Setting the Stage

- Institute for Military Resilience
  - Curricula... Research... Outreach
- Military Need
- Resilience and Comprehensive Fitness
- Spiritual Fitness and related Research

Religion/Spirituality and Health:

Resiliency for Soldiers, Veterans, and their Families

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Duke University Medical Center
Distinguished Adjunct Professor, King Abdul Aziz University, Jeddah, Saudi Arabia
Curriculum: (both undergrad & grad)

- Resilient Warriors & Leaders
- Resilient Military Marriage and Family
- Military Transitions
- Military Mental & Behavioral Health
- More to Follow....

Outreach

- Existing Military Affairs Office activities
- Share best practices nationwide
- Faculty Orientations for Universities

Research

- Integration and Assessment of Faith-Based Protocols

“Our nation’s first faith-based program for Military Resilience.”
The Needs of the Hour

- PTSD/TBI
- Suicide
- Isolation
- Divorce
- Homelessness
- Drug/Alcohol Abuse
- Lawlessness
- Spouse Abuse
- Incarceration
- Failure to Reintegrate
- Sexual Assault
- Child Abuse
RESILIENCE & Comprehensive Fitness

U.S. Army -- Comprehensive Soldier Fitness
A structured, long term assessment and development program to
BUILD THE RESILIENCE
and enhance the performance of every Soldier, Family member and DA civilian

ARMY
• Physical
• Family
• Social
• Emotional
• Spiritual

Judeo Christian
• Physical (Strength)
• Mental (Mind)
• Social (“Neighbor”)
• Emotional (Heart)
• Spiritual (Soul)

Marines
• Physical
• Mental
• Social
• Emotional
• Spiritual

U.S. Army
Comprehensive Soldier Fitness (CSF)
http://csf.army.mil

Holy Bible
Great Commandment
Mark 12:30,31

Marine Operational Stress Surveillance and Training (MOSST)
Spiritual Fitness

• Although there are no “silver bullets” to solve this challenge, there is an arena that has not been pursued to full extent: **the faith factor** related to Spiritual Fitness.

• **Faith is clearly a relevant dynamic** (in society, and in the military demographic which is predominantly Christian) **in the arenas of prevention and recovery from trauma** (incl PTSD), marital/family cohesion, suicide prevention, and RESILIENCE.

• If we are truly going to “get everything in the fight” on behalf of suicide prevention, **we need to more robustly investigate and integrate the power of faith into a holistic and comprehensive approach.**
  – **This means we must include faith to “set conditions”** for spiritual fitness “up stream” to create positive alternatives to suicide, as well as working the downstream symptoms.
Faith Makes a Difference in Suicide Risk & Prevention

- National studies demonstrated that non-participation in religious activities increased suicide risk by almost 400% (Comstock & Partridge, 1972; Nisbet et al, 2000)
- 57 of 68 studies (84%) that addressed the link between suicide and religion found that there were lower suicide rates among those more actively involved in faith-based activities (Koenig & Larsen, 2001)
- One landmark study discovered a link between religious beliefs and practices (specifically Christian), reduced rates of depression, and receiving religiously-oriented cognitive behavioral therapy (Propst et al, 1992)
  - Participants showed reduced symptoms of post-treatment depression, balanced clinical adjustment, and lower recidivism with this mode of treatment
- Religion and spirituality have shown to reduce suicide rates for those suffering from Traumatic Brain Injury (Brenner et al, 2009)

Chaplains and faith-based counselors are uniquely qualified to serve a large segment of the military population—those who identify with a religious belief system—and especially those who carry the emotional and psychological wounds of war home with them.
Religion/Spirituality and Health: Resiliency for Soldiers, Veterans, and their Families

Harold G. Koenig, MD
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Center for Spirituality, Theology and Health
Duke Medicine
Overview of Challenges Faced by Soldiers

- High stress: before, during and after deployment
- Poor health behaviors, difficulty with self-regulation
- Alcohol and substance abuse
- Fear, anger, violence
- Isolation, lack of support (especially after return home)
- Divorce, domestic abuse, sexual acting out
- Depression, anxiety, PTSD
- Lack of meaning, lack of hope, giving up: Suicide
Religion and Successful Coping

Religion is related to *every one* of the emotional and social challenges our soldiers face
Religion and Psychological Stress

Perceived Stress
Pollard et al. (2004). *Psychological Reports*, 95(3,Part1), 999-1007
Cousson-Gelie et al. (2005). *Psychological Reports*, 97(3), 699-711 (breast CA)
Bowen et al. (2006). *Depression and Anxiety*, 23(5), 266-273

General Stress
Holland & Neimeyer (2005). *Palliative and Supportive Care*, 3(3), 173-181
Kim et al. (2007). *Supportive Care in Cancer* 15(12), 1367-74 (caregiver)
Pienaar et al. (2007). *Criminal Justice and Behavior* 34(2), 246-258
Religious Coping During National Stress

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


* Hundreds of quantitative and qualitative studies report similar findings in persons under stress, especially in minorities *
How Religion Influences Coping

1. Positive world view
2. Meaning and purpose
3. Psychological integration
4. Hope (and motivation)
5. Personal empowerment
6. Sense of control (prayer)
7. Role models for suffering (facilitates acceptance)
8. Guidance for decision-making (reduces stress)
9. Answers to ultimate questions
10. Social support (both human and Divine)

Not lost with physical illness or disability
Does religion actually help people to cope better, or not
The Research

(systematic review 1872-2010 of all quantitative research published in peer reviewed academic scientific journals in the English language listed in PsychInfo and Medline)

This research is documented in:

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

Research on Religion and Mental Health

**Emotional disorders**
- Depression
- Suicide
- Substance use

**Positive emotions/virtues**
- Well-being and happiness
- Meaning, purpose, and hope
- Forgiveness, altruism, gratitude, compassion

**Social health**
- Social support
- Social capital
- Marital stability
Emotional Disorders
Religious involvement is related to:

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

More depression (6%)
Religion and Depression in Hospitalized Patients

Geriatric Depression Scale

Information based on results from 991 consecutively admitted patients (differences significant at p<.0001)

Percent Depressed

- Low: 35%
- Moderate: 23%
- High: 22%
- Very High: 17%

Degree of Religious Coping

Geriatric Depression Scale

Information based on results from 991 consecutively admitted patients (differences significant at p<.0001)
Time to Remission by Intrinsic Religiosity

(N=87 patients with major or minor depression by Diagnostic Interview Schedule)
845 medical inpatients > age 50 with major or minor depression

HR=1.53, 95% CI=1.20-1.94, p=0.0005, after control for demographics, physical health factors, psychosocial stressors, and psychiatric predictors at baseline

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Other Patients

Highly Religious (14%)
Religious involvement is related to:

Less suicide and more negative attitudes toward suicide
106 of 141 studies (75%)
Religious involvement is related to:

• Less anxiety, less PTSD
  (125 of 225 studies report significantly less)
Spiritual Injury and PTSD Symptoms

1,385 veterans from Vietnam (95%), World War II and/or Korea (5%) involved in outpatient or inpatient PTSD programs. VA National Center for PTSD and Yale University School of Medicine. Weakened religious faith was an independent predictor of use of VA mental health services—indeed of severity of PTSD symptoms and level of social functioning. Investigators concluded that the use of mental health services was driven more by their weakened religious faith than by clinical symptoms or social factors.

Positive Emotions / Virtues
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%)
Religion and Well-being in Older Adults


Church Attendance or Intrinsic Religiosity

Religious categories based on quartiles (i.e., low is 1st quartile, very high is 4th quartile)

Church Attendance or Intrinsic Religiosity

Religious categories based on quartiles (i.e., low is 1st quartile, very high is 4th quartile)
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%)
Positive Human Virtues / Character Traits
(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 Health
Religious involvement is related to:

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

Religious involvement is related to:

Significantly greater social capital
11 of 14 studies (79%)
Religious involvement is related to:

Significantly greater marital stability
68 of 79 studies (86%)
[92% of best]

less divorce, greater marital satisfaction, less spousal abuse
Poor Health Behaviors, Difficult with Self-Regulation

Religious involvement is related to:

- Less cigarette smoking, especially among the young
  122 of 135 studies (90%)
  [90% of best]

- Less extra-marital sex, safer sexual practices (fewer partners)
  82 of 95 studies (86%)
  [84% of best]

- Less alcohol use / abuse / dependence
  240 of 278 studies (86%) [90% of best]

- Less drug use / abuse / dependence
  155 of 185 studies (84%) [86% of best] [95% experimental studies]
Self-Regulation (cont)
(systematic review)

Religious involvement is related to:

- Less anger, hostility
  (23 of 35 studies show significantly less)

- Less delinquency and crime
  (81 of 102 studies show significantly lower rates)
Religion and Physical Health
Interaction of the Brain and Immune System

CRH

LOCUS CERULEUS

NUCLEUS OF THE TRACTUS SOLITARIUS

VAGUS NERVE

PITUITARY GLAND

ADRENAL GLANDS

CORTISOL

ACTH

SYMPATHETIC NERVIOUS SYSTEM

CYTOKINES

IMMUNE ORGANS

IMMUNE CELLS

ROBERT SMITH
Serum IL-6 and Attendance at Religious Services
(1675 persons age 65 or over living in North Carolina, USA)

Frequency of Attendance at Religious Services

**Citation**: International Journal of Psychiatry in Medicine 1997; 27:233-250
Religious involvement is related to:

Better immune functions
(14 of 25 studies) (56%)

Better endocrine functions
(23 of 31 studies) (74%) (majority involving meditation)
Effects of Emotions on Cardiovascular Health

  [817 undergoing CABG followed-up up for 12 years; controlling # grafts, diabetes, smoking, LVEF, previous MI, *depressed* patients had **double the mortality**]

• Kubzansky et al. *Arch Gen Psychiatry* 2007; 64:1393-1401
  [emotional vitality – **positive emotions** – reduces risk of coronary heart disease by nearly 20% over 15 years in over 6,000 persons]

• Tindle HA et al. *Circulation* 2009; 120:656-662
  [in a sample of 97,253 followed over 8 years (Women’s Health Initiative), cynical hostility associated with 13% increased risk of myocardial infarction and 25% increased risk of CHD mortality, as well as a 23% increased risk of cancer-related mortality; however, optimism was associated with a 16% reduction in risk of myocardial infarction, a 30% decrease in CHD mortality, and a 7% reduction in cancer-related mortality]
Religious involvement is related to:

Lower blood pressure  
(36 of 63 studies) (57%)

Better cardiovascular functions (CVR, HRV, CRP)  
(10 of 16 studies overall) (63%)

Less coronary artery disease  
(12 of 19 studies overall) (63%)
Religious Activity and Diastolic Blood Pressure
(n=3,632 persons aged 65 or over)

Citation: International Journal of Psychiatry in Medicine 1998; 28:189-213

* Analyses weighted & controlled for age, sex, race, smoking, education, physical functioning, and body mass index

**High** = weekly or more for attendance; daily or more for prayer
**Low** = less than weekly for attendance; less than once/day for prayer
Mortality From Heart Disease and Religious Orthodoxy
(based on 10,059 civil servants and municipal employees)

Differences remain significant after controlling for blood pressure, diabetes, cholesterol, smoking, weight, and baseline heart disease.
Six-Month Mortality After Open Heart Surgery

(232 patients at Dartmouth Medical Center, Lebanon, New Hampshire)

Citation: Psychosomatic Medicine 1995; 57:5-15
Mortality (all-cause)
(systematic review)

Religious involvement related to:

• Greater longevity in 82 of 120 studies (68%)

• Best studies (rated 8 or higher): 47 of 62 studies (76%)

• Shorter longevity in 7 of 120 studies (6%)
The Relationship between Religion and Health: All Studies

Number of studies includes some studies counted more than once (see Appendices of 1st and 2nd editions).

Prepared by Dr. Wolfgang v. Ungern-Sternberg
Theoretical Model of Causal Pathways

**Belief in, attachment to God**
- Public prac, rit
- Private prac, rit
- R commitment
- R coping

**Positive Emotions**
- Psychological Traits / Virtues
  - Forgiveness
  - Honesty
  - Courage
  - Self-discipline
  - Altruism
  - Humility
  - Gratefulness
  - Patience
  - Dependability

**Social Connections**

**Negative Emotions Mental Disorders**

**Immune, Endocrine, Cardiovascular Functions**

**Physical Health and Longevity**

**Genetics, Developmental Experiences, Personality**

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

(c) Handbook of Religion & Health, 2nd ed
For some, particularly active duty soldiers, veterans, and their families, religion can be a powerful coping resource.

Religion is related to better mental health and better health behaviors.

Religion is related to better physical health, medical and surgical outcomes, and greater longevity.

We cannot ignore this powerful resource for resiliency at a time like this.
Further Reading


6. *In the Wake of Disaster* (Templeton Press, 2007)
The Center was founded in 1998, and is focused on conducting research, training others to conduct research, and field-building activities related to religion, spirituality, and health. In addition, we serve as a clearinghouse for information on religion, spirituality and health, and seek to support and encourage dialogue between researchers, clinicians, clergy, and others interested in the intersection.

Goals & Focus

The three main goals of the Center are:

- Conducting interdisciplinary research on spirituality, theology and health
- Training and supporting those wishing to do research on the topic
- Building a community of researchers, clinicians, clergy, and others interested in dialogue and discussions related to spirituality, theology and health
- Informing the public about relationships between religion, spirituality and health
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. Leading spirituality-health researchers at Duke, UMSC, and elsewhere will give presentations:

- Strengths and weaknesses of previous research
- Theological considerations and concerns
- Highest priority studies for future research
- Strengths and weaknesses of measures of religion/spirituality
- Designing different types of research projects
- Primer on statistical analysis of religious/spiritual variables
- 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

Scholarships are available for the financially destitute

If interested, contact Harold G. Koenig: koenig@geri.duke.edu
Discussion
(till 1:00)