RISING SUN: Prioritized Outcomes for Suicide Prevention in the Arctic

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Abstract

Suicide rates among Indigenous people in the circumpolar north typically exceed national averages. Over the past decade, the Arctic Council has become a forum for collaborative efforts among governments and Arctic communities to highlight the problem of suicide and its potential solutions. The mental health initiative under the United States chairmanship of the Arctic Council, *Reducing the Incidence of Suicide in Indigenous Groups: Strengths United through Networks* (RISING SUN), established community-based outcomes to evaluate suicide prevention interventions using a Delphi methodology complemented by stakeholder discussions at face-to-face meetings. The RISING SUN outcomes and stakeholder input underscore suicide risk and protection as multifactorial and shaped by influences at the levels of the society, community, family, and individual. Implementation of multilevel suicide prevention initiatives requires mobilization of resources and enactment of policies, including those that reduce adverse childhood experiences, increase social equity, and mitigate against the impacts of colonization and poverty.

Introduction

Approximately 500,000 Indigenous people inhabit the circumpolar north, and suicide rates, particularly for young people, typically exceed national averages in these communities(1). The high rates of Indigenous youth suicide in the Arctic are a relatively recent phenomenon, coinciding with colonial intrusions into the traditional lifestyles of Indigenous people, colonization, rapid modernization, national cultural disruption, and policies of cultural assimilation (2). Lack of service system infrastructure, distrust of formal services, ongoing marginalization, systemic discrimination, underemployment, and collective disempowerment increase suicide risk for Arctic Indigenous youth (1, 3). The strengths found in communities and cultures that support mental health are also shared across many circumpolar contexts (4).

Prevention efforts should be tied to known strengths and vulnerabilities, but the challenges of conducting rigorous research and evaluation in the Arctic hinder the development and implementation of best practices. Suicide prevention research among Arctic Indigenous communities is constrained by geography (i.e. remoteness), lack of culturally relevant measures with thorough psychometric testing, small populations, and by research strategies that prioritize local control and cultural relevance over generalizability and rigor-enhancing scientific conventions (5). Another constraint is the definition of evidence, which has often limited the criteria for intervention effectiveness to randomized controlled trials at the expense of other knowledge systems. Arctic mental health researchers have called for a "circumpolar comparative framework…to design, conduct and interpret interventions [to] enable lessons to be learned and shared"(5). Such a framework will better enable Indigenous communities, service

providers, researchers and policymakers to address the critical health disparities that affect Indigenous youth across the Arctic.

Over the past decade, the Arctic Council, the intergovernmental forum of Arctic states and Permanent Participants (representing Indigenous peoples' organizations), has become a forum for collaborative efforts to highlight the problem of suicide and its potential solutions. The 2011 Arctic Health Declaration in Nuuk, Greenland, focused on enhancing mental health and the prevention of substance abuse and suicide. Under the 2013-2015 Canadian chairmanship of the Arctic Council, the *Sharing Hope* initiative supported international teams of Arctic researchers to identify evidence-based interventions that increase mental wellness and prevent suicide in circumpolar Indigenous communities (5). The final report revealed a dearth of rigorously tested interventions for these communities. The mental health initiative under the United States (US) chairmanship of the Arctic Council, *Reducing the Incidence of Suicide in Indigenous Groups: Strengths United through Networks* (RISING SUN), built on this work. The primary aim of RISING SUN was to develop a toolkit of common outcomes and measures to assess suicide prevention efforts across the Arctic—a first step toward harmonizing data and increasing collaborative research and evaluation efforts(6).

Regional Workshops

"I want to dispel one myth, which is that research doesn't happen or hasn't happened prior to western contact within the Indigenous community. We just have never referred to it, necessarily, as research. …we have really well-established systems of potlatch ceremonies, stick dances … sweat ceremonies. All these practices were developed by our ancestors and refined over time to help us to maintain a spiritual, mental, physical balance in life as we move through the world

and a lot of those systems were disrupted over the last couple hundred years. I really feel like a part of our work is finding an appropriate way to help rebuild those." (Alaska Native leader & administrator, Anchorage, AK 2015)

The RISING SUN initiative used face-to-face conferences and a virtual Delphi Process to identify needs and establish consensus on suicide prevention priorities. A Scientific Advisory Group (SAG) comprising clinicians, researchers, and youth leaders from Arctic Council member states and Permanent Participants guided the process. At conferences in Anchorage, Alaska; Tromsø, Norway; and Iqaluit, (Nunavut) Canada, Alaska Native, Aleut, Athabaskan, Gwich'in, Inuit, and Saami advocates and researchers gathered alongside policymakers, academics, and clinicians. Each conference prioritized Indigenous community participation and dedicated time for group discussion. Presenters at each meeting shared epidemiologic trends on suicide rates among Indigenous groups as well as regionally specific research findings. Participants consistently noted that suicide prevention requires holistic problem-solving that considers the many strengths of circumpolar Indigenous people alongside the wide range of threats they face. Threats include climate changes that impinge upon livelihoods; corporate or government incursion on land traditionally used for reindeer herding; as well as the high turnover rates and scarcity of health care providers with appropriate language skills, cultural, and historical understanding in many Arctic rural communities. These threats compound the effects of social inequity, and alcohol and substance misuse that disturb the health and wellbeing of some communities. Colonial practices that disrupted Indigenous families, language preservation, cultural ties, and social cohesion left an intergenerational legacy of historical trauma and thereby changed the trajectories of subsequent generations. Cultural continuity, community action,

Indigenous ways of knowing and healing, relationship to land and water, and language revitalization remain sources of collective resilience that need to be drawn upon.

Here we report selected highlights from specific meetings, focusing on discussion of the initiative and desired outcomes of the initiative.

Process

The 2015 Alaska workshop featured small group discussions about the overall structure of RISING SUN, approaches to suicide prevention, and the proposed Delphi Process. Participants stressed the importance of cultural orientation for researchers working in communities, the belief that communities can heal themselves, and emphasis on community and cultural strengths rather than on demoralizing statistics. They promoted seeking local expertise and Indigenous knowledge by asking communities what they already do to prevent suicide and how one can build on that. They encouraged efforts to increase knowledge and decrease shame about suicide, to engage communities with low rates of suicide to help others, and to recognize that communities in different states of readiness may require different approaches.

Several participants from Alaska expressed concerns about the Delphi Process--that a western-based process such as the Delphi may not align with an Indigenous worldview--and suggested an alternative that favored consensus over compromise, enabling communities to "build narrative" or "create a story." In response, the Scientific Advisory Group made plans for SAG members from interested countries to conduct focus group discussions on topics addressed in the Delphi process.

Discussions continued during the May 2016 meeting in Tromsø. SAG members, Arctic Council representatives, and Permanent Participants of the Arctic Council provided feedback on

the analysis of the data collected through the Delphi process. They questioned whether the presentation of the data was consistent with Indigenous ways of presenting information, pointed out the lack of explicit capture of the domain of the spiritual, and considered whether only evidence-based intervention outcomes should be listed. Given that restriction to evidence-based intervention outcomes would likely exclude input from non-researchers, as well as outcomes based on traditional knowledge and practice-based knowledge, the group opted for more inclusive presentation of results to accommodate varied perspectives.

Desired Outcomes

The final workshop took place in March 2017 in Iqaluit, Canada. Through group discussions, participants identified priorities for suicide prevention in the community, regional, and global contexts (7). At the community level, members must be able to advocate for and secure long term, sustainable funding to support lifelong mental wellness, including through employment, education, and mentoring for youth. Sustainable funding is also needed for programming to promote and apply Indigenous knowledge and build positive cultural identities. The need for self-determination and focused advocacy emerged as key themes. Elders would play a central role in these efforts to help youth develop competencies and to disseminate knowledge. On a regional level, full implementation of Indigenous suicide prevention strategies arose as a priority, as did cultural competency, which would help address needs for respectful frontline workers—a community-level concern. At the regional and global levels, participants emphasized the benefits to be gained from sharing information, coordinating programs and interventions, collaborating on research efforts, and making tools available to support evaluation.

Participants identified web-based technologies as tools to increase knowledge sharing and collaborative networking.

Setting Priorities for Intervention Outcomes

RISING SUN identified collective priorities through an iterative, consensus-building Delphi method involving a large and diverse group of advocates, clinicians, policymakers, Indigenous community members, researchers, suicide survivors, and tribal leaders. The US National Institute of Mental Health (NIMH) RISING SUN Working Group led communication, data collection, analysis, and reporting.

The SAG nominated 300 people to the Delphi Panel. Of these, 159 people representing eight Arctic states agreed to participate, and 140 completed Round 1. US respondents accounted for 44%, 31% were from Canada, 21% from Scandinavian countries and Greenland, and 4% from Russia. Among the panelists, 34% self-identified as researchers, 25% as Indigenous community members (including Native youth and elders), 22% as clinicians and service providers, and 19% as policymakers.

In Round 1, panel members responded to the question, "In addition to reducing suicide deaths, what are the most important outcomes that suicide prevention interventions should achieve in Arctic communities?" by listing up to five outcomes they considered most important. An outcome was defined as "the result of a health service, program or intervention [that when] measured, shows what the health service program, or intervention can achieve and helps guide decision making (8)." Round 1 participants identified over 600 individual outcomes for suicide prevention.

Round 1 results were collated by the NIMH RISING SUN Working Group into a consolidated list of 127 outcomes. Following a second round of edits to remove conceptual duplicates and to clarify statements for non-native English speakers, 99 unique outcomes were presented to the Delphi Panel. In Round 2, the panelists selected their top 25 outcomes. In Round 3, panelists ranked each outcome on a three-point scale for relevance to an Arctic context, feasibility, and immediacy of impact. The final ranked list of outcomes represents the weighted individual rankings for each outcome summed across all three criteria and divided by the total number of responses. The top 25 outcomes are shown in the Table.

Outcomes

As a group, the RISING SUN Delphi outcomes convey the importance of recognizing suicide risk and protection as multifactorial and shaped by influences at the levels of the society, community, family, and individual. The focus on youth reflects the fact that the highest rates of suicide occur among this age group in Arctic Indigenous communities, with young men particularly affected(1). Several themes arose in the prioritized outcomes. First is the necessity of incorporating core Indigenous values in healthcare for Indigenous communities, especially cultural competence, community engagement, Indigenous ways of knowing and healing, and self-determination. The importance of community relationships emerges through the priorities of increasing connectedness, strengthening intergenerational relationships, and community-based crisis management and prevention. Second, the family context appears as a critical protective environment for fostering resilience to adversity. Third, healthcare and other suicide prevention services need to be designed explicitly to meet the needs of Indigenous groups, whose histories and current beliefs and ways of life are often distinct from those of the majority population and

from the clinicians who serve them.

Community Member Checking

To complement the Delphi panel, three of the authors from the US (X and Y) and Canada (Z) hosted community discussions to gain additional perspectives on priorities for suicide prevention interventions and desired wellness outcomes. Community member participants emphasized the value of recognizing cultural perspectives and holistic health as well as Indigenous practices that promote protective factors to achieve community well-being and resilience (Rasmus, Charles, & Mohatt, 2014). The participants in Alaskan discussion groups also stressed the significance of cultural history, the importance of a sense of belonging, and benefits of traditional ways of transmitting well-being and resilience through Indigenous languages, stories, dances, and subsistence hunting and gathering of traditional foods.

Next Steps

RISING SUN developed from the recognition that, despite high numbers of death by suicide and high rates of attempts, existing interventions are inadequate and so are existing evaluation tools for assessing efficacy or effectiveness in the Arctic. These are prerequisite for disseminating and scaling up effective interventions. An explicit goal of RISING SUN, then, is to facilitate collaborative research by providing a common set of community-based, prioritized outcomes and measures that facilitate data pooling and adequate sample sizes and that can aid community-driven efforts to identify what works best within and across a range of Arctic communities. Additionally, in communities where applying practice-based and experiential evidence remains more feasible to guide decision-making, an agreed upon set of prioritized outcomes and measures could help guide intervention selection. To that end, RISING SUN has

produced a set of tools accessible online for stakeholders to use alongside the specialized tools developed for their communities (http://www.mhinnovation.net/collaborations/rising-sun/rising-sun-toolkit). Measures exist for some of the prioritized outcomes, and many of those must be adapted and validated for different Arctic contexts. For other outcomes, measures need to be developed. Activities during the Finnish Arctic Council chairmanship (2017-2019) could help to address these gaps.

Attempting to achieve the prioritized outcomes for suicide prevention will require sustained mobilization of resources and, in some cases, enactment of policies. Reducing adverse childhood experiences for young people in the Arctic requires preventing exposure to violence and substance use, and designing corrective responses to child abuse and sexual assault. Where the legacies of colonization, residential schools, and intergenerational poverty contribute to adversity in remote, rural communities, social equity must be achieved. Access to adequate housing, clean water and sanitation, nutritious food, infrastructure, healthcare service systems, pathways to higher education and employment, and thriving local economies constitute the social determinants that can drive positive mental health outcomes(9). Many of these priorities are now being articulated by Indigenous leaders as implement suicide prevention strategies that focus on Indigenous populations in circumpolar contexts(10). Sustainable benefits will require collective long-term action to reduce the disproportionate burden of suicide in the Arctic.

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Table. RISING SUN Prioritized Outcomes for Suicide Prevention Interventions

Level of Intervention	Outcomes [a]
Clinic	• Increased access to and participation in mental health follow-up services for those who have attempted suicide or self-harm [b] • Development of skilled, caring, and culturally competent healthcare workforce and more accessible, timely, and culturally safe behavioral health treatment and support for mental and substance use disorders [b] • Increased trauma-informed support for survivors [b] • Increased early intervention for depression, anxiety, drug use, and violence
Community	• Increased number of trained and educated community members who understand resources for care and who can provide support in a crisis [b] • Increased peer, community, and social network support [b] • Increased number of cultural protective factors (e.g., cultural pride, engagement in cultural activities) [b] • Increased access to relationships with elders, including an increase in the number of places and activities to promote inter-generational activities [b] • Increased community involvement in suicide prevention, including increased number of youth who are equipped to provide peer-to-peer support [b] • Increased number of youth that are engaged in traditional indigenous activities • Increased opportunities for youth • Increased self-determination, ownership for safety and well-being, and community ability to address suicide • Decreased number of non-fatal suicide behavior and injuries (e.g., reduced suicide attempts and re-attempts, reduced suicidal ideation, and reduced non-suicidal self-injury) • Reduced likelihood of being a victim of sexual abuse/assault during childhood • Increased employment
Family	• Improved social and emotional coping skills among children and youth [b] • Increased number of, and access to, positive role models who deal with

	adversity without suicide [b] • Reduced children's exposure to substance misuse in the home
Individual	• Increased sense of belonging • Increased number of protective factors (e.g., social support) • Increased hope for the future • Increased reasons for living
National/Regional	• An increase in sustainable funding for interventions • Increased quality of life during childhood and decreased adverse childhood experiences (ACEs) • Increased intersectoral collaboration across systems

Notes.
[a] 25 outcomes after Round 2. The order in which the outcomes are presented in the table does not indicate frequency of endorsement or relative importance.
[b] Top 10 outcomes ranked by Arctic relevance, immediacy of impact, and feasibility.