Hospital Chaplaincy and Medical Outcomes at the End of Life

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HealthCare Chaplaincy/John Templeton Foundation

Caring for the Human Spirit: Driving the Research Agenda for Spiritual Care in Health Care

DANA-FARBER
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Study Team

- Angelika Zollfrank, MDiv, BCC (chaplaincy)
- Tracy Balboni, MD, MPH (rad onc/pall med)
- Holly Prigerson, PhD (psychology/pall med)
- Michael Balboni, PhD (theology/pall med)
- Kathleen Gallivan, PhD (chaplaincy)
- Kelly Trevino, PhD (psychology)
- Christine Mitchell, MDiv (chaplaincy)
- Andrea Enzinger, MD (med onc/pall med)
- Tyler VanderWeele, PhD (biostatistics/ epi)

Talk Outline

I. Study Summary
   - Background and Study Aims
   - Methods
   - Preliminary Results

II. Study Challenges and Achievements

Background

Patient R/S associated with:

- Satisfaction with care
- ↑ QOL
- EOL preferences
- EOL decisions

Background

Spiritual Care from medical professionals:

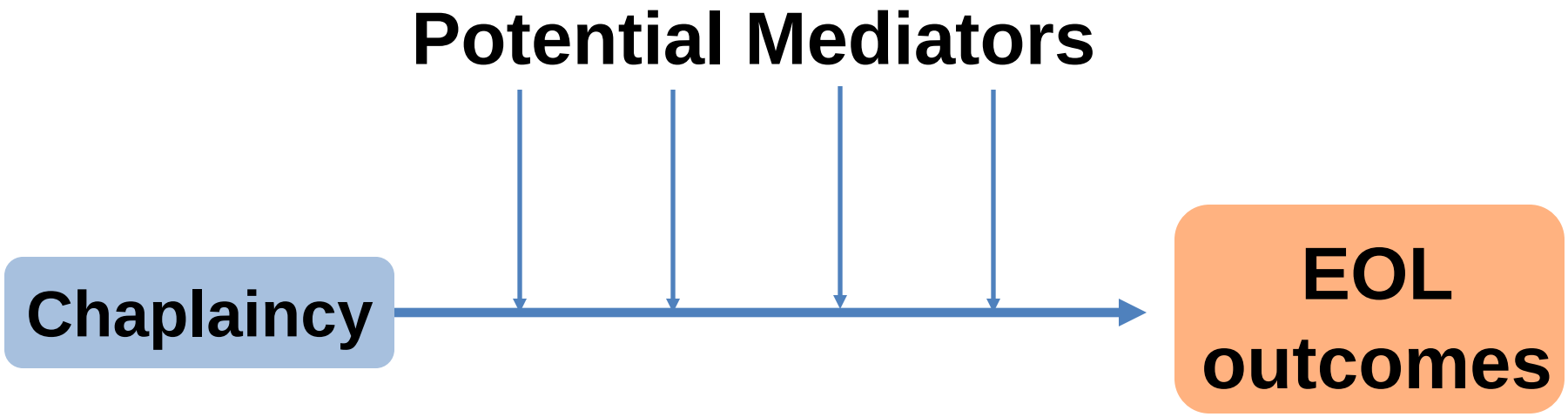
- ↑ hospice
- ↓ intensive treatment
- Cost differences

Background

Chaplaincy and patient outcomes

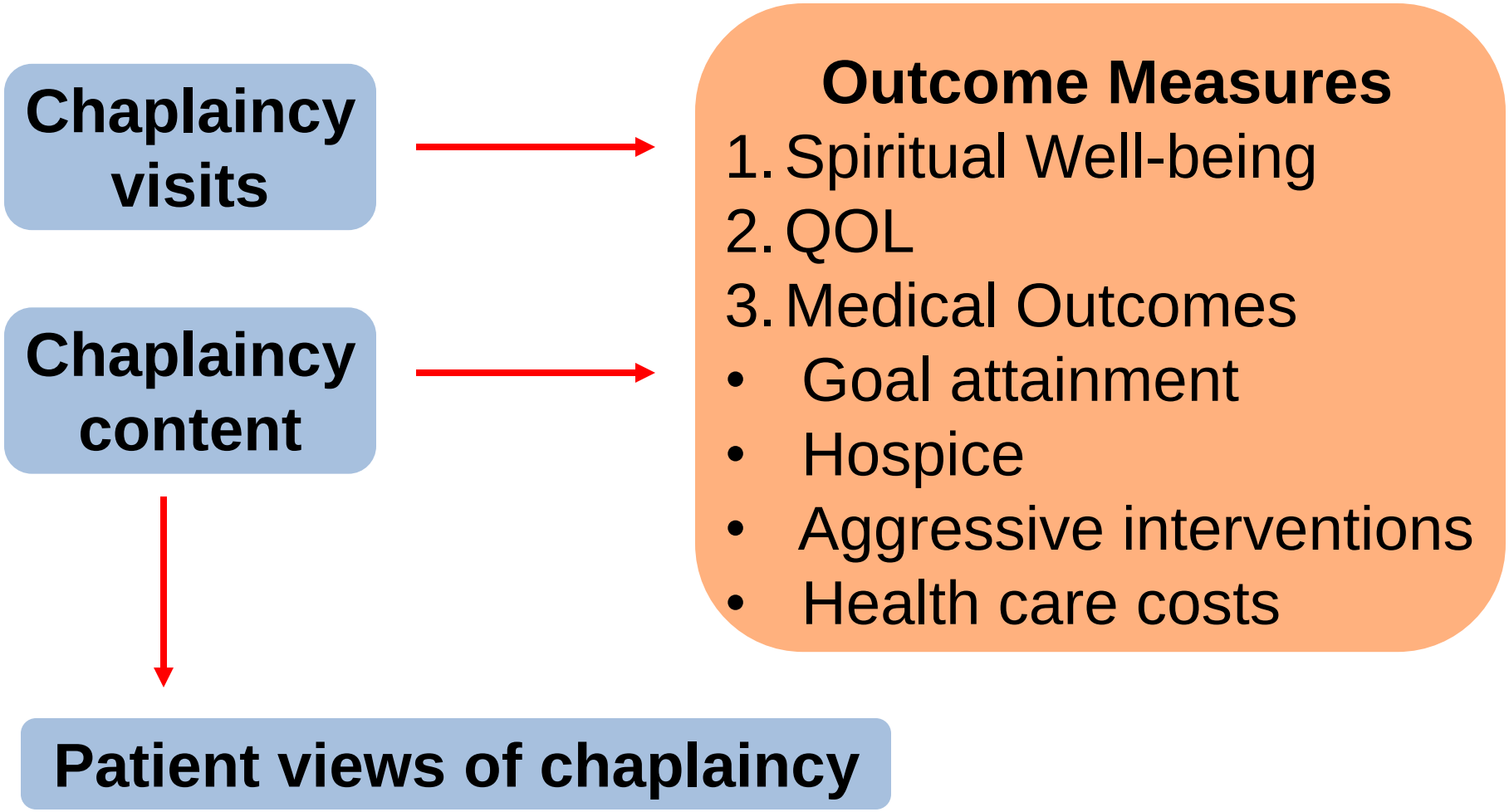
- Single-item measure in CwC
- Unknown frequency of visits
- Unknown content of visits

Background



- Religious Beliefs and EOL care
- Illness acceptance
- Medical attitudes (e.g. EOL preferences)
- Therapeutic alliance
- Spiritual care from clergy & RN/MD
- Health Communication

Overview of Study Aims



Study Aim #1

To examine the relationship between frequency of chaplaincy visits and patient quality of life and health care services outcomes, including identification of mediators of these relationships (e.g., treatment preferences, spiritual struggle/peace).

Study Hypothesis #1

Greater frequency of chaplaincy visits will be associated with better quality of life, greater hospice care, less aggressive medical interventions, and reduced medical care costs at the end of life.

Study Aim #2

To examine the relationship between specific chaplaincy content and patient quality of life and health care services outcomes, including identification of mediators of these relationships (e.g., treatment preferences, spiritual peace).

Study Hypothesis #2

Specific elements of chaplaincy visits will be associated with improved patient quality of life, greater hospice, reduced aggressive medical interventions, and reduced health care costs at the end of life.

Study Aim #3

To explore patients' views of chaplaincy services and identify aspects of these services viewed as beneficial to patients at the end of life.

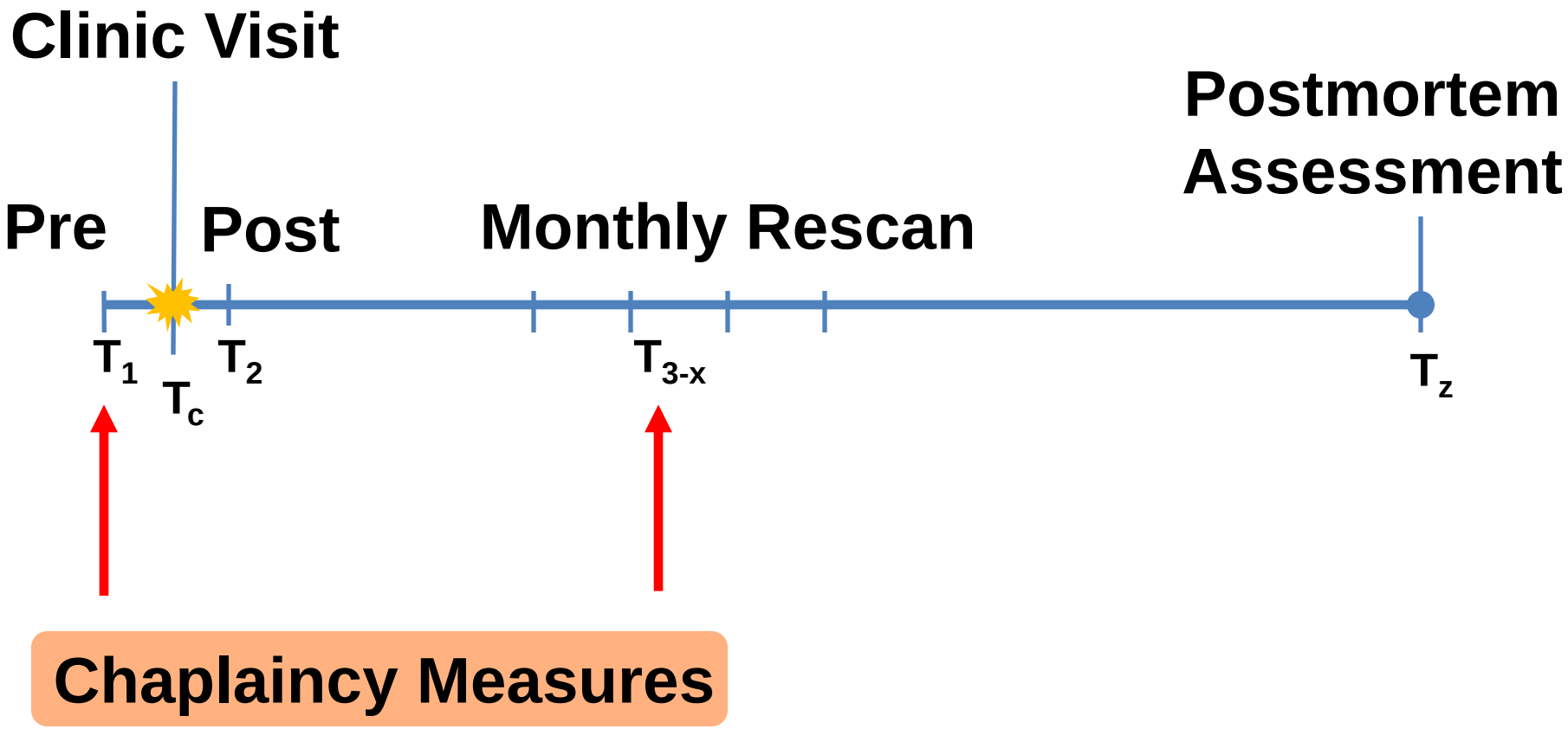
Qualitative Exploration

What are patients' views of their chaplaincy experiences, including the elements viewed as beneficial at the end of life?

Methods: Coping with Cancer II

- NCI/NIH study, Holly Prigerson, PI
- 600 advanced cancer patients, 200x3: Black, Latino, White
- Eligibility criteria:
  - Advanced cancer diagnosis and failure, ineligibility for, or declining of first-line chemotherapy
  - Age 21 or greater
  - English-speaking, without cognitive impairment
  - No hospice or palliative care at enrollment
- 10 Sites/6 cities: Boston, New Haven, Richmond VA, Dallas, Albuquerque, Pomona

CwC2 Protocol Schema



Patient Survey Instruments

Pt T_1	**Pt T_2**	**Pt T_{3-x}**
• Demographics (DEM)	• Post-Visit Assessment (PVA)	• DEM
• Diagnostic understanding	• McGill QOL	• PVA
• McGill QOL	• PEH	• McGill QOL
• Evaluation of Health (PEH)		• PEH
• Preferences for prognostic info (PROG PREF)	• PROG PREF	• PROG PREF
• Cognitive Function	• Communication (HCP)	
• Interaction with health care	• Communication Goals (ISEE)	
• EOL knowledge (TACT)		• TACT
• Future visit info	• Peace Scale	
	• Pref Aggressive (TX PREF)	• TX PREF
	• Human Connection Scale (THC)	

- **R/S Beliefs EOL care (7 items)**
- **Rel Com R/S support (2 items)**
- **MD Spiritual support (2 items)**
- **+ Rel Coping (3 items)**
- **Brief MMRS (6 items)**
- **Chaplaincy services (5 items)**
- **Spiritual QOL (1 item)**

- **Chaplaincy services**
- **Spiritual QOL**

Chaplaincy Service Frequency

Have you been visited by a hospital or clinic chaplain [in the last month]?

- ☐ No
- ☐ Yes
- ☐ REF
- ☐ DK
- ☐ Missing

If yes, approximately how many times? _____

Chaplaincy Service Checklist (new)

In order to help chaplains better serve patients, we would like to understand what the chaplain did during your visit(s). I'm going to read you a short list, and after each one please say "yes" if the chaplain did it during your visit:

- ☐ Express sympathy & compassion?
- ☐ Listen to spiritual concerns?
- ☐ Talk about forgiveness?
- ☐ Pray?
- ☐ Offer a religious ritual (e.g. communion) or read Scripture?
- ☐ Help you connect with a religious community or clergy member?
- ☐ Talk about sources of meaning?
- ☐ Talk about death or an afterlife?
- ☐ Help you sort through medical decisions?
- ☐ Talk about sources of peace?

Chaplaincy Global Assessment

Overall, how helpful was your time with the chaplain?

- ☐ Not helpful at all
- ☐ Helpful to a small extent
- ☐ Moderately helpful
- ☐ Largely helpful
- ☐ Completely helpful

Please explain why your time with the chaplain was helpful or not helpful? (new)

Spiritual Quality-of-Life (new)

Please rate your overall quality of your spiritual life over the past two days. Please use a scale from the worse to the best it could be.

0	1	2	3	4	5	6	7	8	9	10
Worst It Could Be					Neutral					Best It Could Be

Preliminary Results: Sample Characteristics (N=282)

- Average age 60 yrs
- 65% female
- All with advanced, incurable cancers
- 78% with KPS of 70 or higher

Preliminary Results

Religious Affiliation

- 18% Baptist
- 36% Catholic
- 7% Jewish
- 6% None
- 16% Other
- 16% Protestant

Religiousness

- 10% Not at all
- 22% Slightly
- 35% Moderately
- 33% Very

Spirituality

- 7% Not at all
- 13% Slightly
- 37% Moderately
- 43% Very

Religious Beliefs and EOL Care

N=133 at time of analysis in 2/2013	Total n=133	Whites n=87	Blacks n=29	Latino n=17
My belief in God relieves me of having to think about EoL medical decisions	42%	27%	82%	53%
I accept every possible medical treatment because my faith tells me to	61%	55%	79%	59%
Agreeing to a DNR order is against my religious beliefs	8%	1%	30%	7%
I am giving up on my faith if I stop treatment	25%	19%	43%	24%
God can perform a miracle and cure me	67%	51%	96%	88%
I must endure medical procedures because suffering is God's testing	27%	14%	66%	31%
Faith helps me endure suffering from medical treatments	54%	44%	79%	63%

Racial/ethnic Differences in Religious Beliefs about EOL Medical Care

	Black vs White		Latino vs White	
	OR	*p*	OR	*p*
My belief in God relieves me of having to think about EoL medical decisions	12.8	**<.001**	3.1	**.04**
I accept every possible medical treatment because my faith tells me to	3.1	**.03**	1.2	.78
Agreeing to a DNR order is against my religious beliefs	36.2	**.001**	6.1	.21
I am giving up on my faith if I stop treatment	3.2	**.01**	1.3	.67
God can perform a miracle and cure me	26.4	**.002**	7.3	**.01**
I must endure medical procedures because suffering is God's testing	11.7	**<.001**	2.8	.10
Faith helps me endure suffering from medical treatments	4.9	**.002**	2.1	.18

Preliminary Data: Religious Beliefs about EOL Medical Care

- Created score for religious beliefs about EOL care (RBEC, factor analysis → single factor)
- MVA to assess relationship of religious beliefs score with EOL treatment preferences (Support item)

Preliminary Data: Religious Beliefs about EOL Medical Care

MVA included any significant confounding factors (e.g., demographics, religious tradition)

- RBEC predicted greater preference for aggressive EOL care (AOR=2.49, *p*=.003)
- Though race/ethnicity predictive of treatment preference in UVA, no longer predictive in MVA.

Summary: Religious Beliefs about EOL Medical Care

- Religious beliefs about EOL medical care are common, and significantly more so among racial/ethnic minority patients
- Religious beliefs about EOL medical care are related to greater preference for aggressive EOL medical care
- Religious beliefs about EOL medical care may be a mediating factor in the relationships of race to greater aggressive care at life's end

Preliminary Data: Chaplaincy Visits

Have you been visited by a hospital or clinic chaplain?

- 52% No
- 48% Yes

Chaplaincy visits reported at monthly follow-ups

- 87% No
- 13% Yes

Approximately how many visits?

- Baseline – Average 3 visits
- Monthly follow-up – Average 1 visit

Preliminary Data: Chaplaincy Visits

Overall, how helpful was your time with the chaplain?

Baseline (N=122)		Follow up (N=6)
21%	Completely helpful	1
25%	Largely helpful	0
27%	Moderately helpful	3
16%	Helpful to a small extent	1
11%	Not at all helpful	1

Patient-reported Components of Chaplain's Visit	N=31 Assessed Visits
Talk about sources of peace?	4 (13%)
Help you sort through medical decisions?	2 (7%)
Talk about death or an afterlife?	2 (7%)
Talk about sources of meaning?	5 (16%)
Help you connect with a religious community or clergy member?	2 (7%)
Offer a religious ritual (e.g. communion) or read Scripture?	14 (45%)
Pray?	24 (77%)
Talk about forgiveness?	7 (23%)
Listen to spiritual concerns?	16 (52%)
Express sympathy and compassion?	27 (87%)

Summary of Preliminary Data: Chaplaincy Visits

- Baseline: 48% have been visited (on average three times) by chaplaincy
- Follow-up: 13% have been visited (on average once)
- 73% view these visits as at least moderately helpful
- In preliminary assessment, most common components prayer, listening to spiritual concerns, empathy/compassion

Preliminary Data: Spiritual QOL

Overall Quality of Spiritual Life	Baseline (n = 47)	Follow-Up (n=45)
Best it could be – 10 -	14 (30)	14 (31)
9 -	4 (9)	3 (7)
8 -	15 (32)	17 (38)
7 -	4 (9)	2 (4)
6 -	4 (9)	0 (0)
5 -	5 (11)	8 (18)
Worst it could be – 0-4 -	1 (2)	1(2)

Summary of Preliminary Data

- Considerable progress thus far in research collection
- Much continued data maturation to occur

Study Challenges

- Lengthy IRB delay (outside our control)
- Lengthy process of awaiting data acquisition (working with a large cohort study)
- Multi-institutional meeting coordination

Team Achievements

Chaplaincy authorships:

- Angelika Zollfrank:
  - "Teaching Healthcare Providers to Provide Spiritual Care: A Pilot Study" *Academic Medicine*
  - *"*Examining Forms of Spiritual Care Provided in the Advanced Cancer Setting" *Journal of Palliative Medicine*
  - "Negative Religious Coping as a Correlate of Suicidal Ideation in Patients with Advanced Cancer" *Psycho-Oncology*
  - "Nurse and Physician Barriers to Spiritual Care Provision at the End of Life" *Journal of Pain and Symptom Management*
- Kathleen Gallivan:
  - "Provision of Spiritual Support to Patients with Advanced Cancer by Religious Communities and Associations with Medical Care at the End of Life" *JAMA Internal Medicine*

Team Achievements

- Zollfrank: 2013 ASBH poster presentation (“Is Spiritual Care from Nurses and Physicians Appropriate at the End of Life?”)
- Zollfrank: 2014 APOS presentation (CPE for healthcare provider program)
- Team grant-writing activities to launch Program in Religion, Health, and Medicine at Harvard, includes chaplaincy research/research development as a core domain, NPCRC grant (both pending)

Team Achievements

- Our research assistant, Christine Mitchell, has an MDiv from Harvard Divinity School (2012), with 2 years of experience as a chaplain
- Co-author on “Nurse and Physician Barriers to Spiritual Care Provision at the End of Life”
- Accepted to PhD program in Practical Theology at Boston University
- Accepted to ScD program in Social and Behavioral Sciences at Harvard School of Public Health

Teaching Healthcare Providers to Provide Spiritual Care: A Pilot Study

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Outline

1. Background
2. Educational Intervention
3. Study Aims
4. Methods
5. Results
6. Discussion

Background

- Patients want to be asked about R/S beliefs.
- R/S well-being has been associated with improved quality of life, happiness, hope, peace, and gratefulness.
- Spiritual well-being protects against despair at the EoL, leads to avoidance of burdensome treatment and increases hospice enrollment.
- Oncology patients' unaddressed R/S needs have been associated with decrements in quality of life.
- R/S care can strengthen patient-provider relationships.
- Practice standards recommend addressing patients' spiritual needs.

Background

- Many providers continue to overlook patients' R/S values
- Barriers to R/S care provision
  - Lack of education
  - Role conflicts
  - Providers' uncertainty about personal beliefs
  - Personal discomfort
  - Lack of time

Clinical Pastoral Education for Health Care Providers (CPE-HP)

- CPE-HP is five-month fellowship in R/S care
- Since 1998 at the Massachusetts General Hospital, Boston
- 108 healthcare providers participated
- 23 participants in inpatient or outpatient oncology, palliative care, hospice, or general medicine

Educational Intervention: CPE-HP

Educational component of 100 hours

- Didactics, case presentations, process group
- Weekly written reflection, case presentations, and papers on participants' R/S experiences, final paper describing changes relative to integration of R/S care and future plans.

Clinical component of 300-hour

- Application of competencies in participants' professional home setting and provider role.
- Bi-weekly clinical supervision focusing on integration of spiritual care in each participant's clinical setting

Goal: Integration of R/S care into clinical practice

- Basic spiritual assessments/histories
- Utilizing diverse religious and spiritual resources
- Referring to a board certified chaplain as needed
- Using similarities in different R/S beliefs to effectively navigate diversity
- Initiating and ending meaningful helping relationships
- Listening skills (non-verbal)
- Assessing underlying motivations
- Balancing interpersonal boundaries with empathy

Paul's Story

- Advanced cancer
- Wife Mildred at the beside, fearful, no children.
- Couple was originally RC, had joined a Born Again Christian Church, otherwise isolated.
- Paul: "God is giving me signs that I will do well."
- Mildred: "We are praying for a miracle."
- His Nurse anticipated negative R/S coping as prognosis was poor. Diagnosis spiritual struggle. Ongoing engagement of R/S issues.
- Chaplain helped Paul to experience God's presence independent of outcomes; prayer and scripture reading; explored fears, facilitated conversation among the couple; talked about funeral, life after Paul's death for each of the partners.

Study Aims

To study the impact of CPE-HP on health care providers':

- Ability to provide R/S care
- Confidence in R/S care provision
- Frequency of R/S care provision

Study Hypothesis

We hypothesized that comprehensive education in integrating R/S care into medical practice would lead to greater (1) health care practitioner confidence and perceived ability in providing spiritual care and (2) greater provision of spiritual care to patients.

Study Measures

Ability to provide R/S care

- identify R/S issues
- initiate conversations
- respond to R/S issues initiated by patients
- conduct spiritual assessments and implement care plans.

Five-point scale (1=no ability, 5=excellent).

Study Measures

Frequency of R/S care

- R/S care offered over the past two weeks (Patient initiated, provider initiated, prayer)

Five-point scale (1=0 times, 5=4 or more times).

Comfort using religious language

- “I am comfortable using religious language with patients”

Five-point scale from 1 (strongly disagree) to 5 (strongly agree).

Study Measures

Confidence in R/S care

- Confidence in providing R/S care to Buddhist, Hindu, Jewish, Protestant, and Roman Catholic patients
- “I feel confident providing care to Buddhist patients”
- Five-point scale from 1 (strongly disagree) to 5 (strongly agree).

Study Results

Demographics

- *n*=**50** (41 female, 9 male)
- **29** RNs, **13** MDs
- **20** Protestant, **10** Roman Catholic, **8** Jewish, **11** Other
- Average age: **47.1** years
- Experience in their profession: **20.2** years
- Number of patients with chronic and life-threatening illness per week 36

Participant Report in change in Spiritual Care Provision from Baseline to Post-training

Ability to provide spiritual care

- **33%** improvement over time

Comfort using religious language

- **29%** increase

Frequency of R/S care provision

- **75%** overall increase
- **61%** increase in frequency of R/S conversations
- **83%** increase in initiation of R/S conversations
- **95%** increase in provision of prayer

Confidence in Providing R/S Care

Total Sample

- Increase over time of **36%**
- **20%** increase in R/S care to patients of the same R/S affiliation
- **43%** increase in R/S care to patients of different R/S affiliation

Confidence in Providing R/S Care

Jewish participants

40% overall increase
32% in concordant R/S care
77% in discordant R/S care

Roman Catholic Participants

15 % overall increase
9% in concordant R/S care (not statistically significant)
15% in discordant R/S care

Protestant participants

40% overall increase
18% in concordant R/S care
48% in discordant R/S care

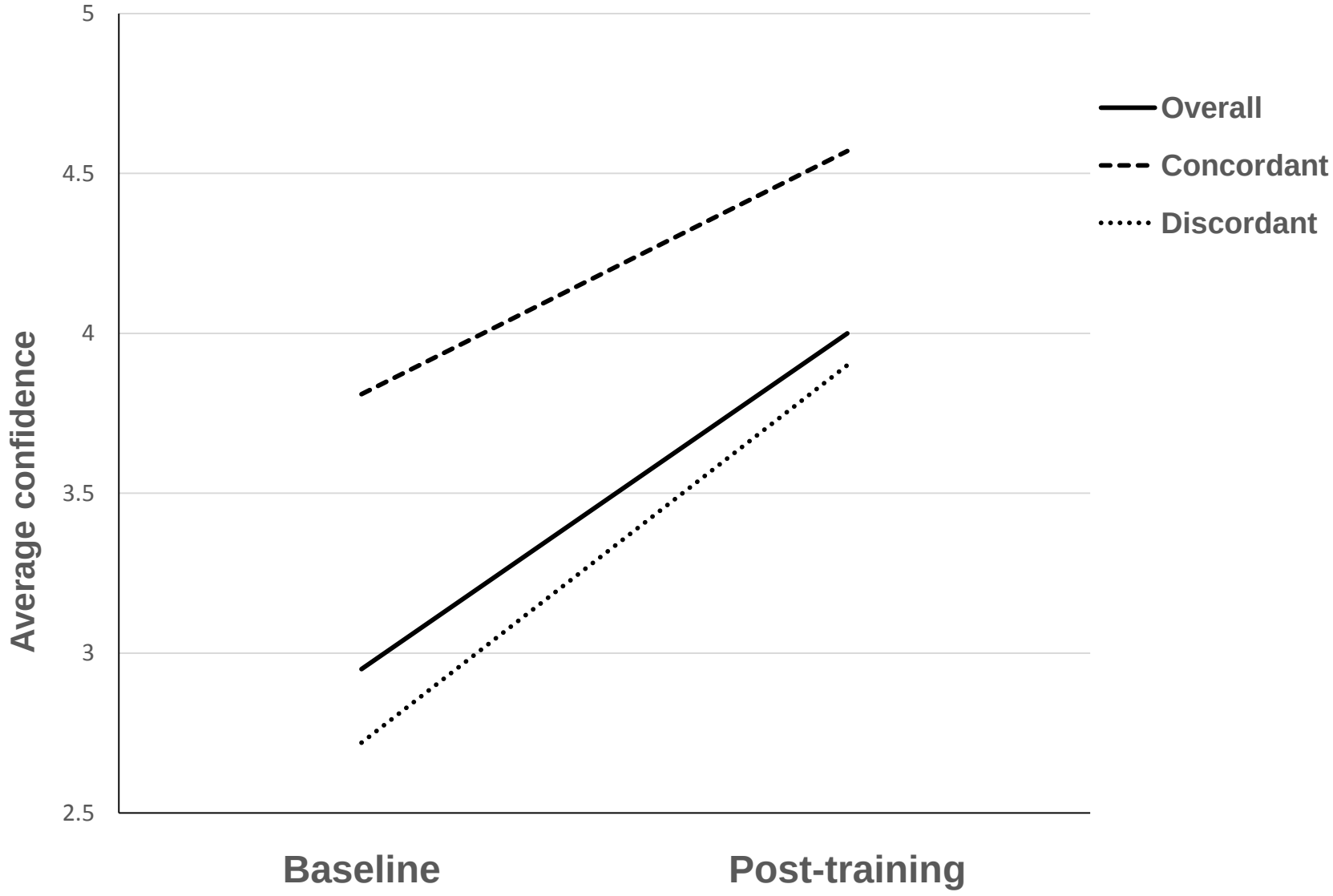
Other

28% overall increase
31% increase with Jewish patients
15% increase with Roman Catholic patients
27% increase with Protestant patients
32% increase with Buddhist patients.

Confidence in Providing R/S Care

- Participants across religious affiliations reported greater confidence in ability to provide R/S care to patients of the same versus a different religious affiliation from baseline to post-training.
- The difference in participants' confidence in providing care to religiously concordant versus religiously discordant patients decreased over time.

Figure: Change in Confidence in R/S Care Pre- and Post Training



Conclusions

- From baseline to post CPE-HP training, participants' self-reported ability and confidence improved. Participants also reported providing spiritual care more frequently.
- Improvements in participants' confidence occurred whether the patient's religion was the same or different from the providers for participants of Protestant, Jewish, and "other" religious affiliation.
- CPE-HP improves participants' confidence in providing spiritual care for most participants independent of patient affiliation.

Study Team

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