



2018

28-30 JUNE
VIENNA, AUSTRIA

SUPPORTIVE CARE
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CANCER CARE POSSIBLE

The Effect of a Culturally Tailored Internet Cancer Support Group on Support Care Needs of Asian American Breast Cancer Survivors

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Faculty Disclosure

<input checked="" type="checkbox"/>	No, nothing to disclose
<input type="checkbox"/>	Yes, please specify:

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Backgrounds and Purpose



- Breast cancer in Asian American Women
 - The **leading cancer** by site and leading cause of death
 - Compared to Whites:
 - Higher relative risks, lower 5-year survival rates, and lower quality of life.
- Internet Cancer Support Groups
 - **Effective** in improving various symptoms and health behaviors related to cancer.
 - Can contribute to **reducing racial/ethnic gaps** in survival rates and barriers to care by providing information and supports.
 - **Socially marginalized population** are reported to be more interested in e-health and Internet resources;
 - More likely to have **equal and trustworthy relationships** with their doctors than in face-to-face settings.



Need culturally tailored technology-based programs which consider factors which are specifically important to targeted cultural group

- The purpose of this study
 - Explore the **effectiveness** of a technology-based support program on the **support care needs** among Asian American breast cancer survivors.



Web Resources

Web Resources in Traditional Chinese.

Web Resources in English.

Category	Source	Description	URL	Type
breast cancer	Breastcancer.org	Treatments for Pain Introduces different types of pain, causes of pain, pain management options, tips for taking pain medications, keeping a pain diary, talking to your doctors about pain and etc.	Visit	A
breast cancer	Breastcancer.org	Patient Management (especially for recurrent and metastatic breast cancer) Describes different types of pain that breast cancer patients may have. Introduces some pain management options.	Visit	A
breast cancer	National Breast Cancer Foundations	Beyond the Shock Comprehensive online guide to understanding breast cancer. Provides series of educational videos on breast cancer types and stages.	Visit	B

Method (2)

Instruments

- **Covariates:**
 - Questions on Background factors (e.g., age, education)
 - Questions on Disease factors (e.g., breast cancer types and stages).
- **Outcome variables:**
 - **Primary:** Support care needs (Support Care Needs Survey-34 Short Form)
 - **Secondary:**
 - » Degree of cancer pain (Brief Pain Inventory-Short Form),
 - » Uncertainty (Mishel Uncertainty in Illness Scale-Community),
 - » Personal resources (Personal Resource Questionnaire),
 - » Perceived isolation (Perceived Isolation Scale)
 - » Perceived self-efficacy (Self-efficacy Items)



Methods (3)

- Data collection procedures

- 1) Asked potential participants to visit the project website;
- 2) Obtained electronic informed consent;
- 3) Screened against inclusion and exclusion criteria;
- 4) Randomized into intervention and control groups;
- 5) Administered pre-test questionnaires;
- 6) Asked the control group to use ACS websites and the Intervention group to use ACS websites & intervention program (CAPAA) for one month; and
- 7) Administered post-test questionnaires.

- Data analysis

- Automatically coded using REDCap system.
- Used SPSS 22.0 statistical software
 - **Descriptive statistics:** frequencies, percentages, means, and standard deviation of major variables.
 - **Repeated measures ANOVA:** To determine the preliminary efficacy of the program in enhancing cancer pain experience and secondary outcomes of Asian American breast cancer survivors.



Results (General Characteristics of participants)

Characteristics		Intervention (N = 64)	Control (N = 30)
		Mean ± SD or N (%)	
Age (years old)		38.4 ± 6.20	48.0 ± 11.1
Born in U.S.	Yes	51 (79.7)	5 (16.7)
Length of stay in U.S.	Years	14.9 ± 5.9	16.2 ± 10.6
Education	Above college	50 (78.1)	20 (66.7)
Marital	Married	63 (98.4)	22 (73.3)
Religion	Yes	55 (85.9)	16 (53.3)
Employment	Yes	12 (18.8)	12 (40.0)
Years after breast cancer diagnosis	Years	2.5 ± 1.20	1.1 ± 0.59
Breast cancer type	Invasive	32 (50.0)	18 (60.0)
Taking medication for pain	Yes	59 (92.2)	11 (36.7)



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Results (Outcome Variables – Intervention group)



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Group	Variable	Assessment point	Mean (SE)	F	p
Intervention group	Pain	Pre	4.21 (1.94)	0.438	0.510
		Post	3.95 (1.96)		
	Perceived isolation	Pre	1.87 (0.49)	9.937**	0.002
		Post	1.48 (0.76)		
	Personal resources	Pre	4.31 (1.25)	6.612*	0.012
		Post	4.92 (0.98)		
	Support care need	Pre	4.54 (1.16)	8.299**	0.005
		Post	3.84 (1.21)		
	Uncertainty	Pre	2.70 (0.74)	8.722**	0.004
		Post	2.24 (0.79)		
	Self-efficacy	Pre	6.44 (2.11)	2.801	0.097
		Post	7.11 (1.61)		

Note. Pre = pre-test; Post = post-test

** $p < .01$, * $p < .05$ indicate the significant differences by groups



Results (Outcome variables - Control group)

Group	Variable	Assessment point	Mean (SE)	F	p
Control group	Pain	Pre	5.63 (3.85)	0.123	0.728
		Post	6.08 (3.50)		
	Perceived isolation	Pre	5.75 (0.62)	0.197	0.660
		Post	5.64 (0.91)		
	Personal resources	Pre	2.20 (0.33)	1.051	0.311
		Post	2.31 (0.35)		
	Support care need	Pre	3.12 (1.07)	0.027	0.870
		Post	3.06 (1.27)		
	Uncertainty	Pre	2.83 (0.79)	2.207	0.145
		Post	3.20 (0.47)		
	Self-efficacy	Pre	7.10 (1.99)	0.267	0.608
		Post	6.73 (2.37)		

Note. Pre = pre-test; Post = post-test

** $p < .01$, * $p < .05$ indicate the significant differences by groups



Conclusions

- The findings of the study supported the effectiveness of the proposed technology-based program on cancer patients' support care needs.
- Culturally tailored technology-based programs could be useful in improving survivorship experience of Asian American breast cancer survivors.

Acknowledgement

- The study was funded by the Population Science Pilot Project Award, the NCI Cancer Center Support Grant (P30 CA016520) and the Abramson Cancer Center of the University of Pennsylvania. The Chinese translation process involved in the study was also funded by the Chang Gung Medical Research Foundation (BMRPA50 & ZZRP3C0011).

