Impacting Health Behaviors in Cancer Survivors: Translation of an Existing Intervention

Erin O'Carroll Bantum, Cheryl Albright, Jeffrey Berenberg *, Kami White, Gabriela Layi; University of Hawaii, *Tripler Army Medical Center

Diana Laurent, Phil Ritter, Katy Plant, & Kate Lorig; Stanford University



Social Support, Online Interventions & Cancer

- Social support and psychological adjustment have received a great deal of attention in cancer literature as being related to better health and quality of life. (Lutgendorf et al., 2012, Helgeson et al., 2004; Hoyt & Stanton, 2011).
 - Despite these findings, health behavior change interventions are rarely conducted in group settings.
- Online interventions have been gaining interest for cancer survivors (e.g., David et al., 2012, Leykin et al., 2011, Lepore et al., 2011), although interventions vary greatly in terms of design and content.
 - Often times these interventions are focused on attending to psychosocial needs.
- The Chronic Disease Self-Management Program (CDSMP) is an example of an intervention that has demonstrated efficacy within groups with many types of chronic health conditions (Lorig et al., 1993).
 - This program started as a face-to-face intervention and has been translated into an online format, as well (Lorig et al., 2006).

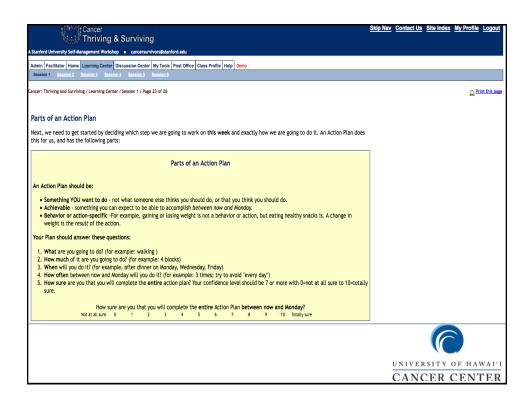
CANCER CENTER

Surviving Cancer & Thriving

- 7 Focus Groups conducted on Oahu to gain information on interest and desired content of intervention.
 - δ 3 Groups for Health Professionals (n = 24); Nurses, Social Workers, Physicians
 - ♦ 4 Groups for Cancer Survivors (n = 21)
- Surviving Cancer & Thriving Eligibility
 - 18 years of age or older
 - Experienced one cancer within the previous 5 years
 - Completed primary treatment
 - Open to all cancers outside of non-melanoma skin cancer and all stages of disease
- ▲ Features
 - A secure, password-protected interactive web-based course
 - o 6-week course (different topics each week), material prompted participation
 - Treatment or Wait-list control (begin 6 months after baseline)
 - · 2-3 hours per week, suggested commitment
 - 20-25 participants per course
 - Peer moderators and professional mentors









Baseline Characteristics

| Age (n = 352; 176 in each group) | 52 yrs (SD 10.2) |
|----------------------------------|------------------|
| Ethnicity | |
| Caucasian | 87% |
| Asian | 5% |
| Hispanic | 4% |
| African American | 2% |
| Native Hawaiian | 2% |
| Time Since Diagnosis | 1.8 yrs (SD 1.2) |
| Married | 66% |
| Female | 82% |
| Stage – In situ | 5% |
| I | 25% |
| II | 31% |
| Ш | 21% |
| IV | 9% |
| Unknown | 9% |
| Breast Cancer | 47% |
| Endometrial/Uterine/Ovarian | 13% |
| Colorectal | 6% |

Baseline Differences

| | Control Group (n = 176) | Intervention Group (n = 176) |
|--|-------------------------|------------------------------|
| | _ X (SD) | X (SD) |
| Fatigue (BFI) | 41.0 (20.1) | 36.7 (18.7) |
| Insomnia (WHIIRS) | 9.6 (4.5) 9.6 (4.6) | |
| Exercise: Stretching; Minutes Per Week (Godin) | 45 (73) | 51 (74) |
| Exercise: Strenuous; Minutes Per week (Godin) | 52 (90) | 62 (96) |
| Exercise: Moderate; Minutes Per Week (Godin) | 75 (108) | 90 (104) |
| Exercise: Mild Minutes Per Week (Godin) | 110 (142) | 90 (105) |
| Fruit/Vegetable Intake (Block) | (12) | 24 (10) |
| Depression (PHQ-9) | 7.6 (5.7)* | 6.3 (5.2) |
| Subject Stress (IES-R) | 24.1 (14.0) | 22.7 (13.3) |

Outcomes

| | Control Group (n = 156) | Intervention Group (n = 147) | Effect Size |
|--|-------------------------|------------------------------|-------------|
| | – X (SE) | _ X (SE) | |
| Fatigue (BFI) | 39.5 (1.32) | 37.6 (1.3) | 0.06 |
| Insomnia (WHIIRS) | 10.1 (0.3) | 9.2 (0.3)* | 0.14 |
| Exercise: Stretching; Minutes Per Week (Godin) | 47 (5.8) | 67 (5.9)* | 0.14 |
| Exercise: Strenuous; Minutes Per week (Godin) | 57 (6.5) | 79 (6.7)* | 0.14 |
| Exercise: Moderate; Minutes Per Week (Godin) | 85 (7.8) | 90 (8) | 0.03 |
| Exercise: Mild Minutes Per Week (Godin) | 103 (9.8) | 130 (10)* | 0.11 |
| Fruit/Vegetable Intake (Block) | 23.7(1.1) | 25.1(1.1) | 0.10 |
| Depression (PHQ-9) | 6.6 0.3) | 6.5 (0.3) | 0.02 |
| Subject Stress (IES-R) Note: Adjusted for baseline scores. When adjusting for | 21.9 (0.8) | 22.8 (0.8) | 0.05 |

Cursory Usage Data

- Mean number of sessions attended was 5.3.
- 67% attended all 6 sessions.
- For 176 treatment participants, a total of 8,016 messages were posted.
 - Average of 46 posts per participant.



Next Steps

- Future Studies to Include Distress or Other Inclusion Criteria
 - Participants were engaging in health behaviors at rates that we might already hope for.
- ♦ Additional Analysis
 - Content Analysis of Messages
 - Emotion
 - ♦ Timing of Messages Sent
 - Social Networking Characteristics
 - Reciprocity
 - Density



Thank you!

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 - Clinicians help with face-toface recruitment

