

# Religion, Spirituality & Medicine

## Research and Clinical Implications

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**DukeMedicine**



- Definitions
- Religion and mental health
- Religion and health behaviors
- Religion, disease detection, treatment compliance
- Religion, physical health and recovery
- Clinical applications
- Further resources

# Definitions



# Religion vs. Spirituality vs. Humanism

**Religion** – beliefs, practices, a creed with do's and don'ts, community-oriented, responsibility-oriented, divisive and unpopular, but easier to define and measure

**Spirituality** – quest for sacred, relationship to the transcendent, personal, individual-focused, inclusive, popular, but difficult to define and quantify

**Secular Humanism** – human experiences that lack a connection to the transcendent, to a higher power, or to ultimate truth; focus is on the human self and human community as the ultimate source of power and meaning

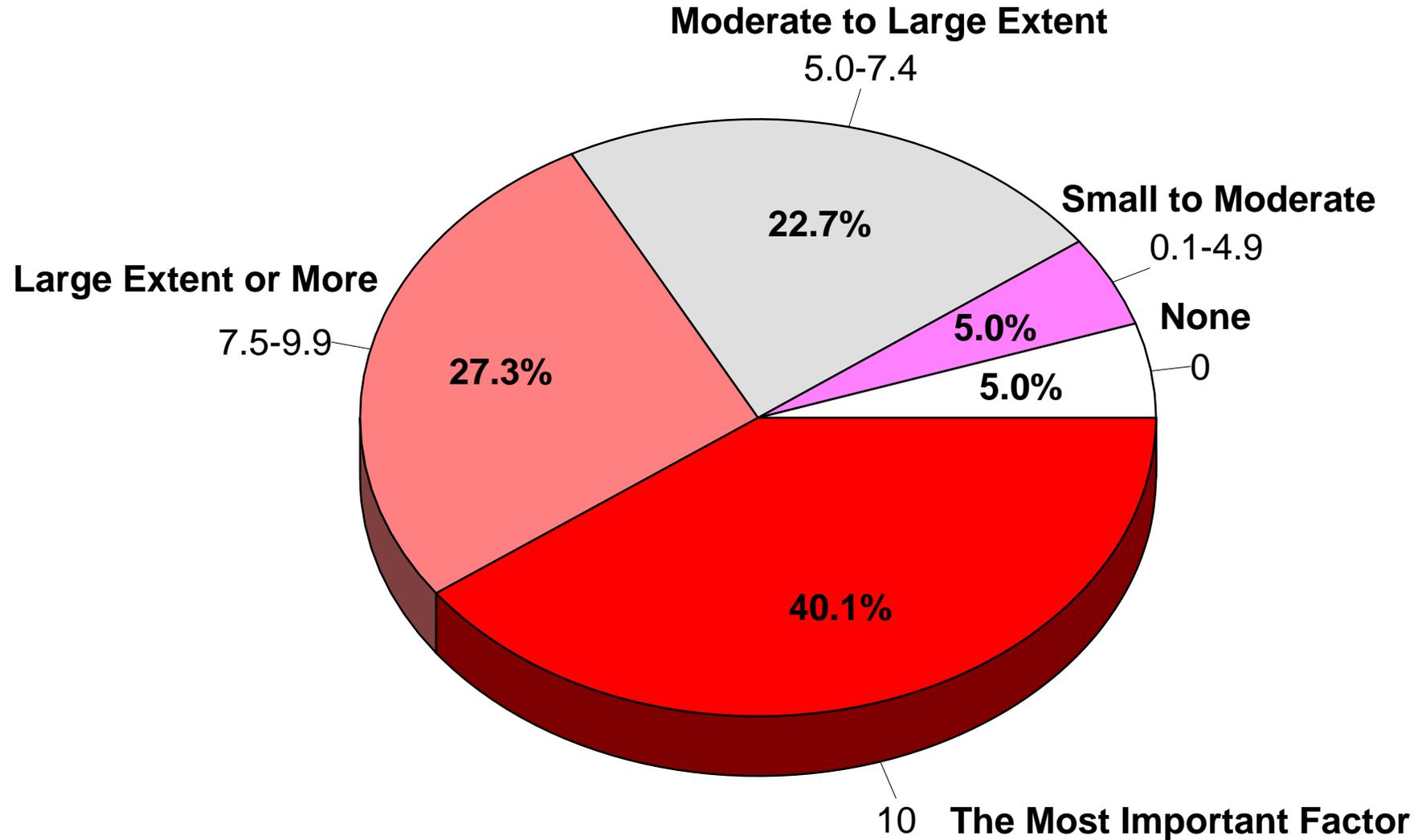
Most of the research has been done on **religion**.

Many persons in the USA are religious and turn to religion for comfort, support, and hope when they become sick

How common is religious coping  
in medical patients?

# Self-Rated Religious Coping

(On a 0-10 scale, how much do you use religion to cope?)



Responses by 337 consecutively admitted patients to Duke Hospital (Koenig 1998)

# Religious Coping is Not Just for the Sick

America's Coping Response to Sept 11th:

1. Talking with others (98%)
2. **Turning to religion (90%)**
3. Checked safety of family/friends (75%)
4. Participating in group activities (60%)
5. Avoiding reminders (watching TV) (39%)
6. Making donations (36%)

Based on a random-digit dialing survey of the U.S. on Sept 14-16

New England Journal of Medicine 2001; 345:1507-1512

# Example of Religious Coping

(JAMA 2002; 288 (4): 487-493)

1. 83 years old
2. Multiple serious medical problems
3. Chronic, progressive, unrelenting pain
4. Traditional medical treatments ineffective
5. Alternative medical treatments ineffective
6. Limited material resources – lives alone
7. But, doing well psychologically
8. Positive, hopeful and optimistic
9. Functioning independently- without assist
10. Concerned with meeting others' needs
11. How does she do it? Religion, she says

## Religion – How does it help to cope?

"I don't dwell on the pain. Some people are sick and have pain and it gets the best of them. Not me. I pray a lot.... I believe in God, and I give my whole heart, body, and soul over to him... Sometimes I pray and I'm in deep serious prayer and all of a sudden, my pain gets easy. It slackens up and I drop off to sleep, and wake up and I can do things for myself. So prayer helps me a lot – I give God my heart and soul – and you don't have to worry about nothing. He leads you and directs you, and he takes care of you. And I believe in that. That is my belief."

# The Research

(systematic review 1806-2010)

The following research is documented in the Handbook of Religion and Health (Oxford University Press, 1<sup>st</sup> ed (2001), and 2<sup>nd</sup> ed (2011, forthcoming))

# Religion and Mental Health

Well-being and happiness

Depression

Anxiety

Substance use

Suicide

Meaning, purpose, and hope

Forgiveness, altruism, gratitude, compassion

Social support

# Well-being and Happiness

(systematic review)

Religious involvement is related to:

Greater well-being and happiness

(256 of 326 studies) (79%) [82% of best]

Lower well-being or happiness (<1%)

# Depression

(systematic review)

Religious involvement is related to:

Less depression, faster recovery from depression  
(272 of 444 studies) (61%) [67% of best]

More depression (6%)

# Anxiety

(systematic review)

Religious involvement is related to:

Less anxiety, faster recovery from anxiety  
(147 of 299 studies) (49%) [57% of best]

More anxiety in 33 studies (11%)

# Alcohol Use/Abuse/Dependence

(systematic review)

Of 278 quantitative studies, 240 (86%) reported less alcohol use/abuse/dependence among those scoring higher on religious involvement [90% of best]

# Drug Use/Abuse/Dependence

(systematic review)

Of 185 quantitative studies, 155 (84%) reported less drug use among those scoring higher on religious involvement [86% of best, 95% of RCT or experimental]

# Suicide

(systematic review)

Religious involvement is related to:

Less suicide and more negative attitudes toward suicide  
106 of 141 studies (75%)

Why?

A spiritual world-view gives people a reason for living – it gives life meaning.

# Meaning, Purpose, Hope, Optimism

(systematic review)

Religious involvement is related to:

Significantly greater meaning and purpose in life  
(42 of 45 studies) (93%) [100% of best]

Significantly greater hope  
(29 of 40 studies) (73%)

Significantly great optimism  
(26 of 32 studies) (81%)

# Forgiveness, Altruism, and Gratitude

(systematic review)

Religious involvement is related to:

Significantly more forgiveness

(34 of 40 studies) (85%) [70% of best]

Significantly more altruism / volunteering

(33 of 47 studies) (70%) [75% of best]

Significantly more gratitude, compassion, kindness

(8 of 8 studies) (100%)

# Social Support

(systematic review)

Religious involvement is related to:

Significantly greater social support  
(61 of 74 studies) (82%) [93% of best]

# Health Behaviors

(systematic review)

Religion is related to:

- More exercise/physical activity  
(25 of 37 studies) (68%) [76% of best]
- Lower weight  
(7 of 36 studies) (19%)
- Heavier weight  
(14 of 36 studies) (39%) 
- Less extra-marital sex, safer sexual practices (fewer partners)  
(82 of 95 studies) (86%) [84% of best]

# Health Behaviors (cont)

Religious involvement is related to:

- Less cigarette smoking, especially among **the young**  
(123 of 137 studies show significantly lower rates)  
(90%) [90% of best]
- Diet and cholesterol  
(13 of 21 studies show better diet) (62%)  
(12 of 23 studies show lower cholesterol) (52%)
- More likely to wear seat belts (3 of 3 studies)

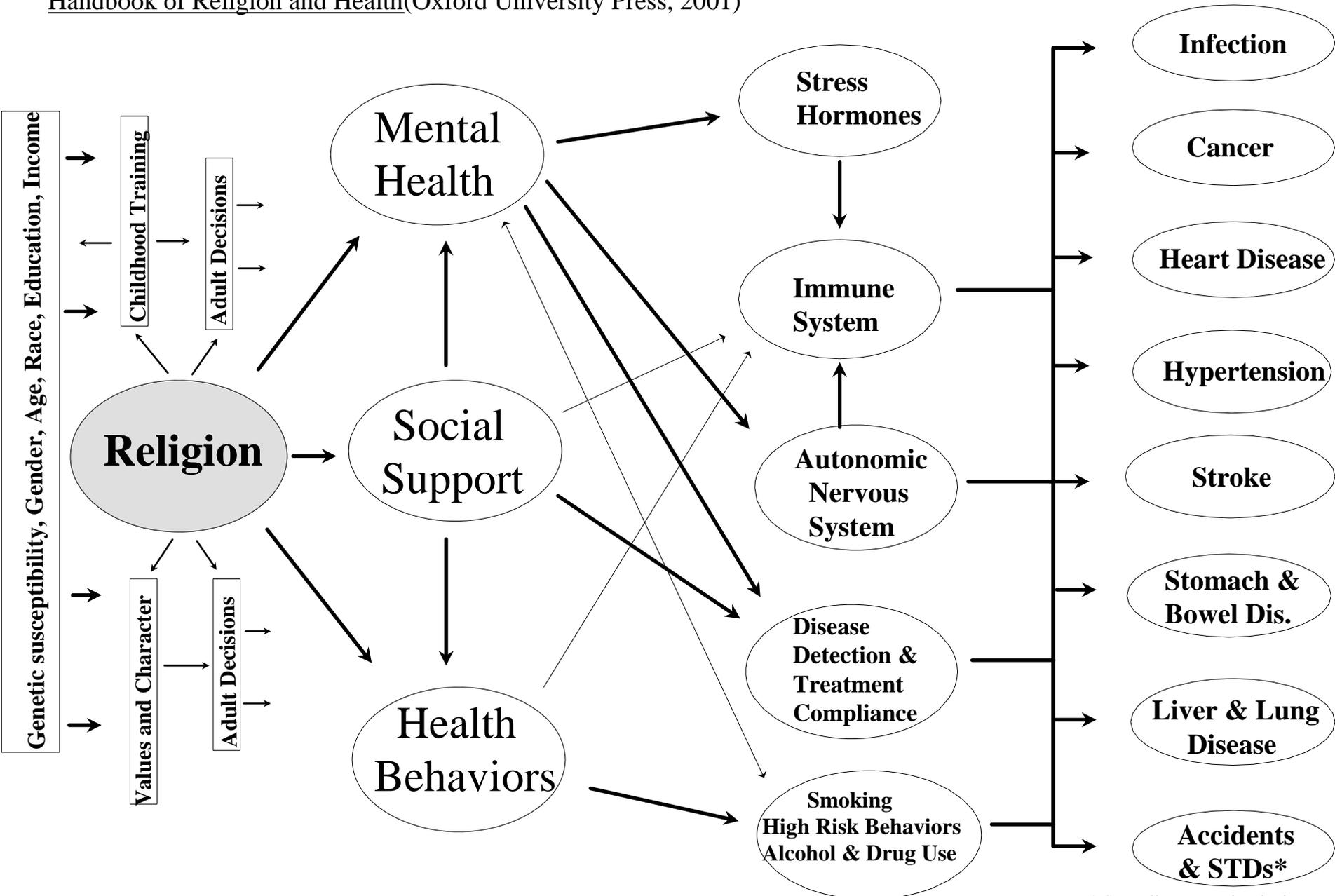
# Disease Screening and Compliance

Religious involvement is related to:

- Greater likelihood of participating in disease screening behaviors - mammography, glucose, BP, prostate, etc. (28 of 44 studies) (64%)
- Greater likelihood of complying with treatment (15 of 27 studies) (56%)

# Model of Religion's Effects on Health

Handbook of Religion and Health(Oxford University Press, 2001)



\* Sexually Transmitted Diseases

# Research on Physical Health

Heart disease

Hypertension

Cerebrovascular disease

Dementia

Immune function

Endocrine function

Cancer

Overall mortality

# Heart Disease

(systematic review)

Religious involvement is related to:

Significantly lower rates of coronary artery disease  
(12 of 19 studies) (63%) [69% of best]

Lower cardiovascular reactivity, greater heart rate variability,  
more positive cardiovascular functions  
(11 of 16 studies) (69%) [69% of best]

# Hypertension and Stroke

(systematic review)

Religious involvement is related to:

Lower BP or lower rates of hypertension  
(36 of 63 studies) (63%)

Lower rates of stroke or less carotid artery thickening  
(4 of 9 studies) (44%)

# Dementia

(systematic review)

Religious involvement is related to:

Significantly less cognitive impairment or  
slower progression of dementia

(11 of 21 studies) (52%)

[54% of best; 71% of prospective studies]

# Immune and Endocrine Function

(systematic review)

Religious involvement is related to:

- Better immune function (higher lymphocyte counts, lower inflammatory markers, etc.)  
(14 of 25 studies) (56%) [60% of best]
- Better endocrine function (cortisol, epi and norepinephrine)  
(23 of 36 studies) (64%)

# Cancer

(systematic review)

Religious involvement is related to:

- Lower rates of cancer or better prognosis (14 of 25 studies) (56%) [65% of best]

# Overall Mortality

(systematic review)

Religious involvement is related to:

- Lower mortality, longer survival  
(82 of 121 studies) (68%) [66% of best; 76% of very best]

# Religious Attendance and Survival in the Alameda County Study

28-year follow-up of 5,286 persons living in Alameda County, CA initially seen in 1965; comparing frequent church attenders to infrequent attenders:

- I. Frequent attenders had lower mortality rates (RH=0.65) (35% lower)
- II. During follow-up frequent attenders were:
  - a. more likely to stop smoking
  - b. more likely to increase exercising
  - c. more likely to increase social contacts
  - d. more likely to stay married
- III. Adjusting for the 4 health practices did not significantly change frequent attenders' mortality rates

Strawbridge et al. (1997). American Journal of Public Health, 87:957-961.

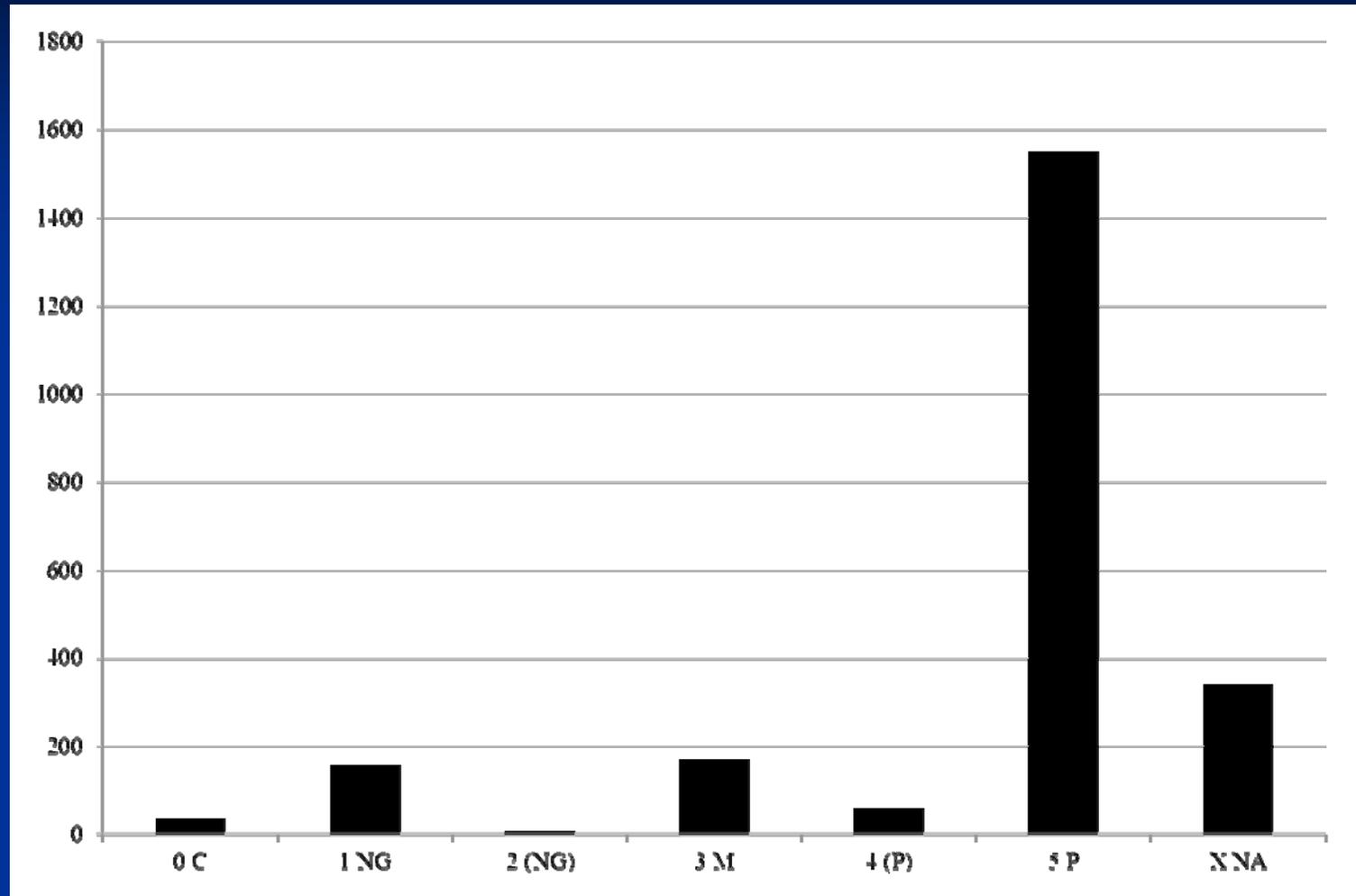
# Standard Mortality Ratios (ages 25-99)

	<u>Males</u>	<u>Females</u>
<u>California Mormons</u> (n=9815)*	0.54 (0.51-0.57)	0.61 (0.57-0.65)
Attend church wkly (99% M / 99% F)		
+ never smoke+married+12 yr ed**	<b>0.45 (0.42-0.48)</b>	<b>0.55 (0.51-0.59)</b>
+ moderate BMI (57% M / 65% F)	0.43 (0.39-0.47)	0.52 (0.47-0.57)
** Life Expectancy age 25	84 years	86 years
<u>US Whites</u> (n=15,832)*	0.90 (0.85-0.96)	0.83 (0.79-0.88)
Attend church wkly (28% M / 39% F)	0.78 (0.68-0.88)	0.70 (0.62-0.79)
+ never smoke	0.60 (0.48-0.74)	0.63 (0.55-0.74)
+ married	0.51 (0.40-0.66)	0.52 (0.42-0.66)
+ 12 yr education **	<b>0.47 (0.33-0.64)</b>	<b>0.38 (0.28-0.52)</b>
+ moderate BMI (7% M / 10% F)	0.43 (0.30-0.61)	0.35 (0.24-0.50)
Life Expectancy age 25 (US Whites – all)	74 years	81 years
**Life Expectancy age 25 (extrapolated)	84 years	86 years+

\*Based on a systematic sample of active Calif. Mormons followed 1980-2004, and random sample of white US adults followed 1988-1997. **Preventive Medicine 2008; 46:133-136**

# Relationship Between Religion and Health: All Studies

No. of studies



**Legend:** 0C=complex findings; 1NG=statistically significant negative findings ( $p < 0.05$ ); 2(NG)=trend toward negative findings ( $0.05 < p < 0.10$ ); 3M=mixed findings (both negative and positive); 4(P)=trend toward positive finding ( $0.05 < p < 0.10$ ); 5P=statistically significant positive finding ( $p < 0.05$ ); XNA=no association. (Handbook of Religion & Health, 2<sup>nd</sup> ed, 2011)

# Why is Religion Related to Better Health?

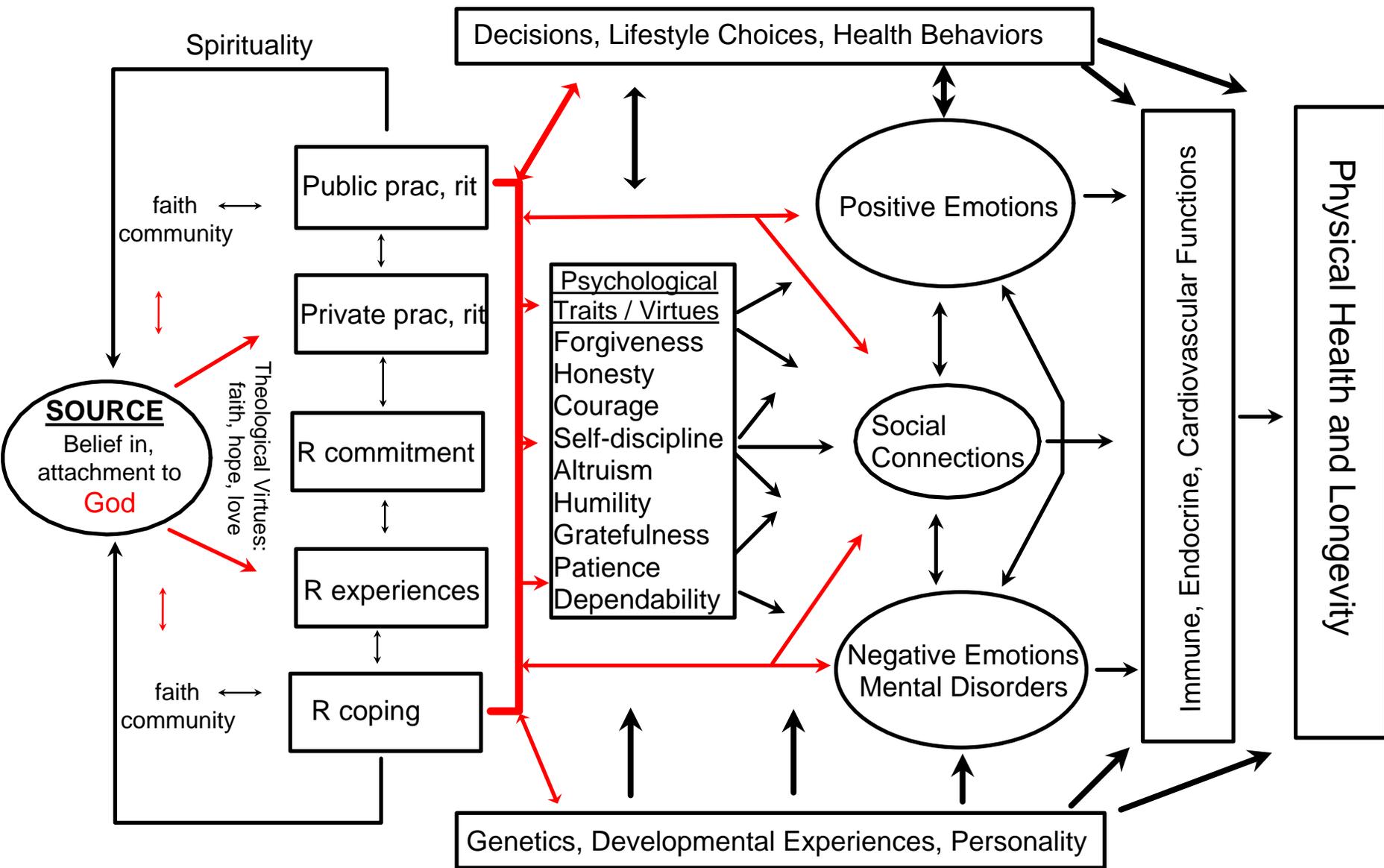
On January 3, 2009, after the death of the Guinness of World Records' oldest person, Maria de Jesus age 115, next in line was Gertrude Baines from Los Angeles.

Born to slaves near Atlanta in 1894, she was described at 114 Years old as “spry,” “cheerful,” and “talkative.”

When she was 112 years old, Ms. Baines was asked by a CNN correspondent to explain why she thought she has lived so long.

Her reply: “God. Ask him. I took good care of myself, the way he wanted me to.”

# Theoretical Model of Causal Pathways



\*Model for Western monotheistic religions (Christianity, Judaism, and Islam)

# Summary of the Research

- Religion/faith is a powerful coping resource
- Religion is related to better mental health
- Religion is related to better health behaviors
- Religion is related to better physical health and great longevity

# Clinical Implications

Spirituality in Patient Care, Second Edition  
Templeton Foundation Press, 2007

(reviewed in **JAMA** 2008; 299:1608-1609)

# Why Address Spirituality in Clinical Practice

- Many patients are religious, would like it addressed in health care
- Many patients have spiritual needs related to illness that could affect mental health
- Poor mental health affects physical health and response to Rx
- Religious beliefs of patients affect medical decisions, may conflict with Rx
- Religious beliefs of physicians affect their medical decisions, may conflict with those of patients
- Religion influences support and care in the community

# Take a Spiritual History

1. The screening spiritual history is brief (2-4 minutes), and is not the same as a spiritual assessment (chaplain)
2. The purpose of the SH is to obtain information about religious background, beliefs, and rituals that are relevant to health care
3. If patients indicate from the start that they are not religious or spiritual, then questions should be re-directed to asking about what gives life meaning & purpose and how this can be addressed in their health care
4. Spiritual history itself has CLINICAL benefits

# Physician Should Take The Spiritual History

- Patient needs to feel comfortable talking with physician about spiritual issues
- Patients' medical decisions (and physicians') are influenced by their religious beliefs
- Patients' compliance with medical treatments are influence by religious beliefs
- Taking spiritual history enhances doctor-patient relationship & may itself affect health outcomes
- Spiritual struggles, if undetected, can adversely affect health outcomes

# Religious Struggle

444 hospitalized medical patients followed for 2 years

Each of 7 items below rated on a 0 to 3 scale, based on agreement. For every 1 point increase on religious struggle scale (range 0-21), there was a 6% increase in mortality, independent of physical and mental health  
(Arch Intern Med, 2001; 161: 1881-1885)

- Wondered whether God had abandoned me
- Felt punished by God for my lack of devotion
- Wondered what I did for God to punish me
- Questioned the God's love for me
- Wondered whether my church had abandoned me
- Decided the Devil made this happen
- Questioned the power of God

# Contents of the Spiritual History

See JAMA 2002; 288 (4):487-493

1. What is patient's religious or spiritual (R/S) background (if any)
2. R/S beliefs used to cope with illness, or alternatively, that may be a source of stress or distress
3. R/S beliefs that might conflict with medical (or psychiatric) care or might influence medical decisions
4. Involvement in a R/S community and whether that community is supportive
5. Spiritual needs that may be present and need to be addressed for health reasons

# Besides Taking a Spiritual History...

1. Support the religious/spiritual beliefs of the patient (verbally, non-verbally)
2. Ensure patient has resources to support their spirituality – refer patients with spiritual needs to CHAPLAINS
3. Accommodate environment to meet spiritual needs of patient
4. Be willing to communicate with patients about spiritual issues
5. Prescribe religion to improve health (?)
6. Pray with patients if requested (?)

# Limitations and Boundaries

1. Do not prescribe religion to non-religious patients
2. Do not force a spiritual history if patient not religious
3. Do not coerce patients in any way to believe or practice
4. Do not pray with a patient before taking a spiritual history and unless the patient asks
5. Do not spiritually counsel patients (always refer to trained professional chaplains or pastoral counselors)
6. Do not do any activity that is not patient-centered and patient-directed

# Further Reading

Spirituality in Patient Care (2007, Templeton Press)

Medicine, Religion and Health (2008, Templeton Press)

Handbook of Religion and Health (2001, Oxford University Press)

Handbook of Religion and Health, 2<sup>nd</sup> ed (2011, Oxford University Press, forthcoming)

The Link Between Religion and Health (2002, Oxford University Press)

Religion & Spirituality in Psychiatry (2009, Cambridge University Press)

## Further Information

Website: <http://www.spiritualityandhealth.duke.edu/>

# Summer Research Workshop

July and August 2011

Durham, North Carolina

5-day intensive research workshops focus on what we know about the relationship between spirituality and health, applications, how to conduct research and develop an academic career in this area (see website: <http://www.spiritualityhealthworkshops.org/>). Leading spirituality-health researchers at Duke, UNC, USC, and elsewhere will give presentations:

- Previous research on spirituality and health
- Strengths and weaknesses of previous research
- Applying findings to clinical practice
- Theological considerations and concerns
- Highest priority studies for future research
- Strengths and weaknesses of spirituality measures
- Designing different types of research projects
- Carrying out and managing a research project
- Writing a grant to NIH or private foundations
- Where to obtain funding for research in this area
- Writing a research paper for publication; getting it published
- Presenting research to professional and public audiences; working with the media

**If interested, contact Harold G. Koenig: [koenig@geri.duke.edu](mailto:koenig@geri.duke.edu)**

# Discussion

1:30 end

