Challenges in a Technology-based Support Care Intervention among Asian American Breast Cancer Survivors

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INTRODUCTION

- **Cultural tailoring of technology-based interventions began to be adopted, tested, and widely used in recent years**
 - incorporate specific cultural aspects of racial/ethnic minority groups
 - serve the special needs of a racial/ethnic minority group more efficiently
- **Little is still known about practical issues in implementing a culturally tailored technology-based intervention in health care fields**
 - Only a few publications have discussed the general issues in Internet-based research.
 - focused on methodological issues studies using the Internet as a data collection method.

OBJECTIVE

- **Discuss the challenges that the research team encountered in a culturally tailored technology-based support care intervention among Asian American breast cancer survivors.**

THE STUDY: THE BASIS FOR DISCUSSION ON

- **Examine the efficacy of a culturally tailored technology-based intervention on improving survivorship of Asian American breast cancer patients**
- **A randomized repeated measures pretest/posttest control group study**
 - intervention group: use the program and the website on breast cancer by the American Cancer Society (ACS) for 3 months
 - control group: use only the ACS website for 3 months
- **Participants:**
 - target: 330 Asian American breast cancer survivors
 - three sub-ethnic groups : Chinese, Koreans, and Japanese
- **Instruments**
 - background factors and disease factors
 - the Support Care Needs Survey-34 Short Form
 - the Memorial Symptom Assessment Scale-Short Form
 - the Functional Assessment of Cancer Therapy Scale-Breast Cancer

METHODS

- **Content Analysis:**
 - the research team members kept the records of research team meetings, and wrote research diaries on challenges in the study;
 - the meeting minutes and research diaries were analyzed using the content analysis by Weber;
 - 27 Individual words in the minutes and diaries were used as the unit of analysis, and coding was done using a line-by-line coding method; and
 - categories representing practical issues were made, and six themes were extracted from the codes.

RESULTS

- The Challenges found in the research process were extracted into six themes (table1).

FINDINGS & SUGGESTIONS

Practical Issues	Suggestions
o Technology literacy	o Prepare the information sheet providing technological assistance for both the participants and interventionists through a pilot study. o Get connected with their institutions' computer system administrators and/or network administrators. o Attend related seminars/workshops, continuing education sessions, panel discussions, and conference presentations.
o Diversities (e.g., languages)	o Set the rules for translation at the early stage of the study. o Need to be flexible in language usages during the implementation process.
o Cultural heritages	o Need to consider cultural values, attitudes, and beliefs in its design and implementation throughout the research process.
o Interventionists' qualifications	o Need to factor in continuous training of interventionists from design to implementation stages. o Develop a protocol for standardized interventions with regular training of interventionists. o Plan regular support group discussions among interventionists. o Include medical experts in the intervention process to consult and get useful advice or resources whenever an immediate action is required to mitigate participants' issues.
o Technological issues (e.g., safety and confidentiality of the data shared)	o Carefully design several strategies to ensure security and confidentiality of the study in advance. o Check their institutions' IRB policies related to the use of Internet. o Need to regularly train their research staff members to ensure security and confidentiality of their interactions with the research participants. o Conduct regular monitoring of the research process.
o Adherence and retention issues	o Consider potential time and geographical constraints in their studies and plan the intervention implementation process. o Considering major holidays, weekends, and/or vacations, and time zone differences. o Schedule an individualized intervention that could preferably work for both participants and their interventionists.

SUGGESTIONS FOR FUTURE RESEARCH

- Researchers need to:
- be prepared with detailed step-by-step information sheet for the participants and interventionists in the use of a culturally-tailored technology based interventions;
- set the rules for translation at the early stage of the study and need to be flexible in language usages during the implementation process;
- consider cultural barriers in implementing their technology-based interventions;
- factor in continuous training of interventionists from design to implementation stages to successfully provide participants with appropriate emotional and informational support; &
- carefully design several strategies to ensure security and confidentiality of the study in advance; and
- consider potential time and geographical constraints in studies

CONCLUSIONS

- The study supports that culturally-tailored technology-based interventions would work very well among racial/ethnic groups, but future researchers need to consider several practical issues in designing and implementing culturally-tailored technology-based interventions.

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