

Word count (max 300 words): 300

Abstract title – must be in UPPER CASE and limited to 25 words. Please submit symbols as words.

Abstract text – limited to 300 words including acknowledgements.

Abstract Topic/Category: Scientific Program – Psychosocial (PPO)

Presentation Preference: Poster

TITLE:

FIDELITY TO A RANDOMIZED INTERVENTION TO INCREASE MAMMOGRAPHY UPTAKE AMONG CHILDHOOD CANCER SURVIVORS: A REPORT FROM THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

Authors:

Han-Wei V. Wu, Kevin C. Oeffinger, Joanne F. Chou, Tara O. Henderson, Melissa M. Hudson, Lisa Diller, Aaron J. McDonald, James Ford, Nidha Z. Mubdi, Dayton Rinehart, Christopher Vukadinovich, Elena B. Elkin, Wendy M. Leisenring, Gregory T. Armstrong, Jennifer S. Ford*, Chaya S. Moskowitz*

Background and aims:

Female childhood cancer survivors treated with chest radiotherapy have a high risk of breast cancer (BC) but low uptake of guideline-recommended BC screening. The EMPOWER study was a randomized clinical trial within CCSS testing an intervention which increased screening mammography uptake (33.1% vs. 17.6%, $p=0.018$). This analysis characterizes utilization of, and attitudes toward, the intervention and associations with receiving a mammogram.

Methods:

Participants ($n=136$ in the intervention arm; median age 35 years, range 25-49 years) were 5-year survivors of cancer diagnosed 1976-1999 before age 21 years and treated with chest radiation. The intervention had 2 components: mailed educational materials, including information on BC screening benefits/risks and a laminated card with guideline recommendations to provide to physicians, and telephone counseling delivering a brief motivational interview. The trial primary endpoint was receipt of a mammogram within 12 months of randomization. At study end, participants completed a survey about intervention experiences. Fisher's exact tests assessed associations.

Results:

Among 129 survivors who completed a survey, 44 (34%) received a mammogram. One hundred (78%) reported receiving the mailed materials, 95 (74%) the telephone counseling, and 87 (67%) both. Reactions were primarily positive; 89% of respondents found the laminated cards helpful and 79% described the counseling as positive or activating. Approximately 2/3 endorsed little to no fear/anxiety from the mailed materials or of developing BC post-counseling. Women were more likely to obtain a mammogram if they received both intervention components compared to women receiving one or no components (45% vs. 24%, $p=0.050$), reported using the laminated card to discuss screening with physicians (72% vs. 51%, $p=0.086$), or found counseling motivational (61% vs. 30%, $p=0.003$).

Conclusions:

A two-part intervention aimed at increasing mammography uptake among high-risk survivors was well-received and elicited minimal fear/anxiety. Receiving intervention messaging in multiple forms and sharing it with a physician was associated with intervention efficacy.

*co-senior authors