

Intervention IP-074: Qungasvik (phonetic: koo ngaz vik; “tools for life”)

Summary

Qungasvik (Tools for life) is an indigenous intervention that focuses on enhancing protective factors for suicide and alcohol risk among adolescents/young adults 12-18 years of age in low-income, rural, Alaska native communities. The intervention was designed and culturally-tailored in collaboration with the community to provide education and *Yup'ik* practices to four rural counties in Southwest Alaska. Findings show an increase in reasons for life and reflective process about alcohol consequences as protective factors from suicide and alcohol use.

Overview

Purpose of Intervention:

Qungasvik is a strengths-based multilevel intervention that addresses Yup'ik suicide and alcohol health disparities by providing a culturally grounded implementation model for sustainable, community-directed intervention driven by local expertise.

Intervention Type:

Research-Tested — *Interventions with strong methodological rigor that have demonstrated short-term or long-term positive effects on one or more targeted health outcomes to improve minority health and/or health disparities through quantitative measures; Studies have a control or comparison group and are published in a peer-review journal; No pilot, demonstration or feasibility studies.*

Intervention Details

Intervention was Primarily Driven, Led, or Managed by:

Both Community and Academic/Clinical Researchers

Citations:

- Allen J, Charles B, Fok CCT, Lee K, Grogan-Kaylor A, Qungasvik Team, Rasmus S. Culturally grounded strategies for suicide and alcohol risk prevention delivered by rural Alaska Native communities: A dynamic wait-listed design evaluation of the Qungasvik intervention. *American journal of community psychology*. 2023 Mar;71(1-2):184-197. Epub 2022 Oct 10.
Relevance: Main Intervention, Post-Intervention Outcomes, Evaluations and Assessments

Adaptation of Another Research-based Intervention:

No

Contact Information

Primary Contact Affiliation:

Center for Alaska Native Health Research, University of Alaska Fairbanks

Intervention URL:

<http://www.qungasvik.org/preview/>

Results

Intentions

Improve minority health or the health of other populations with health disparities (e.g. rural populations, populations with low SES)

Intervention Primary Outcome:

Co-occurring protective factors moderating risk:

1. Reasons for life to buffer suicide risk
2. Reflective processes about alcohol consequences to buffer alcohol risk

Intervention Secondary Outcome:

Promotive or direct protective factors at three socioecological levels (individual, family, community)

Key Findings:

Qungasvik outcomes were tested using a community-level dynamic wait-listed design across four communities with four measurement time points over two years. Of 281 participants recruited, 259 completed Wave 1 assessments and 205 were retained at Wave 4. Intervention produced time X dose interactions on both primary outcomes. High dose in contrast to low dose intervention produced greater credible growth in Reasons for Life, a measure of protective factors buffering suicide ($\beta = 0.29$; 95% CI: = [0.05–0.49]). For Reflective Processes about Alcohol Consequences, a measure of protective factors buffering alcohol risk, high dose in contrast to low dose also produced greater credible growth ($\beta = 0.31$; 95% CI: = [0.09–0.50]). The Reasons for Life findings replicate findings of suicide prevention effects from two previous non-randomized comparative effectiveness and feasibility trials. The Reflective Processes findings are first evidence for Qungasvik effects in alcohol risk reduction.

Statistical Method Used:

To evaluate intervention effects over time in contrast to baseline, and in response to high vs. low intervention dose exposure, we created Bayesian linear mixed effects models testing effects of time, dose, and preexisting level of protection, along with gender and age.

Evaluations and Assessments

Were Any of the Following Assessments Conducted (Economic Evaluation, Needs Assessment, Process Evaluation)?:

Yes

- **Needs Assessment:** Needs assessment was conducted in one western rural Alaska Native community. This process enlisted an existing community 'Joint Committee.' The committee consisted of groups from the community school, head start facility, churches, tribal justice program, tribal government, local medical /behavioral health staff of regional Alaska Native health corporation, and organizations serving young people. The committee met monthly to plan, educate and outreach, disseminate, and evaluate.
- **Process Evaluation:** A detailed process evaluation of the intervention development and its implementation was conducted and is reported in a peer reviewed publication (Rasmus, 2014; complete citation can be found in 'Qungasvik Intervention Complete Bibliography of Peer Reviewed Publications 2023' included in the Articles Related to Submitted Intervention section).

Demographic and Implementation Description

Diseases, Disorders, or Conditions:

Suicide, Alcohol Use Disorder

Race/Ethnicity:

American Indian or Alaska Native

Populations with Health Disparities:

People with Lower Socioeconomic Status (SES), Racial and Ethnic Minority Populations, Underserved Rural Communities

Age:

Adolescents (10 - 17 years)

Socio-demographics / Population Characteristics

Community Type:

Rural

Other Populations with Health Disparities:

Linguistic minority: Central Yup'ik/Cup'ik

Geographic Location:

Alaska Boroughs and Census Areas

Socio-Economic Status:

Low SES

Minority Health and Health Disparities Research Framework

		Levels of Influence			
		Individual	Interpersonal	Community	Societal
Determinant Types	Biological				
	Behavioral	✓	✓	✓	
	Physical / Built Environment	✓	✓	✓	
	Sociocultural Environment	✓	✓	✓	✓
	Health Care System				

Community Involvement

The community's role in different areas of the Intervention (Choices are "No Role", "Participation", and "Leadership"):

Design:

Participation

Dissemination:

Leadership

Evaluation:

Participation

Implementation:

Leadership

Outreach:

Leadership

Planning :

Leadership

Recruitment:

Leadership

Sustainability:

Leadership

Characteristics and Implementation

Intervention Focus Area:

Behavior Change, Social/Societal Change

Disease Continuum:

Primary Prevention

Delivery Setting:

Local Community (e.g. Barbershops, Beauty / Hair Salon, Laundromats, Food Markets, Community Centers), Land-based activities, Schools / Colleges

Mode of Delivery:

In-person

Who delivered the Intervention?:

Community Health Worker/Promoters, Peer(s), Community Elders also delivered the intervention. In Alaska Native communities, in addition to being in later life, Elders are recognized as cultural knowledge bearers through their past accomplishments and specific expertise and skills.

Conceptual Framework

Intervention Theory:

Yup'ik Indigenous Theory of Change - Qasgiq Model (Rasmus et al., 2019)

Intervention Framework:

Yup'ik Indigenous Implementation Model - Qasgiq Model (Rasmus et al., 2019)

Implementation

Intervention Study Design:

Dynamic Wait-listed Design (this is a variant of the Stepped Wedge Design)

Targeted Intervention Sample Size:

281

Actual Intervention Sample Size:

239

Start Year:

2009

End Year:

2015

Intervention Exposures

Duration of Intervention/How Long it Lasted:

2-3 years

Frequency of Intervention Delivery:

Intervention is constituted episodes of cultural scripts accompanied by Elder interpretative teachings. Activities are seasonal, some consist of single events, varying from 1-2 hours to 2+ days. Others occur near daily for a period of the year.

Number of Sessions/Meetings/Visits/Interactions:

More than 10 Sessions

Average Length of Each Session/Meeting/Visit/Interaction:

3-4 Hours

Format of Delivery:

Group (e.g. Community leaders)

Highest Reading Level of Intervention Materials Provided to Participants:

Grade 6-7

Impact, Lessons, Components

Produced an impact or change beyond the primary or secondary outcome:

Yes

Impacts noted were based on observation, interview, qualitative and quantitative data, and occurred at community, family, and individual levels. Community-level impacts included (1) Indigenous leadership development, (2) reduced community organizational fragmentation, (3) more effective tribal government, (4) increased Indigenous language use, (5) increased Indigenous ceremony, (6) increased access to land-based activities such as subsistence, (7) increased participation in Indigenous culture practices in daily living and in craftwork / specialized tool building, (8) increased training for teachers / health providers in Yup'ik culture, (9) enhanced integration of schools in community life, (10) enhanced adult relations, (11) increased intergenerational youth contact with peer parents and Elders, (12) enhanced Elder leadership, functioning, and quality of life. We also observed reductions in problem drinking, other drug use, property destruction, and interpersonal violence, along with greater sense of hope and adherence to yuuyaraq—the Yup'ik way of life. Family level impacts included (1) increased parental knowledge on traditional Yup'ik parenting practices, (2) enhanced parental functioning and mental health including reduced substance misuse. Individual youth level

impacts included enhanced (1) cultural identification, (2) educational attainment, (3) social connection, (4) cultural knowledge, (4) land-based activity and survival skills, and (5) place-base connection.

Essential Aspects for Success:

This intervention can be misunderstood as largely focused on delivery of youth activities. Instead, efforts devoted to development of Elder leadership, coordination with youth serving organizations and government efforts, and implementation using cultural protocols of the Qasgiq Model are crucial.

Lessons Learned

Key Lessons Learned and/or Things That Could be Changed or Done Differently:

There is enormous pressure at program start-up to immediately "do something" about suicide in highly affected communities. Holding new staff back from jumping into delivering youth activities prior to basics of essential community organizing work with agencies, government, and Elders is critical.

Insights Gained During Implementation

Insight Category	Insight Description
Cost of Implementing or Sustaining	Cost of implementation is \$150,000 per year per rural Alaska community. The includes 2 staff positions and communications, office, IT, and activities supplies, including land-based activities access supplies.
Logistics	Intervention must respond to rhythms of the community and seasons of the land. For example, communities shut down in respect at death of a community member. Activities may be cancelled when beluga whale appear with opportunity for crucial food supplies. Winter storms can make travel impossible.
Administrative Resources	Multi-layered back up of administrative resources is needed for these small communities (pop. 300-1200) that are remote, off the road system, and with poor internet access and stretched human resources with background and training for completing grant reporting and monitoring administrative tasks.
Equipment / Technologies	Setup of access to internet and cellular communications, IT equipment, and IT support for remote low bandwidth settings is crucial. These communities are typically lacking in stable access to all these IT services that are crucial to program communication, administration, and functioning.
Training / Technical Assistance	Training of community staff by Yup'ik cultural experts and other Indigenous staff who have experience in the Qasgiq implementation model is key. We adopt a model where staff and Elders from current intervention communities train staff in new intervention implementation communities.
Transportation	Travel costs to roadless Alaska communities can include air travel for two days each direction. This travel is frequently weather interrupted. Access to land-based activities requires snow machines, four wheelers, boats, and fuel (January 2023 fuel cost was \$8.25 gal. in 1 intervention community).
Staffing	Core long-term staff with deep cultural knowledge and experience in liaison with rural communities and tribal government has proven crucial. These staff have recognized Elder status and guide outreach to local Elders and tribal leadership relations. Local staff hire becomes leadership development.
Recruitment	Everyone knows everyone in these tight knit, geographically remote communities. Though we use posters and social media, a crucial element in recruitment occurs through word of mouth and personal contacts from known, trusted local sources who discuss the program in the community and do outreach.

Intervention Components

Intervention Has Multiple Components:

Yes

Assessed Each Unique Contribution:

No

Products, Materials, and Funding

Expertise, Partnerships, and Funding Sources

	Used for Implementation	Needed for Sustainability
Expertise		
Advocacy	Yes	Yes
Community mobilization, community organization/coalition building	Yes	Yes
Key informants, Tribal leaders, Community gatekeepers	Yes	Yes
Translation/linguistics	Yes	Yes
Indigenous Knowledge Expertise	Yes	Yes
Research/Data science	No	No
Partnerships		
School system (e.g. school administrators, health educators, daycares, preschools, private & public schools)	Yes	Yes
Local leaders/families	Yes	Yes
Universities	Yes	Yes
Government agencies (city/state/county health department, law enforcement/criminal justice agencies)	Yes	Yes
Community groups (e.g. faith-based organizations, barbershops, beauty-salons, laundromats, food markets, community centers, cultural associations, tribal groups)	Yes	Yes
Funding Sources		
Public funding (e.g., federal, state or local government)	Yes	Yes

Product/Material/Tools

	Tailored For Language	Language(s) if other than English	Material
Outreach/Recruitment Tools			
Social Media	No		http://www.qungasvik.org/prev_intro/?target=_self
Participant Educational Tools			
Social Media	No		http://www.qungasvik.org/prev_qasgiq_model/?target=_self
Social Media	No		http://www.qungasvik.org/prev_protective_factors/?target=_self
Social Media	No		http://www.qungasvik.org/prev_journey_continues/?target=_self
Measurement Tools			
Standardized Instrument/Measures	No		Attachment available for request at the bottom of the page.

Implementation Materials and Products

	Material
Implementation/Delivery Materials	
Intervention implementation guidelines	http://www.qungasvik.org/preview/
Implementation/Output Materials	
Social/traditional media publicity/news coverage	https://videocast.nih.gov/watch=38651

Articles Related to Submitted Intervention

	Article
Reports/Monographs	
No Reports/Monographs provided.	
Additional Articles	
Evaluation	https://onlinelibrary.wiley.com/doi/10.1002/ajcp.12621
Evaluation	Attachment available for request at the bottom of the page.
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Materials Available for Request

- Qungasvik Outcomes Assessment Package _Brief v 9.0i.xlsx
- Multi-Level Cultural Intervention 2018.pdf
- 7_Feasability and Evaluation_Community Intervention 2014.pdf
- Suicide Prev IJCH 2009.pdf