Launching Native Health Leaders: Reducing Mistrust of Research Through Student Peer Mentorship

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American Indian/Alaska Native (AI/AN) mistrust of institutions reflects a legacy of alienation from health, research, and education systems.[1] Federal policies aimed at removing AI/AN peoples from their land, culture, traditional lifestyles, and teachings formed the roots of many social problems burdening these populations today.[2,3] For example, during the boarding school period (1879–1928) children as young as 3 years were forcibly removed from their homes and subjected to physical and mental abuse, including consistent shaming messages about their heritage.[4] Many who survived this era developed dysfunctional behaviors that were perpetuated in their descendants, a phenomenon referred to as historical trauma.[2,3]

Community views of institutions have also been shaped by abusive health interventions and research exploitation. As late as the 1970s, Indian Health Service physicians performed sterilization with inadequate consent on an estimated 25% of AI/AN women living on reservations, to stem unwanted pregnancies and related social problems.[5] Researchers used samples taken from Havasupai tribal members to study type 2 diabetes for purposes that the tribe did not authorize, including population migration studies, prompting a lengthy legal dispute that ended in 2010 and spurred an "all-time high" of mistrust of genetics research across Indian country.[6] Many AI/AN groups have worked with researchers who never returned to inform communities of study results, providing little, if any, benefit from participation.[7]

AI/AN communities also struggle with sending their children into predominantly rule-based education systems framed by Eurocentric values that do not recognize indigenous ceremony, art, prayer, and story as integral to holistic learning.[8] Collective memories and experiences create a multifaceted relationship between communities and the institutions that have repeatedly excluded or mistreated them. Many AI/AN individuals enter college with a sense of connectedness to family and community, incorporating

respect for history and knowledge passed down by ancestors. Recognizing that the aftermath of historical events and prevailing institutional cultures affect the educational pathways of current AI/AN college students is as important as providing academic support for them to succeed.[1,9]

A growing number of AI/AN persons are pursuing higher education with long-term goals of reducing health and socioeconomic disparities.[10,11] Despite trust issues, AI/AN students represent an ideal health workforce and a bridge for matching research resources traditionally held by academicians, such as access to funding mechanisms and mastery of research skills, with community interests. Addressing mistrust among invested students is a key step toward growing a cadre of professionals positioned to improve community health.[1,7,12]

Community-based participatory research (CBPR) is recognized as a means for employing research to reduce health disparities.[13] With a focus on local health priorities, CBPR draws on community strengths and academic resources, addressing widely documented AI/AN mistrust toward institutions.[7,14] Equitable community participation requires a larger pool

of AI/AN persons trained to play pivotal research and health professional roles in CBPR.[15,16]

LAUNCHING NATIVE HEALTH LEADERS

The Launching Native Health Leaders (LNHL) program aimed to enhance AI/AN appreciation for research by introducing students to CBPR principles through small-group discussions and exposure to professional health research settings. Student groups attended 9 conferences between 2006 and 2009. The meetings took place in major cities around the United States and in 2 international venues (Canada and New Zealand). Most conferences were sponsored by professional societies (e.g., Community Campus Partnerships for Health, the Intercultural Cancer Council), and focused on various areas of minority health disparities, such as CBPR, cancer control, and tribal health. We integrated program activities into existing research conferences, providing LNHL participants with (1) an orientation and presentation by elders, storytellers, or AI/AN researchers; (2) daily debriefings and reflection; and (3) a final gathering and evaluation prior to

Objectives. We assessed the impact of Launching Native Health Leaders (LNHL), a peer-mentoring and networking program that introduced American Indian/Alaska Native (AI/AN) undergraduates to health and research careers and concepts of community-based participatory research (CBPR).

Methods. We conducted 15 interviews and 1 focus group with students who had attended 1 or more LNHL meetings, which took place during 9 professional health research conferences in 2006 to 2009. We completed data collection in 2010, within 1 to 4 years of LNHL participant engagement in program activities.

Results. Participants described identity and cultural challenges they encountered in academic institutions and how their views shifted from perceiving research as an enterprise conducted by community outsiders who were not to be trusted toward an understanding of CBPR as contributing to AI/AN health.

Conclusions. LNHL provided a safe environment for AI/AN students to openly explore their place in the health and research arenas. Programs such as LNHL support AI/AN student development as leaders in building trust for academic–tribal partnerships. (*Am J Public Health.* 2013;103:2215–2219. doi:10.2105/AJPH.2013.301314)

departure. R. D. J. invited elders and storytellers to attend as informal mentors and recruited most AI/AN researchers on-site at the conferences. These individuals connected students with community and culture in professional settings. A subset of students returned for a second or third conference, contingent on submitting an abstract or scholarship application or engaging in leadership activities such as facilitating LNHL debriefing discussions.

In the LNHL debriefing sessions, which lasted approximately 1 hour each evening, students discussed events and ideas encountered during the day. Through this flexible forum, students shared perspectives and expressed their excitement over minority health research presentations and experiences that reinforced their academic ambitions. They also shared disappointing observations, such as when conferences that focused on health disparities included minimal discussion of tribal issues. Emphasis on CBPR principles and AI/AN health research varied across host conferences. To ensure that students had a basic understanding of CBPR, LNHL staff provided orientation to these topics through discussion in the daily debriefings, often with reference to conference research presentations. This model allowed students to identify as a group of peers within the larger conference, providing space to explore career opportunities where they might otherwise have found themselves culturally marginalized.

PROGRAM PARTICIPANTS

The term AI/AN encompasses a rich diversity of students on reservations and in urban dwellings who self-identify as tribal descendants. Many LNHL participants were of mixed race or traced heritage to multiple tribes. LNHL operated as a growing social network where previous participants who transitioned to graduate school or left college for community service positions returned to support the program in mentorship roles. Of the 60 individuals who engaged in LNHL activities,[9] 49 were registered undergraduates at the time of participation in the program. Most undergraduates were from the Pacific Northwest and were pursuing degrees in a range of health fields, including medical assistant, premedical, nursing, nutrition, and health informatics. Several students were undecided on career goals or were majoring in

non–health science fields, such as Native American studies, visual communications, education, and business. Students were aged 18 years and older; some were grandparents, exemplifying the career arc of lifelong learners and first-generation college students.[17] Host conference venues ranged from intimate group discussions with health researchers and community mentors to meetings of more than 1000 attendees that focused on health disparities.

R. D. J. and student advisers, along with word-of-mouth snowball recruitment, identified LNHL program participants. Eligible students were enrolled in a university, tribal college, or community college and willing to talk about health or research careers and CBPR. We explored the complex relationship between AI/AN individuals and education and research institutions and how perspectives on research shifted as a result of LNHL experiences. We also assessed the effects of peer group structures in professional conference environments, where Western worldviews dominate, and how exposure to CBPR concepts might broaden views on the potential for research to serve AI/AN community interests.

METHODS

The tribal college provided assistance with recruitment and resources for students attending conferences with the LNHL program. Because of limited resources, we did not employ a CBPR approach. However, program participants provided input on guide questions and feedback on coding and theme results. We invited all 49 LNHL undergraduate participants by e-mail; 3 messages were returned undelivered. Follow-up calls garnered commitments from 23 participants: 15 interviewees and 8 focus group participants. Three focus group participants cancelled, resulting in a 41% response rate.

We completed data collection in 2010, within 1 to 4 years of LNHL participation. T. M. M. conducted approximately 30-minute interviews in English, with a written guide. Questions explored experiences during and beyond the LNHL program: "As you move forward, how have you thought about these two aspects of your life—community and research?" and "Have there been downsides to your participation in LNHL?" Interviews aimed for in-depth, personal discussions; the focus

group allowed us to capture dynamics of storytelling and explore common ideas in response to such questions as "How has being part of LNHL affected your family or community?" An independent outside consultant facilitated the group discussion.

Except for 3 pilot interviews, which we did not include in the study data, we audiorecorded and transcribed the discussions. Because respondents had participated in LNHL and were supportive of it, we bracketed personal perspectives to identify and define deeper meanings that evolved from iterative rounds of readings. We analyzed transcripts with self-awareness and cross-examination of predispositions to the program and assumptions about the data.

We conducted a form of thematic networks analysis,[18] in which we each independently coded all transcripts by hand and used inductive reasoning to identify patterns and categories. We then collectively confirmed themes around students' views of higher education and perceptions of research. We used group consensus to reduce the potential for influence from a single interpretation and to develop a more robust judgment of concepts evolving from the data. Although not an initial focus of the study, mistrust of research and institutions emerged unprompted as an important theme.

RESULTS

Thematic analysis identified 2 themes related to research mistrust that reflected individual and community experiences and tensions with participating in higher education and research. These were the push–pull of higher education and LNHL's role in changing perspectives on research. Codes and organizing ideas illustrating each of these themes are shown in the boxes on the next page.

The Push–Pull of Higher Education

LNHL participants revealed complex perspectives regarding the benefits of education and the promise of research against a backdrop of historical mistrust for institutions. One interviewee shared skepticism about the assumption that research equates to understanding community problems: "When I go listen to things like these presentations, the people that are saying things about our

Codes and Organizing Ideas Illustrating Push–Pull of Higher Education for American Indian/Alaska Native Students: Launching Native Health Leaders, 2006–2009

Code	Organizing Ideas
Return	Interest in returning to community
	Use of education to give back–make positive change
	Social responsibility to family–community
Career or academic goals	Exposure to new career options
	Expansion of goals for education or career
Focus	Refinement of personal goals
	Focus of career goals
	Incentive and motivation
Action	Action taken for positive health or education change because of LNHL exposure
Ripple effect	Experience shared with family or friends
Reduce isolation	Recognition that others share educational journey, interest in returning to community

Note. LNHL = Launching Native Health Leaders.

people . . . I've always been wary of taking what they say as fact." Many respondents saw being at the academic table as an opportunity to ensure more accurate indigenous representation in research, yet described challenges with support for their education and with balancing roles in the community and on campus. Several interviewees described both internal and community-driven pressure to earn degrees in contemporary careers focused on helping their communities:

> I felt like I wasn't equipped with any sort of training or knowledge to get where I wanted to be. I wanted to be on a track to help my Native American people.

> I feel, with education, there's so much power and potential . . . to help people.

> Most people where I live, and especially my dad, are very supportive of people getting their education and going out and helping.

At the same time, they experienced a pull away from the same institutions that have yet

to adequately address mistrust. For instance, students contended with social circles that viewed their university association with trepidation. As one interviewee explained,

> I think [my family was] proud that I was pursuing being a leader and stepping out on my own. But I think it was also kind of scary because they have experienced hurt . . . toward the Native Americans. So I think they feared that I would also experience that.

Mistrust of institutions can distance students from critical social networks when their educational achievement is devalued or their dedication to community is questioned because of their association with institutional environments. Such challenges contribute to barriers such as inadequate academic preparation and financial hardship, which result in low AI/AN enrollment in and completion of degree programs.[10,19] For students coming from places where higher education is uncommon, simply spending time away from home can lead to tensions. Yet LNHL participants persevered in their training goals despite feeling out of place on campus and encountering suspicion or even jealousy in their social circles, as 2 focus group participants illustrated:

> I went home every other weekend, almost 400 miles away. So, my grades suffered. . . . Being a first-generation college student, my parents didn't know what I was going through. . . . [I]n the end, I'm a stronger person because I didn't let those things bring me down.

> When I went home . . . they knew I graduated, but nobody said "Congratulations." I had to approach my mom and say "I got my bachelor's." The look in her eyes was like, "You think you're better than us?" I had to reiterate to her that I did this for me. . . . "It's not to come home and put it in your face. You should be proud that I accomplished something." And that was my struggle when I'd been away for so long.

Such interactions can also mobilize students who view education as imposing a responsibility on them to return with skills, degrees, and knowledge to help their community address health problems. Two focus group participants expressed this idea:

> I want to go home and be humbled by this experience, through education; get back to my people and not hold regrets on them telling me that I am just a little White girl now that I'm off the reservation. I'm still who I was when I left.

> The only way that I can make sure the next generation appreciates where they're going and what they're doing is accepting that everybody is *not* going to be happy. . . . I still struggle today

Codes and Organizing Ideas Illustrating Changing Perspectives on Research for American Indian/Alaska Native Students: Launching Native Health Leaders, 2006–2009

Code	Organizing Ideas
Multidisciplinary	Perspective–experience from nonhealth disciplines participating in LNHL
Isolation	Feeling of marginalization at conference
Voice	Recognition of need for AI/AN presence at conferences or larger health agenda
Views shift	Shift of perspectives on research or institutions
Common ground	Comfort zone with other LNHL participants
	Shared histories, different pathways
	Commonalities in experiences, culture

Note. AI/AN = American Indian/Alaska Native; LNHL = Launching Native Health Leaders.

because, when we go home, they're like "You think you're better than us because you're off the reservation." And I think it's *not* that we're off the reservation. It's that we have responsibilities. And that we care. And that we want to make a difference [emphasis in original].

AI/AN students can be perceived as betraying their heritage or community because of their association with higher education institutions, a circumstance fueled by untrustworthy institutional practices aimed at assimilating indigenous people.[20,21] Compounding the challenges of community ambivalence regarding academic achievements are course curricula, fellow students, and faculty that misrepresent cultural values, the sociopolitical dimensions of AI/AN communities, and their history with education and research.[8,9] To join the ranks of health and research professionals, students must integrate contemporary and traditional knowledge bases while functioning within dominant mainstream institutional cultures.[21,22] As the Aboriginal scholar Fredericks explained,

> My survival within the higher education system and the research academy depends on my knowing how the Western academy is structured and operates. . . . It is also about knowing your discipline inside and out, how it came to be, how it is used, and then turning it upside down so you can see how it relates back to Indigenous peoples.[23(p115)]

Changing Perspectives on Research

Although several programs designed to engage and promote AI/AN participation in health and research careers have experienced some success,[15,24] most are confined by broader Western ideals and values.[20] This predisposition was illustrated by a conference motivational speaker who chose Christopher Columbus as a metaphor to inspire underrepresented students to consider health research fields. LNHL interviewees reported that this had the opposite of the intended effect:

> He was like, "I encourage you to be like that great traveler." And every single person in that room, their history, ancestors, had been impacted negatively by Columbus. And it's not just Natives, you know, African American. . . it's like, I am in the wrong place. I shouldn't be here.

Some LNHL participants voiced their concerns to the speaker:

> I was like, "That man pillaged villages, enslaved people that were all from these lands here . . . stealing, thieving, killing, murdering, raping." . . . It was so important that we were there. . . . "Yes,

we're on the road to discovery. . . . But, who are we going to hurt? Who are we going to walk on to get there?" . . . We had to question those researchers.

The LNHL debriefing sessions at the end of each day played an important role in defusing this and other emotionally charged experiences, allowing students to recognize the need for AI/AN presence and voice at research conferences and in health and research professions.

Exposure to CBPR concepts, combined with positive academic experiences, fosters student-centered learning. Many participants expressed a sense of urgency about connecting information gathering with provision of services or other forms of direct action with and for the community. One interviewee explained,

> What we do with that [research] information . . . I think is almost even just as important. . . . There's always been that type of thing where the government or researchers come in and they say, for instance, "How many of you have tried alcohol before the age of 12?" And if 10 out of 15 children say "Yes," then what are we doing to prevent that?

A focus group participant also expressed this idea:

> Coming together as students from different parts of the reservations and discussing and knowing that, okay, I go to school for a purpose. And you leave here with encouragement of making a difference when you go back to your community.

For some, the LNHL experience was the first time they had considered research in the context of potential benefit to AI/AN people. They connected easily with CBPR principles, such as developing strategies for community-driven research, as one interviewee said,

> It definitely opened my eyes to see the possibilities. Prior to [LNHL], I didn't see any relevance in research . . . it was kind of thought that you don't share information, when you've got people out there coming with questions, you don't embrace that. However, more and more, venturing out, going to [conferences], to college, and talking to some of our instructors . . . helped open my eyes to see that research does have benefits. Do I fully understand the entire process? No. But I have more openness—wanting to learn more about it, and being OK with asking questions and finding those answers now.

Although many students reported encountering mistrust of higher educational institutions in AI/AN circles, others credited family as an important source of encouragement. Students felt that they were part of a changing landscape for AI/AN representation in biomedical, behavioral, and other professional fields. One interviewee said,

Native people have always been involved in medicine and research, but it's finally getting to a point where we are starting to have our PhDs and our MD degrees, finally starting to be a larger number of students coming out of universities. A lot of Native people are coming from impoverished regions. . . . [I]t's starting to accelerate and multiply among their children and their children's children . . . to the point where we're starting to make a breakthrough into different fields of study.

DISCUSSION

LNHL provided a venue for discussions about mistrust of education and research institutions and its implications for AI/AN educational pathways. Students gained a positive perspective on research, rather than seeing it as an opportunistic enterprise controlled by outsiders with little relevance to AI/AN priorities. This shift was cultivated through their interactions with cultural leaders, research role models, and diverse peer groups, within professional conference settings. Students also recognized the dearth of professional representation in health and research fields. The program structure allowed students to withstand isolating encounters that might otherwise have discouraged career aspirations (e.g., "If I was a White man and said I wanted to be a dentist, they wouldn't be like, 'Well, are you going to help a dentist? . . . [M]e being native, they look at me and they're like, 'What do you do as an assistant to a dentist?' It was just really demeaning," in the words of an interviewee) by providing space where they could regroup with, as another interviewee said, "people I don't have to explain myself to." The group experience gave students confidence to open up to new information, network with non-LNHL attendees, and contribute their ideas to public discourse.

Some participants felt the program helped them focus goals and pursue the next steps in a profession: "[I]t's [LNHL] really influenced me to not want to stop just at a bachelor's . . . so I'm starting their doctorate, the nurse practitioner program, this coming fall," said an interviewee. Other participants were inspired to consider these fields for the first time. Students who were planning to pursue research careers outside the health professions (e.g., social work, education) also related to CBPR as an interdisciplinary approach that could strengthen community action efforts to improve the well-being of AI/AN individuals, as one respondent explained,

[I]t's [LNHL] not just for researchers. It's going to open a lot of other mental doors for you, if you're willing to be that receptacle. You might not want to go into research yourself . . . for whatever field you're going into, there has to be some kind of research done.

Limitations

We were unable to determine the degree to which LNHL contributed to long-term academic success or career outcomes because students were exposed to multiple support programs, family encouragement, and other forms of guidance.

We relied on testimony of participants who had relationships with R. D. J. through LNHL and were generally supportive of the program, subjecting results to participant self-selection and recall biases. Interpretation of findings might also have been different had we been able to include the perspectives of individuals who declined to participate in the study or had the sample size been larger.

Conclusions

Community mistrust of institutions and ambivalence toward higher education influence the college experience of AI/AN students. Through critical dialogue and exposure to CBPR concepts within professional conference settings, students gained new perspectives on research as a means for taking action to reduce health problems. The group mentorship structure decreased feelings of cultural isolation and supported AI/AN student engagement in professional meetings.

Capacity building for equitable partnerships must encompass more than nurturing AI/AN success along academic pathways. Our findings show that students can play an important role in navigating divergent cultures to build trust and create common goals for academic–AI/AN partnerships.

Our data suggest that student perspectives are crucial for understanding the depth to which historical trauma has affected indigenous representation in higher education institutions and research. Emerging indigenous leaders who have chosen to combine their education with community action are critically positioned to address mistrust, and academic institutions, funding agencies, and professional societies should support culturally grounded peer network and mentorship programs that engage students in CBPR and create a foundation for college retention and recruitment into health and research careers.

Perhaps the most important lesson is that defining AI/AN career success requires student guidance on the ways they view higher education as a step toward taking ownership of research and maximizing partnerships to reduce health disparities. ∎

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