## Faculty Disclosure

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<tr>
<th></th>
<th>Company Name</th>
<th>Honoraria/ Expenses</th>
<th>Consulting/ Advisory Board</th>
<th>Funded Research</th>
<th>Royalties/ Patent</th>
<th>Stock Options</th>
<th>Ownership/ Equity Position</th>
<th>Employee</th>
<th>Other (please specify)</th>
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<td>X</td>
<td>No, nothing to disclose</td>
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Yes, please specify:
Supporting Caregivers throughout the Cancer Journey

Youngmee Kim
University of Miami

Facilitating Adjustment to Medical Illness in Your Family

June 30, 2018 Multinational Association of Supportive Care in Cancer
Interventions
Cancer Caregiver Interventions

✓ Meta-analysis and Systematic reviews of interventions with cancer caregivers of adult patients (Northouse et al., 2010; Griffin et al., 2014; Waldron, Janke et al., 2013; Kaltenbaugh et al., 2015; Applebaum & Breitbart, 2013; Li & Loke, 2014)

➢ Various Types (Applebaum & Breitbart, 2012)

Psychoeducation, Problem-solving/skill building, Supportive therapy, Family/couple therapy, Cognitive-behavioral therapy, Interpersonal therapy, Complementary and alternative medicine, Existential therapy

➢ Effect Sizes

• Couple-based similar to patient-only or caregiver-only
• Small to medium - but maybe beneficial
Cancer Caregiver Interventions

Weaknesses & Future Directions

- Insufficient evidence
- Unclear theoretical framework
- Uniqueness of cancer caregiving
  – compare and contrast with other caregiver research
- Lack of targeting and tailoring
  Gender, SES, Sociocultural Factors, Country and Culture
- Lack of consideration of the cancer journey;
  brief, if any, follow-up
Caregivership Phases (Five Seasons)

Early------------------- Mid-term ------------------- Long-term -------------------

-------- End-of-life --------------- Bereavement -------------------

-------------------------------------  Prevention  -----------------------------------------
Caregiver Psychological Distress (POMS-SF)

### Clinical Levels of Depressive Symptoms: Prevalence

<table>
<thead>
<tr>
<th></th>
<th>Former CG</th>
<th>Current CG</th>
<th>Bereaved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Depsd</td>
<td>Nondepsd</td>
<td>Depsd</td>
</tr>
<tr>
<td><strong>5 years post-dx</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressed</td>
<td>10.9%</td>
<td>10.0%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Nondepressed</td>
<td>7.8%</td>
<td>71.3%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

2 years post-dx: non-bereaved

<table>
<thead>
<tr>
<th></th>
<th>Depressed</th>
<th>Nondepsd</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7.8%</td>
<td>71.3%</td>
</tr>
</tbody>
</table>

FCR = Former Caregivers-Remission (N = 230); CC = Current Caregivers (N = 68); FCB = Former Caregivers-Bereaved (N = 52)

Kim, Carver, Shaffer, & Cannady (2014)
Predicting Changes in Physical Health

Shaffer, Kim, Carver, & Cannady (2017a, 2017b)
Predictors of Disability Markers: Person x Time

Spousal Caregivers x Time Effect on Development of Arthritis

Kim, Carver, Shaffer, Gansler, & Cannady (2015)
Predictors of Disability Markers: **Person x Time**

Sub. Cg Stress x Time Effect on Development of **Heart Diseases**

Kim, Carver, Shaffer, Gansler, & Cannady (2015)
Perceived Stress & Biomarkers

Kim et al. (2016b).
Personality & Biomarkers

PT_Optimism → PT_Uncertainty → PT_Cortisol Awake → PT_Cortisol Change → CG_Optimism

CG_Optimism → CG_Uncertainty → CG_Cortisol Awake → CG_Cortisol Change

Kim et al. (2017).
Affect & Sleep

PT_NegAffect

PT_PosAffect

PT_Sleep_D-1

CG_NegAffect

CG_PosAffect

CG_Sleep_D-1

PT_Sleep on D

CG_Sleep on D

Ting et al. (2018).
Caregivership Phases (Five Seasons)

Early ------------------- Mid-term ------------------- Long-term -------------------
------------------- End-of-life ------------------- Bereavement
------------------------------------------------- Prevention
## Long-term Bereavement Outcomes

<table>
<thead>
<tr>
<th></th>
<th>3 yrs</th>
<th>Case</th>
<th>5 yrs</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolonged Complicated Grief (ICG)</td>
<td>17.09</td>
<td>24.1%</td>
<td>16.74</td>
<td>18.2%</td>
</tr>
<tr>
<td>Intense Emotional Reaction (TRIG)</td>
<td>40.20</td>
<td>61.3%</td>
<td>38.32</td>
<td>47.7%</td>
</tr>
<tr>
<td>Depression (CES-D)</td>
<td>13.85</td>
<td>36.5%</td>
<td>7.85*</td>
<td>44.3%</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>4.44</td>
<td>1~7</td>
<td>4.43</td>
<td>1~7</td>
</tr>
</tbody>
</table>

N for 3-year = 137; N for 5-year = 88  
Caseness for ICG > 25; for TRIG > 37; 20-item CES-D ≥ 16; 10-item CES-D ≥ 8  
* 10-item CES-D (0 ~ 30)

Long-term Bereavement Outcomes: Predictors

- **Prospectively at 8-year** post-diagnosis

  Preparedness at 5-year related to

  lower ICG and TRIG at 8-year

* Medical, cognitive, affective preparedness
  
  (Hebert et al., 2009)
Bereavement Outcomes: Pre-loss Spirituality

- Bereavement-Specific Distress
  Pre-loss Peace and Faith related to lower Intrusive Thoughts
  Pre-loss Peace related to lower Hyperarousal

- General Distress at Post-loss
  Pre-loss Peace and Faith marginally related to lower Mood Disturbance

Ting, Lucette, Carver, Cannady, & Kim (in press).
Socio-Cultural & Multidisciplinary Team Approaches
Familism & Psychological Distress

Pedreira et al. (2017).
Cancer-related Stress & Health Recovery

Cancer-Related Stress on Family

Physical Health Recovery At 12-mn Post Dx

White

Black

Kim, Shaffer, Rocha-Lima, Milton, & Carver (2016)
IPOS Survivorship Online Survey

https://ipos-society.org/ipos-survivorship-online-survey/

- To gauge current involvement in clinical services and research with cancer patients/survivors in various ages and their family caregivers
  - In collaboration with IPOS
  - Survey developed in 15 languages: Catalan, Chinese-simplified, Chinese-traditional, English, French, German, Hindi, Hungarian, Italian, Japanese, Korean, Portuguese, Romanian, Spanish, Turkish
  - Survey is in the field:
    - Next phases will directly engage with cancer patients/ survivors and their family caregivers
Certain caregivers are more likely to develop greater psychological and physical morbid conditions.

Identifying more refined psycho-social predictors and psychobiobehavioral mechanisms may help supporting the caregivers and their patients/survivors.

Take seasons (illness trajectory) into consideration in designing programs and target transitions (to end of life, to bereavement) for effective support programs for caregivers.

Evidence-based, socioculturally sensitive, interdisciplinary interventions to reduce the burden of cancer and improve the quality of life among persons touched by cancer.
Acknowledgement

All the families who participated in these projects

FAMILY Lab

Funding Sources

NINR, 1R01NR016838;
ACS NHO Intramural Research;
Miami CTSI, University of Miami;
ACS 121909-RSG-12-042-01-CPPB;
Provost Research Award, University of Miami;
U of Miami Sylvester Comprehensive Cancer Center
Thank You !!!

ykim@miami.edu

University of Miami
Charles Carver, PhD
Mike Antoni, PhD
Barry Hurwitz, PhD
Armando Mendez, PhD
Maria Llabre, PhD
Kelly Shaffer, PhD
Hannah-Rose Mitchell, MPH
Amanda Ting, BS

Other Institution
Rachel Cannady, BS, ACS
Matt Loscalzo, LCSW, City of Hope
Richard Schulz, PhD. U of Pittsburgh
David Spiegel, MD, Stanford University
David Wellisch, PhD, UCLA
Jamie Zeitzer, PhD, Stanford University