# Advancing Suicide Prevention Research With Rural American Indian and Alaska Native Populations

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As part of the National Action Alliance for Suicide Prevention's American Indian and Alaska Native (AI/AN) Task Force, a multidisciplinary group of AI/AN suicide research experts convened to outline pressing issues related to this subfield of suicidology. Suicide disproportionately affects Indigenous peoples, and remote Indigenous communities can offer vital and unique insights with relevance to other rural and marginalized groups. Outcomes from this meeting include identifying the central challenges impeding progress in this subfield and a description of promising research directions to yield practical results. These proposed directions expand the alliance's prioritized research agenda and offer pathways to advance the field of suicide research in Indigenous communities and beyond. (*Am J Public Health.* 2015;105:891–899. doi:10.2105/AJPH.2014.302517)

Although the Surgeon General published a call to action to prevent suicide in 1999,[1] national rates of suicide have shown little improvement, and from 2002 to 2010 suicide moved from the 11th to the 10th leading cause of death in the United States.[2,3] National suicide rates are consistently higher among White men aged 65 years and older than in younger age groups.[3] However, suicide remains one of the top 5 causes of death for American adults younger than 45 years and one of the top 3 for adolescents and young adults.[2]

Although suicide is clearly an important public health priority for all Americans, it is an especially critical issue for American Indians and Alaska Natives (AI/ANs). North America's Indigenous peoples have disproportionately high rates of suicide deaths, attempts, and ideation, and suicide deaths are approximately 50% higher for AI/AN people than for White people.[1,3] However, AI/AN elder suicides are quite rare. Suicide is the second leading cause of death among AI/AN adolescents and young adults, and their rate of suicide is 2.5 times as high as the national average across all ethnocultural groups.[2] AI/AN young men are particularly vulnerable[4]; the Centers for Disease Control and Prevention has reported that AI/AN youths aged 10 to 24 years have the highest suicide rates of all ethnocultural groups in the United States, at 31.27 per 100 000 among male youths and 10.16 per 100 000 among female youths. To eliminate this health disparity, research identifying the unique factors contributing to AI/AN suicide is essential to tailor interventions to fit the particular cultural and situational contexts in which they occur.[1]

Driven by the pressing need to better understand and reduce AI/AN suicide, the AI/AN Task Force of the National Action Alliance for Suicide Prevention (NAASP) created a working group to identify research priority areas that have the most potential to reduce suicide and suicidal behavior in AI/AN communities. For this purpose, we (L. W., T. L., and J. P. G.) worked with Jeff Schulden from the National Institute on Drug Abuse and LaShawndra Price from the National Institute of Mental Health to convene a 2-day, multidisciplinary meeting of suicide researchers in August 2013. The working group identified 3 undertakings as crucial for advancing research in this area: the need to (1) summarize current knowledge about the problem of Indigenous[1] suicide, (2) designate key challenges in Indigenous suicide research, and (3) propose future directions that might spur innovation in suicide research among Indigenous people.

Several innovative and promising approaches are currently unaddressed in the NAASP research agenda.[5] We, as Indigenous suicide research experts, believe that 3 core issues in research and clinical care are vital for suicide prevention in AI/AN and other communities. Our suggestions are not meant to be prescriptive but rather to highlight the ways in which some dominant approaches can constrain AI/AN suicide research. The proposed areas of study offer some promising new directions for AI/AN research and for suicide research more generally.

## EXPERT MEETING

We were involved in a 3-stage process of consensus building about current challenges and future directions for Indigenous suicide prevention research, and this article is a product of those efforts. We participated in premeeting reflections and presented and discussed our perspectives in a 2-day meeting at the Aspen Institute in Washington, DC, August 19–20, 2013. After the meeting, authors gave feedback on this article through 5 rounds of editing. We describe the procedures involved in developing the agenda of the meeting so that readers will be better able to analyze and make use of the results.

To begin, we (L. W., T. L., and J. P. G.) compiled a list of potential participants with expertise in AI/AN suicide prevention who met the following inclusion criteria: (1) peer-reviewed publications related to Indigenous suicide, (2) experience doing empirical research focused on Indigenous suicide, and (3) long-term research (at least 5 years) in the field. After reviewing published articles, reports, and conference abstracts, we identified a list of authors with active AI/AN suicide research supported by the National Institute of Mental Health and National Institute on Drug Abuse, the primary

sponsors, and by the National Institute of Alcohol Abuse and Alcoholism. We also circulated the list to the AI/AN Taskforce to elicit additional names. In finalizing the invitee list, we tried to have representation of scholars who are Indigenous themselves, and to include scholars from multiple disciplines including public health, psychology, psychiatry, sociology, education, and anthropology.

Next, we contacted individuals by e-mail to determine their interest in participating in a meeting

> to encourage dialogue among a multidisciplinary group of researchers about AI/AN suicide and prevention and to conceive of next steps for addressing and reducing suicide and suicidal behavior in tribal communities.

Before attending the workshop, each invited attendee was asked to prepare a short 1- to 3-page statement that (1) outlined the nature of the problem of suicide from their perspective, (2) described current gaps in the knowledge or barriers to research that hinder progress toward suicide prevention in AI/AN communities, and (3) identified promising ways to advance the field and reduce the prevalence and severity of AI/AN suicide and suicidal behavior.

These questions formed the basis of each attendee's short presentation at the meeting. The entire first day involved these presentations, which were given in a round-robin style with questions and discussion after each presentation. On the second day, participants were asked 2 questions regarding their reflections on the previous day's discussions: (1) what appears to be the most productive research pathways to reduce suicidal behavior in AI/AN communities, and (2) what crucial information is still missing from investigators' understanding of these issues as they pursue research to prevent AI/AN suicide? Key ideas were recorded and prioritized, again using a round-robin, synthesizing approach. The prioritized ideas were preliminarily agreed on and organized into the themes reflected in this article.

A draft article outline was circulated to the group to ensure that it accurately reflected the meeting outcomes, and particular participants, based on expertise, were responsible for drafting particular sections. The sections were pulled together and circulated to all meeting participants for their review and feedback by the lead author, and the article was then revised several times, incorporating all participants' feedback until all authors reached consensus. Last, the article was circulated to the AI/AN Taskforce co-chairs for their review, and their suggestions were also included.

## CURRENT KNOWLEDGE OF THE PROBLEM

US researchers have identified several risk and protective factors[6] for AI/AN suicide, many of which conceptualize suicide as a problem originating at an individual level rather than a societal one.[7] Studies have described the co-occurrence of suicidal behaviors and alcohol and drug use in many AI/AN communities, documenting that more than half of the AI/AN people who have exhibited suicidal behavior were intoxicated at the time.[8–11] Childhood adversity is also associated with AI/AN suicidal behavior and ideation.[12] Young AI/AN men—in particular those who are unemployed, do not complete schooling, or both—and those with a history of trauma are at greater risk for suicide attempts.[13–16] Compared with other ethnocultural groups, AI/AN youths have more severe problems with anxiety, victimization, substance abuse, and depression,[17,18] which may contribute to suicidality. Research has also linked perceived discrimination and acculturation stress with AI/AN suicide ideation.[19–21]

Previous research has identified potential targets for intervention at multiple levels, including increasing coping skills, reducing the stigma of mental health services, and building community infrastructure for prevention and health promotion,[9,14] yet there is little guidance about how to effectively implement prevention programs in AI/AN contexts.[22,23] Unique challenges in Indigenous communities include distrust of formal services, ongoing marginalization, poverty, underemployment, lack of basic services, and collective disempowerment.[24–26] In addition, rural AI/AN communities often lack the resources to ensure safety (e.g., absence of law enforcement on rural reservations and AN villages), do not have access to mental health services,[27,28] or do not use the mental health services that are available.[29]

Research has shown that existing systems of acute care for at-risk and suicidal people are poorly utilized by AI/AN people.[22,30,31] In fact, the majority of AI/AN youths never receive any form of behavioral health care, despite behavioral problems, signs of mental distress,[32,33] or active suicide ideation.[29,34] In 1 study, 65% of ANs who were referred to mental health services because of suicide attempts either did not initiate or complete care.[16]

When Indigenous people do receive treatment, their care may be culturally inappropriate because of the individualistic and clinic-based intervention offered by primarily non-Native counselors.[35–37] These services tend to address primarily psychological rather than social, cultural, and spiritual issues that are often seen as more relevant for suicide prevention in AI/AN communities.[24,38–43] Similarly, standard treatment practices do not address the key perceived contributors to AI/AN suicide, ignoring issues such as historical oppression, intergenerational trauma, and ongoing marginalization.[44–47] In addition, when there is a need for involuntary hospitalization in cases of imminent risk, the intervention itself, which is often offered far from home in rural communities, can further alienate or distress Indigenous people.[48,49] Taken together, previous research has underscored the need for practical and collaborative research on intervention and prevention strategies that are culturally consonant and that can have more sustainable impacts.

## AMERICAN INDIAN/ALASKA NATIVE SUICIDE RESEARCH

To determine current trends in AI/AN suicide research, we performed a PubMed search using the terms *American Indian* or *Alaska Native* and *suicide* for peer-reviewed academic sources and empirical research published from 2004 to 2014. The search produced 30 articles, of which we excluded 10 commentaries and reviews. We documented each of the remaining 20 articles' focus on deficit- or strengths-based variables or methods, orientation (e.g., participatory or investigator directed), and level of outcome (individual or community). Of these 20 articles, 90% (n = 18)[1–18] measured only individual-level factors, 60%

(n = 12)[1–5,7–9,12,14,17,19] focused on deficits or risks, and only 30% (n = 6)[47–51] described doing the research in collaboration with AI/AN groups.

Some of these trends, such as focusing on individual-level processes and outcomes and limited information about community involvement in project development and implementation, were found in another recent literature review focused on existing AI/AN alcohol, tobacco, and other drug and suicide prevention intervention literature. In addition, the recent review by Allen et al.[49] noted a need for increased focus on the process aspects of this work rather than only on outcomes and for use of local knowledge and theory to frame and guide intervention.

## KEY CHALLENGES IN INDIGENOUS SUICIDE RESEARCH

Key challenges in developing an AI/AN suicide research agenda are complex and include epistemological differences, an emphasis on individual- versus community-level variables, deficit- instead of strengths-based foci, and methodological and ethical concerns. First, the assumptions, methods, and activities that structure the production of knowledge within the behavioral and health sciences are associated by Indigenous communities with colonial European American processes of dispossession and subjugation and may not align with community beliefs and practices. Furthermore, decades of government intrusion, regulation, and management have reinforced the perception among many Indigenous peoples that bureaucratic guarantees and assurances presented as rational, technological, and scientifically grounded have often failed to respect and benefit Indigenous people.[41] Key challenges have emerged from this history[50] and from the sometimes divergent epistemologies and priorities of Western and Indigenous inquiry into the nature of suicide and the implications of prevention.

### Western vs Indigenous Epistemologies

The cautiousness or skepticism about the value of research often seen in Indigenous communities may result in part from divergent traditions related to the creation, validation, and transmission of knowledge. For instance, Indigenous knowledge is often characterized by generational perspectives that deliberately incorporate attention to the past, present, and future and also by an experiential holism grounded "in the context of living in a particular place in nature, in the pursuit of wisdom, and in the context of multiple relationships."[51(p556)] Western science emphasizes the observable and reproducible, manipulating phenomena in the present with the aim of future prediction and control. Science and biomedicine aim to develop decontextualized understanding of phenomena that can be decomposed into distinct parts, functions, and interrelationships to obtain knowledge that can be generalized across historical and societal contexts; the NAASP's prioritized research agenda[5] reflects this orientation. By contrast, Indigenous peoples tend to emphasize heritage and respect for personal experience, which may conflict with the scientific ideals of objectivity and generalizability.[41]

The primary contrasts are between knowledge that is general versus particular, reductionist versus holist, and abstracted versus contextualized.[51,52] Contributing to these epistemological tensions is the tendency within Indigenous perspectives to view experience in its historical, social and environmental contexts. As a result, standard Western approaches that emphasize individual-level variables associated with suicide may be viewed within Indigenous communities as both counterintuitive and dismissive of sociohistorical and cultural context.[52,53]

Indigenous and Western perspectives also have epistemological differences regarding what is knowable and, more specifically, how suicide should be studied. In some AI/AN knowledge systems, words are seen as powerful interventions that express and enact people's intentions and alter reality.[54,55] As a result, processes such as talking about suicide, even in the context of research, may be viewed as problematic because they may cause the problems that they aim only to describe. This way of thinking about the power of language is not often considered in scientific inquiry or study design. Similarly, what can (and should) be known about another person's internal world reflects culturally based values of identity and social personhood.[53] A dominant focus of suicide research involves identifying individual-level risks and psychological processes that contribute to suicidal behavior, yet this kind of inquiry can seem disrespectful from the perspective just described. Some Indigenous communities value autonomy to such a degree that actively not knowing is considered the right way to respond in cases of suicide.[55] This sensibility runs counter to Western scholarly assumptions about the nature of inquiry and social personhood.

### Individual vs Community-Level Research

Despite a century of sociocultural work showing that suicide rates vary dramatically from one society to another,[56] the bulk of European American suicide research has focused on individual-level factors.[7,57] This emphasis is reflected in the NAASP prioritized suicide agenda,[5] on which 12 of the 15 key objectives focus on individual-level concerns. A central tenet of this "Judeo–Greco–Roman–Christian–Renaissance–Enlightenment–Romanticist"[58(p57)] perspective is that suicidal thoughts and behaviors (similar to pathologies) are best understood and treated 1 individual at a time. Several drawbacks result from thinking about suicide and its prevention in terms of individual impacts and dynamics rather than considering systemic, contextual, communal, and historical contexts and processes that contribute to it.[7,59] The dominant focus on individual-level risk factors tends to eclipse what is known about sociocultural, economic, historical, and political risk factors, which place certain social actors or communities at greater relative risk.[60,61] Inquiry into community-level and social determinants of suicide could enhance understanding of why, for instance, White men older than 85 years are at greatest risk in the overall US population, whereas young men are at greatest risk among AI/AN people.[2]

It is also important to note that although Indigenous suicide rates aggregated across whole nations or geographical regions are remarkably high, suicide rates actually vary dramatically when examined at the level of Indigenous tribes or communities. Collapsing this variability across AI/AN groups to create an overall description of Indigenous suicide prevalence (and risk factors) may obscure important clues to prevention that could be revealed through careful disaggregation and

analysis of information about the origins and causes of suicide in different groups. Little research is available to explain why rates are extraordinarily high in some communities and not in others, but a ground-breaking study suggests that self-governance, intact social systems, community control over resources, and collective efforts to rehabilitate traditional culture are all associated with reductions in youth suicide.[62]

### Intervention vs Community Development

Approaches to suicide prevention driven by the technological and product orientation of much health research have yielded limited outcomes in Indigenous populations. Although there have been some successes in more generic preventive programming for children's behavioral health,[63] the independent, nonfederal Task Force on Community Preventive Services assessed whether a broad range of such interventions resulted in improved health outcomes and concluded that half produced insufficient evidence to support practice recommendations.[64] A recent review of dissemination and intervention research cautioned that evidence-based practices are also generally not disseminated spontaneously and that passive approaches to dissemination are largely ineffective.[65] Knowledge translation in child and youth mental health has been similarly unsuccessful,[66] a fact that is of particular relevance to Indigenous suicide research.

Studies aimed at developing replicable individually-focused interventions that are generalizable across communities—reflected in the NAASP research agenda[5]—have had limited utility in preventing youth suicide in Indigenous communities. First, with the occasional notable exception,[67–70] very few empirically validated interventions and prevention initiatives are available, and few if any of these evidence-based interventions have been sustained even in the communities for which they were developed. Thus, there is little evidence to suggest that developing, testing, and disseminating AI/AN suicide prevention interventions will spontaneously translate into practical and sustainable programming for the many distinct AI/AN communities in the United States. There is a great need to understand these discouraging outcomes and to engage in innovative implementation research that includes explicit attention to problems of translation, adaptation, and sustainability.

Notably absent from the available literature are attempts to consider how the research process itself might also contribute to sustainable outcomes. This kind of perspective is absent from the NAASP prioritized research agenda.[5] Many Indigenous communities seek collaborative research relationships that provide tangible local benefit, enhance local health and research infrastructure, provide a vehicle to address disparities, and advance tribal self-determination.[71–75] Collaborations between researchers and Indigenous communities potentially allow for the research itself to be an emancipatory process that enables community members to identify and frame issues important to their community and to develop solutions that reflect community priorities, epistemologies, ontologies, and practices.[76,77] Such collaborative approaches to knowledge generation and utilization hold out the promise that research results are more readily applied and sustained in the communities from which they developed.[78] As such, mobilizing communities may constitute potentially effective interventions in their own right.

### Deficit- vs Strengths-Based Studies

Indigenous communities have voiced concern that most research has focused on risk factors, psychopathology, and deficit models, which encourage individual and group stigmatization and even self-stigmatization.[79,80] As a consequence, many Indigenous communities are drawn to strengths-based models. Such approaches tend to emphasize the protective role of culture, cultural processes, and activities in prevention. Such consideration of matters of well-being and positive health outcomes can direct attention to local contextual factors, families, and community networks[81] that bolster the material, institutional, cultural, political, and historical factors that may protect against suicide.[82–84]

Within such strengths-based approaches, well-being is defined in cultural terms,[85] given that both what it means to be well and even what it means to be a person are culturally determined. Such understandings reorder the primary or proximate outcomes of suicide prevention efforts. Despite the rich possibilities of well-being serving as a culturally defined theoretical construct and an outcome variable desired by many tribal communities, the broader notion of well-being remains both underdeveloped and poorly used in most suicide prevention research.

### Bottom-Up vs Top-Down Priorities for Suicide Research

Although the National Institutes of Health mandates the equitable inclusion of ethnoracial minorities and children in research,[86] current funding priorities appear to limit the accomplishment of this directive. To fully meet such requirements, researchers and funders must focus on questions of interest to both the scientific and the ethnoracial communities that are directly involved. Instead, the dominant priorities of the agencies that fund AI/AN suicide research are frequently misaligned with the priorities of Indigenous communities. The lack of shared priorities between the NAASP research agenda[5] and those we present in this article underscores this point. The Canadian Institutes of Health Research's Institute of Aboriginal Peoples' Health is a promising way to create infrastructure to address this issue.

The commitments of funding agencies and mainstream scientists emphasize research that is capable of demonstrating clear and generalizable causal links between interventions and outcomes though experimental or quasi-experimental designs. However, such efforts to maximize internal validity commonly minimize the role of context (including culture and heritage) that is so often prioritized by Indigenous communities. The recent turn toward investigating the neurobiological mechanisms (including the genomics and epigenetics) of mental disorders exacerbates this problem by overshadowing equally important cultural processes and social determinants of interest to Indigenous groups. By contrast, studies that provide the deep cultural and contextual descriptions that are possible with qualitative methods are rarely funded. Recent reviews of National Institutes of Health funding have revealed that most health research uses only quantitative methods.[87] Although there have been recent calls for mixed-methods research to study complex social phenomena such as suicide, the number of such studies funded remains very low.[88]

The matters we have outlined are reflected in the ethical conduct of research. Since the 1970s, oversight related to ethical practice with individual research participants has increased, but less attention has been paid to community interests in the context of research.[89] AI/AN communities, with their unique status as domestic dependent nations, are increasingly demanding that researchers actively engage them in identifying potential benefits and harms of research at both individual and community levels of analysis.[90] To achieve this, researchers must understand the ethical and political dimensions of their research, and AI/AN community members must fully understand the realities and conventions that drive both research objectives and processes. This degree of involvement frequently requires capacity building as well as prolonged relationship and trust-building activities,[72,91,92] which the current funding climate does not typically support.

In addition, current funding mechanisms do not usually allow for the proportionately higher costs associated with research with small populations (such as many AI/AN groups), logistics for working in geographically dispersed rural reservations and Alaska villages, and protracted timelines for undertaking genuinely collaborative research partnerships. These ethical, political, and logistical constraints make it especially difficult to design studies that are acceptable to both funders and Indigenous communities.

## PROMISING DIRECTIONS FOR INDIGENOUS SUICIDE RESEARCH

We have briefly summarized current knowledge about Indigenous suicide and articulated key challenges in the dominant approaches to Indigenous suicide research. Progress toward reducing the devastating health disparity of AI/AN suicide has been slow due to discrepant research priorities and practices as described above. Mainstream research has yet to focus on aspects of suicide prevention that are potentially most relevant and meaningful for AI/AN people, precluding effective and sustainable solutions for Indigenous communities. At the risk of some oversimplification, we have framed these challenges as simple dichotomies in an effort to highlight alternative perspectives that suggest future directions for Indigenous suicide prevention research (see the box on the next page).

The epistemological divides, or different ways of knowing, that often separate Indigenous and scientific communities provide important contrasting perspectives.[51,52] Addressing these divergent worldviews requires attention to alternate epistemologies and knowledge claims that may contribute to building more accurate scientific models—models that include key determinants of mental health and resilience at the level of whole communities and environments, all situated within their larger sociopolitical contexts.[83] Such lines of research demand consideration of the distinctive, defining experiences of different cultures and different generations to better understand how political, economic, and historical forces constrain and create opportunities and shape priorities and subjectivities of diverse peoples. For example, such approaches might consider how cultural and generational changes affect child-rearing practices and investigate how particular communities convey meaning and provide scaffolding to help their children become actively contributing and healthy adults.

Puzzling through the complex connections between individual and community health shapes many of the most promising contributions to the Indigenous suicide research agenda (as seen, e.g., in the importance of culture as prevention[83]), yet relatively little attention has been given to this aspect of the problem in mainstream research. To date, the majority of suicide research has focused on individual-level risk, and individuals' thinking and behaviors are the targets of most intervention efforts. To the extent that Indigenous suicide arises from enduring structural inequities, which are poorly addressed through the provision of mental health services, it is important to expand the focus of future research.[52,60,93] The health disparities made evident by cross-cultural variations in suicide rates may be better understood as the culmination of cultural wounds inflicted on whole communities and whole ways of life[94] or as a consequence of structural violence, in which processes of disadvantage, marginalization, and exclusion are woven into institutions and social practices.[50]

A crucial area of research concerns the social determinants of mental health. Examining how societal-level factors contribute to the clusters of Indigenous suicide in some communities (e.g., poverty, unemployment, discrimination, and historical trauma; i.e., the cumulative effects of emotional and psychological wounding across generations) is an important area of research.[46,62,95–98] For example, Chandler and Lalonde[62,96] have reported that half of British Columbia's 200-plus First Nations communities have experienced absolutely no youth suicides, whereas other studies have reported rates several hundred times the national average. Similar findings have recently been reported across Western Australia's culturally diverse Aboriginal communities.[99] The variation between Indigenous communities can provide important insights into the community-level variables that reduce the risk for suicide.

The almost exclusive focus on universally measurable individual variables tends to preclude attention to other social, historical, and cultural realities that affect Indigenous people's health. The importance of these factors becomes clear when considering the large community and ethnic variations in suicidal behavior. Differences between Indigenous communities in suicide rates can be used to develop hypotheses about the interaction of community-level processes, family systems, and individual psychology that affect young people's well-being and resilience.[100–102]

Although few studies have focused on community-level protective factors, it appears that communities with higher levels of political engagement (sovereignty rights), functional community institutions, and cultural continuity[62,93] have lower suicide rates. An empirical test of 1 multilevel protective factors model identified community-level factors as explaining the largest proportion of the variance in suicide outcomes.[70] Community-level support and opportunities; family-level relational dimensions of emotional support, cohesion, and conflict resolution; and communal mastery at the individual level were interrelated and together provided protection from suicide. Indeed, certain individual protective factors for Indigenous suicide include school completion and enculturation,[24,45,103] and these factors can be understood in terms of their links to

**Challenges and Future Directions for American Indian/Alaska Native Suicide Research**

| Challenges | Future Directions |
|---|---|
| Constraining assumptions of Western approaches to inquiry | Expansive commitments of Indigenous approaches to inquiry |
| Reductionist perspectives | Holistic perspectives |
| Focus on the present and future | Focus on the past as well as the present and future |
| Individual-level factors | Community-level factors |
| Conceptualizing suicide as a psychological problem | Conceptualizing suicide as a social problem |
| Aggregating Indigenous suicide rates across time and place | Localizing Indigenous suicide rates in specific community contexts |
| Development of expert-driven, valuable intervention formats | Development of community capacity and collaboration on design of local programs |
| Emphasis on risk and vulnerability | Emphasis on protective factors, resilience, and well-being |

well-functioning community institutions (e.g., schools) and intact cultural systems.

The close-knit composition of rural reservations and Alaska village communities means that rural AI/AN youths are often exposed to suicide among friends and family members, which may put them at higher risk for contagion in these settings.[103] Studying these settings can offer unique insights into the community-level influences and interpersonal dynamics of suicide clusters.[104] This understanding is particularly important in the context of multiple suicides in small communities in which specific strategies are needed to mobilize resilience—a need that has been identified as a national priority for suicide research more generally.[5] Understanding the patterns within groups that produce such dramatic community-level differences is an important area of research that could identify locally developed, evidence-based practices that would otherwise remain unknown.[105] Indigenous suicide research has much to gain, therefore, by considering community-level information.

Expanding on this community-level perspective, it is imperative to develop interventions capable of increasing community health as well as individual well-being. To date, suicide prevention intervention research focused on producing standardized interventions has had disappointing results. To some extent, this may reflect difficulties in implementation. We argue, therefore, that focusing on the processes of change through community engagement and participatory inquiry may help identify and address the limitations of current interventions. Such an approach to research ensures that there is always knowledge gained, whatever the outcome.

Investigating locally derived, empowering approaches to research will inform efforts to engage with Indigenous communities to promote productive, endogenous, and sustainable change. This kind of collaborative, community-driven inquiry can promote the lateral transfer of Indigenous knowledge and increase the likelihood that new strategies are implemented and sustained in Indigenous communities. In this line of research, it is important to evaluate the adaptation and dissemination of off-the-shelf interventions in Indigenous contexts,[106] as well as the kinds of interactions and conceptions that are promoted through such efforts.

All such community-focused research requires the development of collaborative relationships. Indigenous communities may be hesitant to engage in suicide research as a result of past studies that showed little regard for their needs, had limited local oversight or direct benefit, and in some cases may have caused harm,[75] creating an ethical imperative for community-based participatory research and community-driven approaches. Important and significant AI/AN suicide research is thus currently feasible in community settings when the research question and associated research design align with the priorities of both grant-funding organizations and AI/AN communities. This kind of research is built on strong community partnerships developed through trust. Such research requires adequate timeframes, a commitment to collaborative inquiry, and shared control, as well as mutual respect for differing experiences and interpretations.

In addition to understanding how multiple risks combine to increase suicide vulnerability, the research agenda must elucidate the ways in which multiple protective factors can interact to create community-level patterns of continuity, care, and support.[5] Such knowledge could reveal how available support systems can be mobilized to prevent suicidal behavior. These kinds of studies will require an elaboration of constructs related to well-being and resilience, which is an essential counterbalance to suicide research in many Indigenous communities.

## CONCLUSIONS

Productive future directions include community-based participatory suicide intervention research with an explicit commitment to local capacity building and translation; social network approaches to uncover constructive community-level environments, situations, and contexts that reduce suicidal behavior and promote resilience; and descriptive studies using qualitative and mixed-methods approaches to facilitate discovery-based research on the social determinants of Indigenous suicide. Such studies hold the potential to elaborate innovative new theories of suicide and strategies for prevention and mental health promotion. Because of the high rates of Indigenous suicide, especially among youths, and the unique demands on researchers who work in this sensitive area, this area epitomizes high-risk—high-reward research. Through the innovative research pathways described here, and underscored by aspects of the NAASP's prioritized research agenda[5] (in particular, objectives 1A, 5B, and 5C, which are focused on larger social and policy-oriented questions), we believe that

Indigenous suicide researchers can advance knowledge and reduce suicide in partnership with AI/AN communities. ■

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## Contributors

L. Wexler led the writing and conceptualization process, coordinated the group writing, and synthesized individual contributions to the article. L. Wexler, J. P. Gone and T. LaFromboise organized the meeting on which the findings of this article are based. M. Chandler added substantial perspectives and intellectual insights in each round of draft writing. J. P. Gone wrote a short section of the article, provided extensive edits on an earlier draft, and added substantial perspectives regarding main arguments in the article. M. Cwik contributed to the article by adding specific examples and references and editing language to reflect scholarly work done in American Indian (AI) communities. L. J. Kirmayer added specific examples and references from his previous work and edited the language to reflect scholarly work done in Canada's Aboriginal communities. T. LaFromboise provided feedback relating to future directions and evidence-based critiques. T. Brockie shaped some of the arguments relating to community-based interventions in AI communities. V. O'Keefe contributed to the literature review. J. Walkup added important insights that helped shape the main arguments of the article. J. Allen offered substantive feedback on all drafts of the article and contributed to the main arguments of the article.

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