



# Pilot-testing a Cancer 101 Education Curriculum with the Fairbanks Native Association's Women & Children's Center for Inner Healing

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## Rationale & Introduction

Cancer is the leading cause of death among Alaska Native people<sup>1</sup>. Nevertheless, due to improved awareness about cancer prevention, early detection screening and advances in treatment<sup>2</sup> survival rates are rising.

Alaska Native communities describe cancer as an epidemic; wondering "Who will be next?"

Community members and their leaders have voiced their desires to gain accurate, user-friendly cancer-focused information that they can share with their family, friends, and communities.

In response, this study pilot-tested the feasibility, content, and knowledge impact of an evidence-based cancer education program developed for use with American Indian and Alaska Native peoples.

## Intervention

### Cancer 101: Cancer Education & Training Program for American Indians & Alaska Natives<sup>3,4</sup>

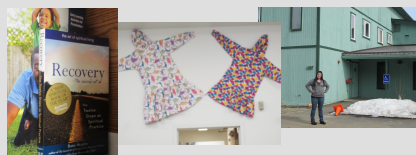
- Purpose: To provide a flexible, and culturally relevant cancer resource aimed at improving knowledge, attitudes, and social interaction
- Developed to be: Evidence- and community-based
- Program comprises 10 educational modules:
  - Facilitator's manual
  - Adaptable PowerPoint slides
  - Pre- and Post-intervention evaluation questions

Modules focus on:

• Cancer among Native Populations	• Cancer Diagnosis & Staging
• What is Cancer?	• Basics of Cancer Treatment
• Risk Factors & Risk Reduction	• Biospecimens & Biobanking
• Role of Genes in Cancer	• Chronic Disease & Cancer
• Screening & Early Detection	• Supporting Patients & Caregivers

## Setting & Recruitment

- Participants were recruited from the Fairbanks Native Association's Women & Children's Center For Inner Healing (WCCINH)<sup>5</sup>
- The mission of WCCINH is to assist women & their children through recovery, healing, healthy lifestyle & enhanced cultural pride



## Methods/Procedures

**Design:** Quasi-experimental, single (pre-post intervention) group, using mixed-methods (quantitative & qualitative)



Module	Module Content Focus
Cancer Risk Factors	<ul style="list-style-type: none"> <li>• Cancer defined as comprising over 100 diseases</li> <li>• Biological, lifestyle, &amp; environmental cancer risks</li> <li>• Means for reducing cancer risk</li> </ul>
Early Detection	<ul style="list-style-type: none"> <li>• Up-to-date screening methods &amp; guidelines for most common cancers</li> <li>• Overcoming barriers to screening</li> </ul>
Chronic Conditions & Cancer	<ul style="list-style-type: none"> <li>• Types of chronic conditions &amp; their associations with cancer</li> <li>• Actions steps to reduce risk of illness &amp; disability</li> </ul>
Supporting Survivors & Caregiver	<ul style="list-style-type: none"> <li>• Psychological, emotional, &amp; social issues affecting survivors &amp; caregivers</li> <li>• Ways to be supportive</li> </ul>

## Results: Pre & Post-Intervention Knowledge

Characteristic at Baseline	% (n)
<b>Gender</b>	
• Female	100 (9)
<b>Age (years), range (mean)</b>	23-70 (34)
<b>Race/Ethnicity</b>	
• White	44.4 (4)
• Alaska Native	66.7 (6)
• Yup'ik	• 33.3 (2)
• Athabascan	• 50.0 (3)
• Inupiaq	• 16.7 (2)
<b>Education</b>	
• Less than high school	11.1 (1)
• High school/GED	55.6 (5)
• Some college	33.3 (3)
<b>Income</b>	
• Struggle meet needs	77.8 (7)
• Have enough	22.2 (2)
<b>Health Status (self-reported)</b>	
• Very good/Good	77.8 (7)
• Fair	22.2 (2)
<b>Association with Cancer</b>	
• Cancer caregiver	22.2 (7)
• Family member with cancer	88.9 (8)
• Friend with cancer	55.6 (5)
• Interested in cancer	77.8 (7)

Learning Module	Intervention Impact on Knowledge for 4 Modules		
	Pre-test Correct Answers Mean (SD)	Post-test Correct Answers Mean (SD)	Change in Correct Answers Mean (SD)
Cancer Risk Factors	3.71 (.95)	3.86 (1.35)	.14 (.69)
Early Detection	3.29 (.95)	4.0 (.82)	.71 (1.11)
Chronic Conditions & Cancer	4.23 (.49)	4.43 (.98)	.14 (.90)
Supporting Survivors & Caregivers	3.86 (.38)	4.71 (.49)	.86 (.38)**

Note:

- Group means comprise "correct" responses across module-specific evaluation questions (responses: Agree, Disagree, Not Sure)
- Analysis were conducted for 8 participants completing both pre- & post surveys
- \*\* Mean change was statistically significant ( $p < 0.01$ , two-sided t test)

- All participants experienced cancer as friend or family member
- Pre-test cancer knowledge was relatively high for the group
- Although pre-post knowledge increased for all 4 modules, only the 'Supporting Survivors & Caregivers' module showed a statistically significant improvement

## Findings: Group Discussion

### How helpful or worthwhile was Cancer 101?

- Participants found the training to be helpful & an "eye-opening" experience
  - All expressed interest in exploring other 101 modules
  - Participants felt their knowledge increase was not reflected by the evaluation questions posed in the pre- & post surveys
- "I know people living with cancer or that already passed. Now I feel more knowledgeable & educated."*

### How can we improve Cancer 101?

- Participants positively described Cancer 101 as being "fun," "interesting," "informative," & "helpful."
- Suggestions for improvement included: new topics (e.g., childhood cancers), more opportunities for participation, & presenting content in greater depth & detail

### How have/will you use Cancer 101 information?

- Most participants have or planned to share Cancer 101 information with others.
- *"I do plan on sharing it with family & friends"*
- Several showed interest in further training to become "cancer natural helpers" – persons to whom others turn for cancer information & support.

## Implications

Participants provided positive feedback about Cancer 101

**Implications:** Cancer 101 is feasible & user-friendly

Knowledge change from pre- to post-test was not statistically significant. Participant pre-test scores imply a ceiling effect – possibly attributed to overly easy & broad evaluation questions

**Implications:** Adapt evaluation measures to reflect detail & depth of information conveyed

Participants provided constructive feedback about Cancer 101

**Implications:** Continue adapting cancer 101 material to be locally relevant. Test full (10 module) curriculum with larger population of participants

## Cited References

1. Kelly, et al., 2012
2. American Cancer Society, Facts & Figures, 2013
3. Hill, et al., 2010
4. Cancer 101 Website: <http://cancer101curriculum.wordpress.com/cancer-101-aian-version/http://www.fairbanksnative.org/wccih.html>
5. WCCIH Website: <http://www.fairbanksnative.org/wccih.html>

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