Evaluating a Culturally Relevant Online Cancer Education Initiative: Learning with Alaska's CHA/Ps

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Acknowledgements

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- The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.
Alaska’s Community Health Aides/Practitioners

Community Health Aide/Practitioner Village Clinics

Inequities in Cancer Mortality

Age-Adjusted Cancer Mortality Rate per 100,000 Population, 1980-2015

Data Source: Alaska Health Analytics and Vital Records Section, Centers for Disease Control and Prevention, National Center for Health Statistics.
Note: U.S. Whites data are for 2012-2014.

http://anthctoday.org/epicenter/healthData/factsheets/Cancer_Mortality_statewide_2_1_2017.pdf
Leading Cancers Among Alaska Native People

Cancer Incidence by Cancer Site, Alaska Native People Statewide, 1984-2013
Data Source: Alaska Native Tribal Health Consortium, Alaska Native Tumor Registry

- Colon/Rectum: 17.9%
- Lung: 17.2%
- Stomach: 4.5%
- Prostate: 5.8%
- Breast: 15.1%
- All Others: 28.3%
- Esophagus: 1.5%
- Nasopharynx: 1.5%
- Oral/Pharynx: 3.7%
- Kidney: 4.4%
- N=8,703

Causes of Cancer

- Tobacco: 30%
- Adult diet/obesity: 5%
- Sedentary lifestyle: 5%
- Occupational factors: 5%
- Family history of cancer: 5%
- Viruses/other biological events: 5%
- Perinatal factors/growth: 5%
- Reproductive factors: 5%
- Alcohol: 5%
- Environmental pollution: 5%
- Other: 10%

Opportunity for Learning

Jan. 2018 DHSS survey of 750 Alaskans:
For each of the following, please tell me if you believe this exposure has a significant effect on whether or not the average person develops cancer.

<table>
<thead>
<tr>
<th>Response</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lack of physical activity</td>
<td>60%</td>
</tr>
<tr>
<td>Overweight/obesity</td>
<td>61%</td>
</tr>
<tr>
<td>A diet low in fruits and vegetables</td>
<td>65%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>90%</td>
</tr>
</tbody>
</table>

In-Person Cancer Education
Theoretical Framework

- Community-Based Participatory Action Research (CBPAR)
- Indigenous Ways of Knowing
- Empowerment Theory
- Empowerment Processes
- Empowerment Outcomes


Lessons Learned: Culturally Relevant Ways of Knowing

- Story
- Humor
- Relationships
- Expressive Arts
  - Dance
  - Song
  - Drawing
  - Sculpting
Distance-Delivered Cancer Education

https://anthc.remote-learner.net/

A Framework for Culturally respectful online cancer education:

Collaborating: Work with learners and communities to develop and refine education

Content: Deliver content in relevant ways, such as personal stories, games, interactivity, and visuals

Connecting: Incorporate space for interactions and building relationships to learn with/from each other

Contextualizing: Connect content to learners' unique experiences, cultures, and the bigger picture

“I think this is a great step in the right direction for educating ourselves about cancer, how to cure it; how to manage it/live with it everyday. Quyannakpuk for making these first steps!”
Online Cancer Education Modules

As of January 2019:

* 241 learners
* 1,737 completed evaluation surveys
Tobacco and Cancer

Caroline Nevak, Tobacco Cessation Counselor at ANTHC.

Hi My name is Caroline Nevak and I'm a Tobacco Cessation Counselor at ANTHC. I'm from Tooksack Bay, Alaska. You may also know me from when I worked in Bethel.

I know how hard it is to quit tobacco use because I used to chew. I'm here to help you and your patients to become tobacco free, our health is worth it.

Notes

Video: Radiation

Radiation Treatment for Breast Cancer Transcript

From "Conversations About Breast Cancer"

Natalie: I found that once they told me it was real, that was one thing that really helped me. Because knowing what was going on, knowing things were going to be different, knowing what to expect next, and knowing that they would give me, any kind of material to read about breast cancer. I read it all. I mean I had a whole huge stack of books that I just read and read and read.

Pamela: I think what I did was really important because I did my yearly mammogram, and I just went to my yearly mammogram, and they found it.
End-of-Module Evaluations

9. How will you use the information you learned during this cancer education module? (Check all that apply)
   - With my patients
   - With my family
   - With my friends
   - With my community
   - For myself
   - Please tell us more:

10. Will the information in this module make a difference in the ways you take care of yourself? Within the next 6 months, I plan to... (Check all that apply)
   - Not make any changes
   - Get information about having a recommended screening exam
   - Schedule a recommended screening exam
   - Have a recommended screening exam
   - Stop using tobacco
   - Cut down on my tobacco use
   - Increase my physical activity
   - Eat healthier
   - Please tell us more:

11. As a result of completing this online learning module, I plan to... (Check all that apply)
   - Talk with my patients about cancer screening more often.

Theory-Driven Evaluation

<table>
<thead>
<tr>
<th>Empowerment Theory Construct</th>
<th>Evaluation Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapersonal</td>
<td>As a result of completing this online learning module, I feel... [much less, less, same, more, much more] comfortable/prepared/confident to talk about cancer with my patients, family, friends, and in my community</td>
</tr>
<tr>
<td>Interactional</td>
<td>As a result of completing this online learning module, I feel... [much less, less, same, more, much more] knowledgeable about cancer</td>
</tr>
<tr>
<td>Behavioral</td>
<td>As a result of participating in this module, I plan to talk with my patients more often about... Will the information in the module make a difference in the ways you take care of yourself?</td>
</tr>
</tbody>
</table>
### Learner Demographics

<table>
<thead>
<tr>
<th></th>
<th>Unique CHA/P Learners N (%)</th>
<th>Total CHA/P Pop. July 2018 N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>221 (100%)</td>
<td>389 (100%)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>198 (90%)</td>
<td>342 (88%)</td>
</tr>
<tr>
<td>Male</td>
<td>23 (10%)</td>
<td>47 (12%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaska Native</td>
<td>188 (85%)</td>
<td>326 (84%)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>28 (13%)</td>
<td>23 (6%)</td>
</tr>
<tr>
<td>Other</td>
<td>16 (7%)</td>
<td>40 (10%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>53 (24%)</td>
<td>108 (28%)</td>
</tr>
<tr>
<td>30-39</td>
<td>61 (28%)</td>
<td>129 (33%)</td>
</tr>
<tr>
<td>40-49</td>
<td>66 (30%)</td>
<td>71 (18%)</td>
</tr>
<tr>
<td>50-59</td>
<td>37 (17%)</td>
<td>58 (15%)</td>
</tr>
<tr>
<td>60+</td>
<td>12 (5%)</td>
<td>23 (6%)</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Aide</td>
<td>96 (43%)</td>
<td>190 (49%)</td>
</tr>
<tr>
<td>Community Health Practitioner</td>
<td>125 (57%)</td>
<td>199 (51%)</td>
</tr>
</tbody>
</table>

### In What Region of Alaska or Other Area Do You Work?

![Bar chart showing the distribution of learners by region](chart.png)

- **CHA/P Respondents**
- **CHA/P Population Estimate (July 2017)**
Was this cancer education module respectful of you and your culture?
- 96% (surveys) Yes

Did you learn what you hoped to learn?
- 99% Yes

"brought me to tears couple of times, and I think it will help in destroying the silence that surrounds cancer".

As a Result of Completing This Module, I Feel...

```
much more
more
about the same
less
much less
comfortable talking about cancer
confident talking about cancer
prepared to talk about cancer
knowledgeable about cancer
```

"in the beginning I didn’t know much of cancer and now I know a whole lot about it and how to prevent it!"
As a Result of This Module, Within the Next Six Months, I Plan to...

- Increase physical activity: 50%
- Eat healthier: 40%
- Get info about screening: 20%
- Get screened: 20%
- Schedule screening: 10%
- Cut down tobacco use: 10%
- Stop using tobacco: 5%
- Not make any changes: 1%

94% of learners planned to reduce their own cancer risk as a result of the modules.

I Plan To Talk With My Patients More Often About...

- Screening: 80%
- Cutting down/ quitting tobacco: 60%
- Physical activity: 50%
- Eating healthy: 40%
- Something else: 30%
- No change: 10%

87% of unique learners planned to talk with their patients more because of the modules.
How Comfortable Do You Feel Talking about Cancer with your Patients, Family, Friends, and Community?

Very Comfortable
Comfortable
OK
Not very comfortable
Not at all comfortable

"Before I wasn't completely knowledgeable about cancer and its treatment but now that I know more I feel totally more comfortable talking about it to everyone."

Increasing Movement

"I've been very busy with fish lifting and cutting fish, sore at night"
Any Leisure Time Physical Activity in Past Month: Learners to Alaska Native adults (BRFSS)

Before | End | 6-Months Post
--- | --- | ---
Learners | Alaska Native adults, 2017 | Alaska Native Adults Lower CI | Alaska Native Adults Upper CI

Next Steps

* Share existing modules more widely
* Share cancer information with young people
* Provide additional cancer education on specific topics
* Create other cancer education materials
Thank You for Listening!

“beautiful thought of and well designed to reflect what Native people can relate to.”

“I am happy to have learned this, and that I am able to share it now”

kcueva@Alaska.edu

How Will You Use This information?

<table>
<thead>
<tr>
<th>Category</th>
<th>With my patients</th>
<th>With my family</th>
<th>With my community</th>
<th>With my friends</th>
<th>For myself</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men’s Health</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Women and Cancer</td>
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<td></td>
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<tr>
<td>Loss and Grief</td>
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<tr>
<td>Survivorship</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cancer Pain</td>
<td></td>
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<tr>
<td>Tobacco</td>
<td></td>
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<tr>
<td>Cancer and Our Genes</td>
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<tr>
<td>Nutrition &amp; Physical Activity</td>
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<tr>
<td>Cancer Basics</td>
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</tr>
</tbody>
</table>
As a Result of This Module, Within the Next Six Months, I Plan to...

<table>
<thead>
<tr>
<th>Physical activity</th>
<th>Eat healthier</th>
<th>Get info about screening</th>
<th>Have screening</th>
<th>Schedule screening</th>
<th>Cut down on tobacco</th>
<th>Stop using tobacco</th>
<th>Not make changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition &amp; Physical Activity</td>
<td>Women and Cancer</td>
<td>Cancer Basics</td>
<td>Cancer and Our Genes</td>
<td>Loss and Grief</td>
<td>Cancer Pain</td>
<td>Cancer Treatments</td>
<td>Tobacco</td>
</tr>
</tbody>
</table>

After completing this module, I feel...

<table>
<thead>
<tr>
<th>Very</th>
<th>OK</th>
<th>Not very</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and Grief</td>
<td>Cancer Pain</td>
<td>Nutrition &amp; Physical Activity</td>
<td>Women and Cancer</td>
</tr>
</tbody>
</table>

- comfortable talking about cancer
- confident talking about cancer
- prepared to talk about cancer
- knowledgeable about cancer
As a Result of This Module, I Plan to Talk With My Patients More Often About...

Number of Modules Completed per Learner