amount of pain in the intercessory prayer group compared to controls. In addition, the amount of concern for baseline problems at follow-up was significantly lower in the prayer group when the subject initially believed that the problem could be resolved. Those who did not believe that their problem could be resolved did not differ from controls. Better physical functioning was observed in the prayer group for those with a higher belief in prayer. However, better mental health scores were observed in the control group with lower belief in prayer scores.

Krucoff, M. W., S. W. Crater, C. L. Green, A. C. Maas, J. E. Seskevich, J. D. Lane, K. A. Loeffler, K. Morris, T. M. Bashore, and H. G. Koenig. 2001. Integrative noetic therapies as adjuncts to percutaneous intervention during unstable coronary syndromes: Monitoring and Actualization of Noetic Training (MANTRA) feasibility pilot. [*Am. Heart J.* 142: 760-767.](#)

A pilot study⁸ (limited to 150 patients) examining the efficacy of noetic (non-pharmacological) therapies (stress relaxation, imagery, touch therapy, and prayer) found that "Of all noetic therapies, off-site intercessory prayer had the lowest short- and long-term absolute complication rates." The results did not reach statistical significance due to the small sample size, but a full study is planned.

Pargament, K. I., H. G. Koenig, N. Tarakeshwar, J. Hahn. 2001. Religious Struggle as a Predictor of Mortality Among Medically Ill Elderly Patients A 2-Year Longitudinal Study. [*Arch. Intern Med.* 161: 1881-1883.](#)

A study examined the effect of "religious struggle" (defined by such things as being angry at God or feeling punished by God) was predictive of poorer physical recovery and higher mortality. According to the authors, "Our findings suggest that patients who indicate religious struggle during a spiritual history may be at particularly high risk for poor medical outcomes. Referral of these patients to clergy to help them work through these issues may ultimately improve clinical outcomes; further research is needed to determine whether interventions that reduce religious struggles might also improve medical prognosis."

Hughes M. Helma, Judith C. Haysb, Elizabeth P. Flintb, Harold G. Koeniga and Dan G. Blazera. 2000. Does Private Religious Activity Prolong Survival? A Six-Year Follow-up Study of 3,851 Older Adults. [*The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 55: M400-M405.](#)

A six year study of 3,851 elderly persons revealed that those who reported having rarely to never participating in private religious activity had an increased relative hazard of dying over those who participated more frequently in religious activity. Whereas most previous studies showed a positive effect for organized religious activities, this study showed that personal religious activity was also effective at reducing mortality.

Koenig HG, Hays JC, Larson DB, et al. 1999. Does religious attendance prolong survival? A six-year follow-up study of 3,968 older adults. [*J Gerontol Med Sci.* 54A: M370-M377.](#)

Hummer R, Rogers R, Nam C, Ellison CG, 1999. Religious involvement and U.S. adult mortality. [*Demography* 36: 273-285.](#)

This study examined the effect of religious attendance on mortality. People who never attended religious activities exhibited 1.87 times the risk of death compared with people who attend more than once a week, which results in a seven-year difference in life expectancy at age 20 between those who never attend and those who attend more than once a week. People who did not attend church or religious services were more likely to be unhealthy and, consequently, to die. However, religious attendance also increased social ties and behavioral factors to decrease the risks of death.

Koenig, H.G. 1998. Religious attitudes and practices of hospitalized medically ill older adults. [*International Journal of Geriatric Psychiatry* 13: 213-224.](#)

When a random sample of 338 hospitalized patients were asked an open-ended question about what the most important factor was that enabled them to cope, 42.3% mentioned their religious faith.

Koenig H.G., *et al.* 1998. The relationship between religious activities and blood pressure in older adults. [*International Journal of Psychiatry in Medicine* 28: 189-213.](#)

The relationship between religious activities and blood pressure was examined in 6-year prospective study of 4,000 older adults. Among subjects who attended religious services once a week or more *and* prayed or studied the Bible once a day or more, the likelihood of diastolic hypertension was 40 percent lower than among those who attended services and prayed less often ($p < .0001$, after controlling for age, sex, race, smoking, chronic illness and body mass index).

Koenig, H.G., Pargament, K.I., and Nielsen, J. 1998. Religious coping and health status in medically ill hospitalized older adults. [*Journal of Nervous and Mental Disease* 186: 513-521.](#)

The authors concluded that religious coping behaviors related to better mental health were at least as strong, if not stronger, than were non-religious coping behaviors. A survey of 577 hospitalized medically ill patients age 55 or over examined the relationship between 21 different types of religious coping and mental and physical health. Religious coping behaviors that were associated with better mental health were re-appraisal of God as benevolent, collaboration with God, and giving religious help to others. Re-appraisals of God as punishing, re-appraisals involving demonic forces, pleading for direct intersection, and spiritual discontent were associated with worse mental and physical health. Of the 21 religious coping behaviors, 16 were significantly related to greater psychological growth, 15 were related to greater cooperativeness, and 16 were related to greater spiritual growth.

Koenig, H.G., George, L.K., Peterson, B.L. 1998. Use of health services by hospitalized medically ill depressed elderly patients. [*American Journal of Psychiatry* 155: 536-542.](#)

Found that depressed patients who had a strong intrinsic religious faith recovered over 70% faster from depression than those with less strong faith; among a subgroup of patients whose physical illness was not improving, intrinsically religious patients recovered 100% faster.

Koenig, H.G., and Larson, D.B. 1998. Use of hospital services, religious attendance, and religious affiliation. [*Southern Medical Journal* 91: 925-932.](#)

Found an inverse relationship between frequency of religious service attendance and likelihood of hospital admission in a sample of 455 older patients. Those who attended church weekly or more often were significantly less likely in the previous year to have been admitted to the hospital, had fewer hospital admissions, and spent fewer days in the hospital than those attending less often; these associations retained their significance after controlling for covariates. Patients unaffiliated with a religious community had significantly longer index hospital stays than those affiliated. Unaffiliated patients spent an average of 25 days in the hospital, compared with 11 days for affiliated patients ($p < .0001$); this association strengthened when physical health and other covariates were controlled.

Koenig, H.G., *et al.* 1998. The relationship between religious activities and cigarette smoking in older adults. [*Journal of Gerontology A Biol Sci Med Sci* 53: 6.](#)

Substantially lower rates of smoking among persons more religiously involved is likely to translate into lower rates of lung cancer, hypertension, coronary artery disease and chronic obstructive pulmonary disease. Cigarette smoking and religious activities were examined in a 6-year prospective study of 3,968 persons age 65 or older in North Carolina. Both likelihood of current smoking and total number of pack years smoked were inversely related to attendance at religious services and private religious activities. Higher participation in religious activities at one wave predicted lower rates of smoking at future waves. If

persons both attended religious services at least weekly and read the Bible or prayed at least daily, they were 990% less likely to smoke than persons involved in these religious activities less frequently ($p < .0001$, after multiple covariates were taken into account).

Oman, D., and Reed, D. 1998. Religion and mortality among the community-dwelling elderly. [*American Journal of Public Health* 88: 1469-1475.](#)

In a 5-yr prospective cohort study of 1,931 older residents of Marin County, California, persons who attended religious services were 36% less likely to die during the follow up period. When the variables (including age, sex, marital status, number of chronic diseases, lower body disability, balance problems, exercise, smoking status, alcohol use, weight, two measures of social functioning and social support, and depression) were controlled, persons who attended religious services were still 24% less likely to die during the 5-yr follow up. During the 5-year follow up, there were 454 deaths. Subjects were divided into 2 categories: "attenders" (weekly or occasional attenders) and "non-attenders" (never attend).

Idler, E.L., & Kasl, S.V. 1997. Religion among disabled and nondisabled persons II: attendance at religious services as a predictor of the course of disability. [*Journal of Gerontology* 52: S306-S316.](#)

A longitudinal study of 2,812 older adults in New Haven, CT, found that frequent religious attenders in 1982 were significantly less likely than infrequent attenders to be physically disabled 12 years later, a finding that persisted after controlling for health practices, social ties, and indicators of well-being.

Koenig HG, *et al.* 1997. Attendance at religious services, interleukin-6, and other biological parameters of immune function in older adults. [*International Journal of Psychiatry in Medicine* 27: 233-250.](#)

Findings suggest that persons who attend church frequently have stronger immune systems than less frequent attenders, and may help explain why both better mental and better physical health are characteristic of frequent church attenders. Reported that frequent religious attendance in 1986, 1989, and 1992 predicted lower plasma interleukin-6 (IL-6) levels in a sample of 1,718 older adults followed over six years. IL-6 levels are elevated in patients with AIDS, osteoporosis, Alzheimer's disease, diabetes, and other serious medical conditions, and is an indicator of immune system function.

Strawbridge, W.J., *et al.* 1997. Frequent attendance at religious services and mortality over 28 years. [*American Journal of Public Health* 87: 957-961.](#)

Frequent church attendees were more likely to stop smoking, increase exercising, increase social contacts, and stay married; even after these factors were controlled for, however, the mortality difference persisted.

Study reports the results of a 28-year follow-up study of 5,000 adults involved in the Berkeley Human Population Laboratory. Mortality for persons attending religious services once/week or more often was almost 25% lower than for persons attending religious services less frequently; for women, the mortality rate was reduced by 35%.

Kark, J.D., G Shemi, Y Friedlander, O Martin, O Manor and SH Blondheim. 1996. Does religious observance promote health? mortality in secular vs religious kibbutzim in Israel. [*American Journal of Public Health* 86: 341-346.](#)

Even after eliminating social support and conventional health behaviors as possible confounders, members of religious kibbutzim still lived longer than those in secular kibbutzim. A 16-year mortality study, where 11 religious kibbutzim were matched with 11 secular kibbutzim ($n=3,900$); careful matching was performed to ensure that secular and religious kibbutzim were as similar as possible in characteristics that might affect mortality (social support, selection and retaining of members, etc.), and controlled for

conventional risk factors (drinking, smoking, plasma cholesterol levels. Of the 268 deaths that occurred, 69 were in religious and 199 in secular kibbutzim; hazard ratio was 1.93 (95% CI 1.44-2.59, p<.0001).

Oxman, T.E., Freeman, D.H., and Manheimer, E.D. 1995. Lack of social participation or religious strength and comfort as risk factors for death after cardiac surgery in the elderly. [*Psychosomatic Medicine* 57: 5-15.](#)

The mortality rate in persons with low social support who did not depend on their religious faith for strength, was 12 times that of persons with a strong support network who relied heavily on religion; even when social factors were accounted for, persons who depended on religion were only about one-third as likely to die as those who did not. Followed 232 adults for six months after open-heart surgery, examining predictors of mortality.

Bliss, J.R., McSherry, E., and Fassett, J. 1995. *NIH Conference on Spirituality and Health Care Outcomes*

Chaplain Intervention Reduces Costs in Major DRGs. Patients in the intervention group had an average 2 day shorter post-op hospitalization, resulting in an overall cost savings of \$4,200 per patient. Randomized 331 open-heart surgery patients to either a chaplain intervention ("Modern Chaplain Care") or usual care.

Propst, L.R., et al. 1992. Comparative efficacy of religious and nonreligious cognitive-behavioral therapy for the treatment of clinical depression in religious individuals. [*Journal of Consulting and Clinical Psychology* 60: 94-103.](#)

Religious therapy resulted in significantly faster recovery from depression when compared with standard secular cognitive-behavioral therapy. Study examined the effectiveness of using religion-based psychotherapy in the treatment of 59 depressed religious patients. The religious therapy used Christian religious rationales, religious arguments to counter irrational thoughts, and religious imagery. What was surprising was that benefits from religious-based therapy were most evident among patients who received religious therapy from non-religious therapists.

Pressman, P., Lyons, J.S., Larson, D.B., and Strain, J.J. 1990. Religious belief, depression, and ambulation status in elderly women with broken hips. [*American Journal of Psychiatry* 147: 758-759.](#)

Reported that among 33 elderly women hospitalized with hip fracture, greater religiousness was associated with less depression and longer walking distances at the time of hospital discharge.

McSherry, E., Ciulla, M., Salisbury, S., and Tsuang, D. 1987. *Social Compass* 35: 515-537.

Heart surgery patients with higher than average personal religiousness scores on admission and post-op had lengths of stay 20% less than those with lower than average scores.

Chu, C.C., & Klein, H.E. 1985. Psychosocial and environmental variables in outcome of black schizophrenics. *Journal of the National Medical Association*. 77:793-796.

Studying 128 Black schizophrenics and their families, investigators reported that Black urban patients were less likely to be re-hospitalized if their families encouraged them to continue religious worship while they were in the hospital (p<.001).

Zuckerman DM, Kasl SV, Ostfeld AM, 1984. Psychosocial predictors of mortality among the elderly poor. [*Am J Epidemiol*. 119:410-423.](#)

This study examine mortality among 400 elderly poor residents of New Haven, Hartford, and West Haven, Connecticut, in 1972-1974. Results, controlled for demographic variables, showed that religiousness reduced mortality.

Florell, J.L. 1973. *Bulletin of the American Protestant Hospital Association* 37(2):29-36.

Crisis-intervention in orthopedic surgery: Empirical evidence of the effectiveness of a chaplain working with surgery patients. Randomized patients either to a chaplain intervention, which involved chaplain visits for 15 minutes/day per patient, or to a control group ("business as usual"). The chaplain intervention reduced length of stay by 29% ($p < .001$), patient-initiated call on RN time to one-third, and use of PRN pain medications to one-third.

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