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Historical Wisdom: Data Analysis and Reimagining in Anti-Oppressive Research Methodologies

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Introduction

When the team—a collective of anthropologists, Native American community members, physicians, and health professionals—first began the Chihuum Piiuywmk Inach/A Gathering of Good Minds project, community members shared concerns over working with researchers because "they never get to see what happens with their interviews," and "researchers just come and take and never give back." This all-too-common experience of community interaction with researchers marks participants' knowledge that "they have been researched to death" and left without findings.[1] A basic premise of community-engaged research in health research is the importance of involving communities as equal partners during all phases of a project; that dissemination of findings to the community is integral to the plan; and that research is meaningful and robust for the communities it is meant to serve.[2,3,4] While there have been great strides, community-engaged research practitioners continue to grapple with the question of what "involvement at all phases of the project" means. Is it a consultation? Participant

The Chihuum Piiuywmk Inach/A Gathering of Good Minds project is a collective of members of Native American nations, health-care professionals, and leaders affiliated with Riverside–San Bernardino County Indian Health and researchers affiliated with the University of California, Irvine and Riverside campuses. The project team has collaborated on several projects that range from building trusting research relationships to historical trauma, from COVID-19 to the intersections of place-making, art, and mental wellness.

recruitment through a community-based organization? A presentation to the community once the research is done?

Thinking with the Chihuum Piiuywmk Inach/A Gathering of Good Minds project and the development of a historical trauma curriculum, we consider the role of the data analysis phase in the community-engaged research process. This paper describes the project and the process of building a practice of equal partnership by following standard community-engaged research guidelines. The effort to build health equity into the project raised questions about using anti-oppressive methodologies, including focusing on community and individual strengths, making explicit political practices in creating knowledge, and investigating academic researchers' processes.[5] These characteristics of anti-oppressive methodologies are aligned with indigenist methodologies,[6] which emphasize Indigenous epistemologies and the creation of a relational space wherein the ways of knowing for all members of the collective are heard and respected, enhancing the project's contributions to knowledge. In the act of implementing anti-oppressive research methods, with a specific focus on the analysis phase of research, we learned how to create pathways to address power dynamics in knowledge-production that are a byproduct of colonization and epistemicide. By questioning the community-engaged research process, our paper contributes to the growing conversation of intersecting literature that calls for the decentering of colonial and institutional systems of oppression in research.

Decentering colonial and institutional systems of oppression in research is a decolonizing process. What a decolonizing research methodology means is often grounded in Linda Tuhiwai Smith's transformative book, *Decolonizing Methodologies*.[7] Tuhiwai Smith argues that research and its institutions are organized around specific power relations that determine whose research counts and who and how the other is examined and represented.[8] Similarly, through the language of "epistemicide," Boaventura de Sousa Santos identifies the institutional processes where these power relations determine how we know and produce knowledge through Eurocentric and colonial systems of education, language, commodification, displacement, genocide, destruction of records, research, and institutional knowledge.[9] Within the context of colonized research and epistemicide, the analysis process was a key area the Chihuum Piiuywmk Inach/A Gathering of Good Minds project identified as in critical need of reimagining.

Tuhiwai Smith models how a decolonial methodology can be implemented, a methodology that centers Indigenous epistemological traditions. As she notes, "We have a different epistemological tradition [that] frames the way we see the world, the way we organize ourselves in it, the questions we ask and the solutions we seek".[10] Following Tuhiwai Smith, scholars and community researchers are increasingly centering community knowledge and experience by working with anti-oppressive research[11] and indigenist community-based research.[12, 13] These methodologies embrace critical claims of social justice as their epistemological and ontological ways of knowing.[14,15] For example, Walters et al.'s[16] review of five community-based intervention studies points out that integrating Indigenous epistemologies into research activities without strategically adapting how researchers practice making relationships with community members will lead to a continuation of inequity and domination of Indigenous

knowledge. A key practice for Walters et al.[17] in indigenist community-based research is to create a relational space of community practice. In this space, relationality fosters an emphasis on an existence that is always in relation to one another, connecting everyone to a fundamental accountability to each other.[18] Within this framework, decolonizing research means changing the practices of knowledge-production and the institutions that support epistemic violence.

While this project builds on the need to decolonize research methodologies, we are particularly attentive to the ways in which we have yet to decolonize the process. This project also takes to heart Tuck and Yang's[19] concern that calls for "decolonizing methods" have shifted the active work of decolonization from "the repatriation of Indigenous land and life"[20] to a metaphor for other social justice transformations that must also take place in institutions. Their concerns must be considered in naming the work we do. We argue that this work has implications for changing research institutions' practices that could lead to decolonization. The work described in this paper is anti-oppressive. Using anti-oppressive methodologies seeks to create a more relational and accountable space that addresses power inequities and centers the strengths of the partnership, not the framing of Indigenous people as being at-risk. It is an acknowledgment that this project is inspired by decolonization, and yet it may be more akin to Tuck and Yang's "settler harm reduction . . . a resuscitation of practices and intellectual life outside of settler ontologies".[21] In moving through community-engaged research as a framing for anti-oppressive research and indigenist community-based research, we are addressing the sticking points, such as the analysis phase, where colonizing institutional processes continue to hold. The Chihuum Piiuywmk Inach/A Gathering of Good Minds project created the opportunity to collectively consider how to reimagine research from a project of epistemicide to a process that fosters Indigenous epistemologies and "intellectual life outside of settler ontologies."[22]

The growth of community-engaged research has been an effort to diversify the impact of scientific research and then to bring community organizations and individuals into every aspect of a research project. However, the analysis phase is a stronghold. Institutional processes create barriers and systematic exclusion of community members in research, which is intimately linked to the colonization of knowledge and epistemicide through the claims of specialized training and expertise, constraints in time and location of research, and adoption of Eurocentric language to claim rights to the production of knowledge.[23] As noted earlier, approaches to community-engaged research range in levels with increasing shifts of power from institutions to community; levels of community participation move from outreach and consultation to collaboration and shared leadership with each stage of engagement.[24, 25] While community-engaged research is increasingly training community partners in the conduct of research—research design, participant recruitment, and data collection, and even how to collaborate on the dissemination of research—the analysis of data continues to be an area of avoidance. This avoidance results in what Arnstein[26] calls consultation forms of community-engaged research as "tokenism," and what Walters[27] would recognize as a practice that does not include Indigenous epistemologies and thus will not create research that is in line with community sovereignty and values. Justifications for not

including community researchers include the complexities of statistical analysis and the time it takes to conduct qualitative analyses.[28] Time and expertise as justifications for exclusion indicate that academic researchers are not considering community engagement as a long-term collaboration or a matter of equity. What "expertise" means in knowledge-production is also linked to histories of epistemicide. Reimagining how community partners become integral to the analysis phase of research moves us beyond "tokenism" and into relational epistemic justice. It is the next critical step for community-engaged research and, indeed, for all research activities.

Through recounting the plans, missteps, pauses, and revisions to the Chihuum Piiuywmk Inach/A Gathering of Good Minds project plan as they happened, we focus on the analysis phase to highlight institutional and training challenges to researchers' analytical assumptions about data, time, and how we come to know. Throughout the Chihuum Piiuywmk Inach/A Gathering of Good Minds project, we regularly assessed the inclusion of multiple voices, the centering Indigenous epistemologies, and our alignment with anti-oppressive practices. For this project, the analysis phase is the opportunity for increased intentional relationality and claiming space (e.g., words, time, location) for relational practices. The analysis phase is a moment for investigating whether research practices mirror colonizing forms of power or building equitable relationships and relational spaces. It is also a call to action, a call to reimagine how all phases of research can foster care, respect, and life.

Context

The research partnership

Chihuum Piiuywmk Inach is Serrano for "A Gathering of Good Minds"—a name gifted to the project by Serrano elder Ernest Siva.[29, 30] The project is designed to build trusting research partnerships and is a collaboration with the community and leadership affiliated with Riverside-San Bernardino County Indian Health, Inc. Established in 1968, this firm is the largest Indian health-care system in California and is a consortium of nine of twelve federally recognized tribes in the geographical area that Riverside and San Bernardino counties occupy. The executive board of the firm has representatives from each tribal nation in the consortium. The Chihuum Piiuywmk Inach/A Gathering of Good Minds project sought to connect with the broad outreach of the firm and support their mission to provide culturally sensitive health care, respect the traditional customs of Native American communities, and promote wellness and early intervention to achieve healthy lifestyles.

As part of the Chihuum Piiuywmk Inach/A Gathering of Good Minds equal partnership, the project leaders comprised academic researchers, community members, and executive board members, physicians, and therapists of Riverside-San Bernardino County Indian Health (Shumway, Salgado, Vann Thornton, Hughes, Andrews, Rodriguez, and McMullin) who collectively designed and developed the project. The project leaders began by organizing a steering committee, which included representation from community members who had a shared interest in health equity and some knowledge of historical trauma, executive board members of the firm, resource leaders,

health-care providers (physicians, nurses), and faculty members and students from the University of California, Riverside[31]. The project leaders met weekly for over a two-year period. The steering committee met quarterly and communicated with the project leaders as needed. Project funding from the Patient-Centered Outcomes Research Institute was split sixty-forty with 60 percent going to the university. The 20 percent difference in the split is primarily due to the "indirect" costs charged by UC Riverside. All members of the steering committee, project leaders, and participants were compensated for their time and contributions to the project.

Working groups convened to gather data about local histories and understandings of historical trauma for adaptation into the historical trauma curriculum. To increase inclusivity and participation in the project, the steering committee suggested the involvement of all seven clinics in the Riverside-San Bernardino County Indian Health system. The clinics range in location from semi-urban to rural areas. Some clinics are located on reservations, such as Morongo and Torres Martinez. The San Manuel Indian Health Clinic is located in the semi-urban city of Grand Terrace. A total of six working groups were held at the clinics on Soboba, Morongo, and Torres Martinez, as well as the clinic in Barstow. The meeting for the clinics on Pechanga and Anza were combined. We also held a working group for physicians, nurses, and affiliated health professionals of Riverside-San Bernardino County Indian Health.

Why historical trauma?

Before the Chihuum Piiuywmk Inach/A Gathering of Good Minds organized the working groups, we hosted a series of meetings—a twelve-month series of modified talking circles in which academic and community members explored their knowledge and experiences with various chronic illnesses and barriers to health care. The series began with a historical trauma presentation from Anthony Pico, a former tribal chairman for the Viejas tribe, who holds an honorary PhD in California Indian education.[32] Pico shared his experience, addressing points in his life when the effects of historical trauma were most clear.[33,34] His insights were framed within the work of Brave Heart et al.'s (2003) study on historical trauma.[35] Indigenous historical trauma emphasizes the violence of colonization as collective trauma, ancestral adversity, and intergenerational transmission that compromises the well-being of descendent generations.[36] The focus on intergenerational trauma and transmission acknowledges that the unresolved grief from the traumas can be passed to descendants, resulting in numerous physical, spiritual, and mental health issues. Tribal nations in the occupying counties of Riverside and San Bernardino have experienced many of the collective traumas—abuses, massacres, compulsory assimilation at boarding schools, removal from ancestral lands, and forced relocation to reservations.[37]

After Pico's presentation, attendees at subsequent meetings mentioned how they considered the effects of historical trauma in their own lives. They shared memories of how they prepared healthy foods with their elders with foods that included commodity foods distributed by the government, vegetables grown in home gardens, and food shared from within the community. People shared memories of relatives who

had passed away from heart disease and diabetes. They recognized how often they were confronted with substance use and suicide among their youth. Historical trauma was a recurring topic because, as retired nurse and community partner Luella Vann Thornton said, "Historical trauma is not just a one-time event. It is chronic." The work of systemic oppression—which often takes the form of the US government's refusal to honor treaty obligations, the continued taking and destruction of land, recent legal threats to the Indian Child Welfare Act, the continued erasure of data on the high rates of missing and murdered Indigenous women and children, and a host of micro- and macroaggressions against Native people—makes historical trauma a chronic issue. It makes it an issue that physicians should understand. With the repeated value of our conversation around historical trauma and patient health, Kendall Shumway suggested creating a historical trauma curriculum for health-care providers.

The experiences in developing the historical trauma curriculum contributed to methodological discussions on grounding the collaboration in a relational process and responding to epistemological questions of how one comes to know and create knowledge within the project. The challenge to the academic researchers was to enact anti-oppressive analyses and center Indigenous knowledge while using academically derived systemic analysis methods involving data reduction for knowledge production. This tension reinforced questions about creating relational spaces in knowledge production, questions of data and time, and an opportunity to indigenize the analytical process.

Plan for implementing the project

The project implementation plan used a modified version of Analysis, Design, Development, Implementation, and Evaluation (ADDIE), a model developed in "Intelligent Frameworks for Instructional Design".[38] The ADDIE model focuses not on teaching others about a topic—in our case, the intersections among health, history, and patient-centered care—but on learning together about the topic. Learning in this model is based on developing objectives formed from intensive communication with learners and educators through a collaborative process.[39] The modified ADDIE model emphasized community engagement with collaboration among patients, providers, and researchers. The primary theoretical positioning for the ADDIE adaptation was Brazilian educator Paulo Freire's pedagogical transformations.[40] His work with disenfranchised communities shifted community engagement toward "read(ing) the world" to develop a consciousness that led to intensive discourse, collaborative problem-solving, and social justice. Freire's framing and Kovach's [41] approaches to anti-oppressive research changed what we viewed as possible with community-engaged research, fostering a centering of Indigenous epistemologies.

Analyzing the data

From October 2018 through March 2019, six working group sessions were conducted. All working group conversations were digitally recorded. Subjects queried included the meaning of historical trauma and participants' thoughts about food access,

language, boarding schools, and missionization. The analysis plan for the working groups included rapid-content analytic techniques for the transcripts[42] to develop the themes. Academic researchers were originally assigned this task. In this rapid analysis approach,[43,44] a summary template (Table 1) that includes key topic (domain) names corresponding with each working group is used to analyze data. The summary template is then used to synthesize key findings from each working group. From this domain analysis, we would create a matrix with topics in the columns and the location of the working group in the rows, (Table 2). This process facilitates identifying patterns across the working groups. As a postanalysis consultation, we planned to ask the steering committee members and consultants (Native American researchers at other universities) to review the matrix and assess the integrity of the analysis and

Table 1
Historical Wisdom Analysis Team Matrix

Basic descriptors of working group	
Working Group	#
Type	Patient or Provider Working Group
Location	Clinic or Tribal Hall
Total number and gender breakdown	
Facilitators	
Note-taker	
Topic	**Types of notes**
Meaning/Description of HT	Ideas, definition, perception of the term
Perception of how HT affects the health of people in the area	
Boarding Schools	Discussion points around their experience/relationship with BS
The mission system	Role of religion, issues that connect with their health
Food	The role of food and the relationship with health, including commodity foods
ACES	Thoughts, questions, connection with providers
Other topics around HT	how is healing different from biomedicine
What needs to be known	
What patients think providers should know	
What providers say they want to know	
Comments around the health services in RSBCIHI	
Analytic thoughts	
Notes	Themes/analytic thoughts/quotes to illustrate a theme
Important quotes	

Table 2
Historical Wisdom Analysis Team Matrix Diagram

Working Group	Meaning of Historical Trauma	Historical Trauma and Health	Boarding Schools, Mission Systems, Commodity Foods and ACES	What needs to be known—patients think providers should know and providers would like to know
#1 Name of location where conversation took place	•	•	•	•
#2 Name of location where conversation took place	•	•	•	•
#3	•	•	•	•
#4	•	•	•	•
#5	•	•	•	•
#6	•	•	•	•
Combined Themes Across Groups	•	•	•	•

Next Steps and Themes:

1) Here we will include the themes that need to be included in the first draft of the curriculum, topics that need to be discussed
2) Other important observations that need to be taken into consideration

interpretation.[45] Findings from this analysis would then guide the development of the historical trauma curriculum.

Our radical departure from the plan occurred when a participant asked what would happen with the digital recordings from the working groups. With this question and the project team's growing interest in anti-oppressive methodologies, we realized that the steering committee and project leaders needed to analyze the data as a group. If we used a postanalysis community review, we would lose an opportunity for change. This decision was pivotal in reimagining a relational space with each other and the data. As a result, we could develop a shared consciousness about how we were building research relationships and could collectively contribute to understanding historical trauma.

Collaboration in the analysis

The project leaders asked the steering committee if they would like to participate in the data analysis phase. Their participation as members of the team analyzing the data could have the following impacts: 1) ensure cultural and contextual awareness of the working groups' conversations; 2) confirm data reduction and categorical organization would appropriately reflect what was said; 3) increase their understanding of how researchers approach qualitative data; and 4) equally partner in all phases of the research. Now and in the future, members of the steering committee could contribute their research experience and engage in conversations about how research can be methodologically and analytically in line with indigenist knowledge. Through this collaboration, community members would also have the capacity and skills to engage in the analytical work for themselves. In turn, the community could hire academic researchers as consultants. This was an anti-oppressive framework in which power

relationships could be shifted. Five of the eight steering committee members agreed to join the analysis team. For the academic researchers, this relational collaboration meant that we needed to continually and intentionally equalize the power relationships in areas where scientific epistemologies held control.

"Don't put us into boxes," version one: Preparation and institutional processes

The first challenge (and institutional process) was the mandatory human subjects training. From our previous project, we learned that the jargon, length of time that the testing takes, and relevance of examples in training did not resonate with members of the research partners. The institutionalization of federal and university protocols and not having a Native or tribal institutional review board meant that we would face the same jargon-filled, structurally problematic training. Before we could collectively analyze the working group recordings with the analysis team, each member had to complete the social and behavioral ethics training provided by the Research, Ethics, and Compliance Training (CITI) Program.[46] The core project leaders provided basic information about the role of the institutional review board in protecting human subjects without the nonrelational jargon of "human subjects." Even with our explanation, the need for compliance training was another legalistic imposition and a form of exclusion to knowledge creation. Human subjects training is simultaneously a part of colonizing knowledge systems while simultaneously attempting to protect research participants. This paternalistic framing turned the process of building relationships into a severing of collaboration.

As the steering committee discussed the challenges to completing the CITI ethics training, it became evident that the jargon of protection and ethics did not resonate with all team members. Why was this institutional form of training needed? The question needed to be reframed to consider how completing this federal requirement was part of how we could build relationships. Drawing on Indigenous ways of knowing related to the ethics requirement[47] and that the root meaning of data is "to give," we began to describe the need for the training as honoring the gift, the words, and stories that people shared with us. The stories people give are part of our relationships, an act of trust that we will not abuse, gossip about, or otherwise harm. Therefore, the training needed to be a collective, relational experience.

Taking an exam to ensure we honored the power of what was given, sacred words, and the relationships we were building did not correspond equally. It was, however, a bridge for researchers to understand the expectations of institutional research within an anti-oppressive methodology. It is interesting to note that when new members requested to join the analysis team, current members interviewed them, ensuring they had taken the CITI training as an acknowledgment of what we were required to do to support the relationships and knowledge they were about to hear. We acquiesced to the institutional requirements in many ways by using the "masters' tools." However, the meaning of the certification was fundamentally transformed, not as a form of exclusion but relationally—to respect and honor the knowledge given to us.

A second institutional process we had to think through was the representational impact of qualitative analysis methods. From the start of the project, the steering committee regularly reminded us that all things were connected and that we should not separate events that lead to historical trauma, like transformations in access to food (removal from ancestral gathering and hunting lands; commodity foods), boarding schools (removal of children from families, cultural and physical attempts at genocide), or missionization and many other acts of settler colonialism. As we listened to recordings from working group sessions, we connected individual expressions of grief for knowledge about medicines, gathering, and recipes to more significant institutional concerns about the privatization of land to what is and is not available from Indian Health Services. Parallel to understanding that everything is connected, community members consistently said, "Don't put us into boxes." To put what was being said into small analytical boxes was displacing knowledge and disembodying experience, severing the relationships. And yet, from the academic researchers' perspective, if we were to avoid the "boxes," how would we analyze trends and make connections within and across groups? How would we decipher potential openings for collaborative learning? This was a moment when the group decided that it was a necessary process to implement the matrix analysis. This process allowed us to put what we heard into categories to have data that matched institutional research, but that also allowed the university researchers to think more deeply about the relationships between all that we heard, experienced, and would continue to experience.

Analyzing data as a group

Once the Research, Ethics, and Compliance Training was completed, we scheduled weekly meetings. The intention was to complete the analysis phase in a single month. However, it was quickly apparent that flexibility and careful listening were essential to completing the analysis. What we imagined would take one month took four months. Rather than feeling perpetually "behind," an anti-oppressive approach allows processes to unfold in their own time. This more equitable process ensured that everyone could fully participate in the analysis. With the increase in time, it was necessary to be aware of how much time the analysis team members took out of their days to participate in the working group analysis and to share their knowledge and experiences with us. As the analysis team sat together to listen to the words and the voices on the recordings, the moment was powerful and an exercise of power.

The first meeting began by reviewing the plan to analyze the working group audio recordings. One week before the analysis team meeting, members would be provided access to one working group audio recording plus a summary template (Table 1). Throughout the week, each analysis team member was expected to listen to the approximately sixty- to ninety-minute audio recording, then fill in the template with notes of what they heard. An all-hands meeting would follow, with each member sharing what they heard and helping to create the larger matrix (Table 2). Having concluded this training, we believed we were set to begin the analysis.

Only two of ten analysis team members had listened to one complete working group recording on the meeting day. Obligations to family and jobs, personal emergencies, and technological challenges were all among the reasons that the team could not complete the task. Even though most of us had not listened to the recordings, we attempted to have a conversation. Team members who had listened to parts of the recording mentioned interesting quotes. Hearing these quotes prompted comments from other team members. Even members of the analysis team who had not listened to the recording were so intrigued by the conversation that many were reminded of their own experiences and knowledge. Collectively listening, hearing, and connecting was a deeply profound experience. It was also challenging. As humans, we are constantly engaged in interpreting the meaning of things. Ann Cheney, who was facilitating the analysis team discussions, created space to discuss the differences between noting what was heard versus interpretations––what we thought was meant in the quote—and to afford more flexibility with the schedule. The sense of urgency to complete the analysis in two weeks and place words into boxes is a characteristic of colonizing knowledge. To hear people share their stories, and not make connections, and to do this task quickly is epistemicide––a severing of the ties to one's knowledge-making and experience.

With this new information, the team planned weekly three-hour meetings over ten weeks. The team would listen to the recording together, take notes, and then go around the room and share what each had heard. The meetings were named "listening sessions." The quotes related to the categories identified by the group were typed into the template and projected onto a large screen so that everyone in the room could see what was being entered. Ample time was provided to discuss interpretations and share personal stories that were recalled by hearing the working group participants' words. One-half to two-thirds of a recording could be reviewed within one three-hour listening session.

This was the practice for a few weeks. By the fifth meeting, while Juliet McMullin was out of town, Cheney continued to lead the listening sessions. When Cheney asked the analysis team if they had taken notes, one analysis team member—then a graduate student, now Sean Milanovich, PhD—raised the question of taking notes. He reasoned that the stories we were listening to were sacred, as we had agreed when we discussed taking the CITI training. Taking notes disrupted that sacredness and reduced the history, emotions, and relationships of what had been shared to symbols on a page, placed into a box. When the project manager, Rodriguez, shared the conversation, McMullin wondered, "Can we get this done?" which led to a concern about what "done" means—and done for whom? Was the preoccupation of analysis being done and finished disrupting the anti-oppressive relationships that were being built? Was it another form of epistemicide? While all the analysis team members wanted to be a part of what was being created, what each team member wanted from the experience differed. For some, being part of the collaboration meant participating and ensuring that what was being said was not misinterpreted. For others, it meant they had the skills to collect and analyze data themselves.

Moreover, others wanted to listen and connect to the stories of their community. For the academics, it meant that the analysis was completed as described in the proposal. For the group, it meant ensuring that the topics were respectfully discussed

in the historical trauma curriculum. To honor the multiple expectations of the analysis team, McMullin shared her thinking: If people wanted to be able to do this kind of work in the future for themselves, then they should take notes on what they heard, building an understanding of what academics do and enhancing the ongoing relationship, broader connections, and understanding of patterns in what we hear and do. Alternatively, if people wanted to focus on listening and contributing to the conversation, connecting it to their own and other experiences that they have encountered, then they need not take notes. There is no singular process for analyzing data; both ways are complementary. At the end of the conversation, everyone nodded in agreement with the plan. No one was asked to say which option they chose. It was not necessary. Everyone who was there wanted to be there, to listen to what had been shared, and, in their way, contribute to how the stories were shared more broadly.

After the analysis team completed the first set of listening sessions, we combined the templates. Next, the team would put the template for each theme and group into a matrix to look at patterns within the data (Table 2). This process would enable us to assess what was similar across working groups, what statements could be combined, what was said in all six of the working groups, and what was said only once but likely of critical importance and that should not be left out. It was another step in the analysis, which meant it was time to put information into an additional set of boxes.

"Don't put us into boxes," version two: Relational spaces

Explaining the matrix segment required an acknowledgment of the collective and individual expectations for this work and the relationships we were building. While remembering the admonition to not "put us into boxes," the way the knowledge was shared and the process of distilling that knowledge into words (as well as analyzing stories as a step toward developing the curriculum) suggested that boxes or templates should be used: academics are trained to see patterns and make connections through this process. Group members were moving back and forth between the two conflicting priorities. Through this process, we promised the analysis team that we would not leave the knowledge as decontextualized information in boxes—a promise which was accepted by the team. Through the analysis phase, academic researchers used their methods (listening and categorizing) to take the pieces apart in the matrices, with the hopes of finding our way back to the wisdom that connections and practice reveal.

Our analysis team's conversations were relational spaces where we talked about what we heard. An example of how we were making connections through experience and training is in repeated working group conversations about intergenerational knowledge and how wisdom is passed down within a community. This data/gift ranged from people not having recipes to not knowing how to gather food from local areas to the need for language reclamation and Indigenous ways of knowing. Seeing these recurring statements across all of the working group sessions created space to have a deeper understanding of what missing intergenerational knowledge meant. Drawing connections required an understanding that missing intergenerational knowledge was directly connected to genocide through disease and military force, the removal of children into

boarding schools, and the relocation of Native Americans from their ancestral lands to reservations or urban areas. Other forms of cultural knowledge were deemed illegal, such as speaking in their language. The consequence of death, physical removal from land, and illegality of performing cultural knowledge led some people to avoid sharing such knowledge with their children. At that moment, the knowledge was characterized as absent. A more relational interpretation, however, was that "absent" must be placed within a historical context. Sean Milanovich and Jackie Wisespirit pointed out that their elders may not have had the knowledge to pass down or were concerned about the consequences of their children having such knowledge. Both situations are consequences of structural violence that lead to historical trauma. Working through the data in the matrix box to ensure that we had all of the information about its meaning allowed us to see and move toward relational knowledge about history, elders, and context. The listening group conversations supported the movement of data out of boxes and into a collective consciousness of historical trauma and wisdom.

The final movement toward wisdom for the group took two forms. First, the analysis team and steering committee wanted to ensure we did not end the conversation with the loss of cultural knowledge but that we emphasized strengths, Indigenous knowledge, and land and language reclamation work that has and continues to be done. Second, we wanted to ensure that physicians working with Native Americans knew the complexities of this history and how questions about intergenerational and cultural knowledge may mean different things to each individual. Physicians need to know that the person sitting in front of them is much more than a patient with a physical problem to be solved. That person brings a long history and lived experience that is partly informed by a history of trauma and knowledge of strengths from their ancestors.

While the group had critical conversations such as the one described previously, we must also note that fewer team members attended the meetings as we moved into the matrix phase of the analysis. Multiple three-hour weekly meetings over six months is a significant amount of time. We also wondered if going over what we had heard and noted for a second time was asking too much. Perhaps if we had an anti-oppressive analysis plan at the beginning, it would not have taken as long and, what is more important, the whole team would have known what to expect. However, such a plan may also have cut short the rich conversations about multiple pathways to analyzing data.

Completing the matrix took another month, which included four meetings that lasted about ninety minutes. Using the collaboratively analyzed matrix, the academic researchers highlighted patterns and then shared the overarching themes with the analysis team and the steering committee for their comment. These themes guided the topics for the historical trauma curriculum and the podcasts.[48,49] The podcast production phase was a moment when several team members returned to participate regularly.

Discussion

The analysis is the phase where knowledge-production occurs. And yet, it is the most challenging phase to achieve an anti-oppressive practice because of institutional barriers, practices of epistemicide, and a paucity of discussion about the process,

implication, and practice of reimagining data analysis. The Chihuum Piiuywmk Inach/A Gathering of Good Minds project and the lessons learned demonstrate the challenges and opportunities that arise from intentional and critical reflection of the work. This reflection can ultimately transform how researchers engage in and enact epistemic justice. The Chihuum Piiuywmk Inach/A Gathering of Good Minds project pushed the team to acknowledge and find ways to work through barriers at the level of meaning and practice in research and the institutional and policy levels.

Obvious barriers to achieving anti-oppressive research include institutionalized skills, such as human subjects training, expectations acquired during higher education, and the amount of time required for the analysis. However, labeling anti-oppressive approaches as barriers relies on an assumption––they are only seen as barriers because they are embedded in dominant, structurally violent practices of who has the right to interpret and distribute knowledge, who is trained to navigate institutional requirements such as human subjects certification, and who has the privilege of time and resources to engage in such activities. Grounding this project in anti-oppressive and indigenist community-based research methodologies supports shifting emphasis to relational epistemologies and not on the impersonal legal and institutional requirements. This project demonstrated that institutional and colonial centered epistemological barriers can and must be reimagined. Issues of time, inclusion, and training must be changed to allow for careful listening and reflection, sharing learned expectations, and cultivating open opportunities for critical learning, reciprocity, collective engagement, and mutual accountability. Reimagining the CITI institutional review board ethics training as a process of honoring shared words and gifts and providing support and conversation about why and what was being asked made the research team accountable to the group. Working within an anti-oppressive research methodology supports acknowledging that knowledge formation is relational––not between data points but between people.

The refrain "Don't put us into boxes" critiques the colonial scientific process that reduces complexity into distinct ways of being as well as researchers' pervasive misrepresentation of Indigenous epistemologies. The project's contributions to the meaning and practice of research demonstrated one path toward inclusive indigenist ways of knowing, as Walters et al. (2020) described. The representation of boxes is antithetical to acknowledging relational spaces and paths to understand how we know what we know. Reframing the definition of "data" to imply its Latin root meaning "to give" shifted the academic researchers' thinking. The transformed meaning fostered a collective acknowledgment and respect for the relationships between knowledge-production and Indigenous ways of knowing. While it did not change the use of the summary templates and matrix, the movement from data as bits of information to produce publications and interventions became a relational process of intentional space for community knowledge, needs, and expectations. It was an acknowledgment of giving, the stories people shared with us, and our obligations to those sacred words. The analysis team meetings were bold spaces where listening to each other speak about what we were hearing was at the forefront, and the templates and matrix were supports to help the academics see connections. This process raises questions about requirements

for research funding. In the same way that funders require community-engagement plans, specifications for how community partners will be included in the analysis phase must also be required. It is necessary to mark both the anti-oppressive and epistemic justice practices, as well as the practices that do not create opportunities for inclusion.

Finally, the Chihuum Piiuywmk Inach/A Gathering of Good Minds project demonstrates how community-engaged research can continue contributing to health equity changes. These transformations could not have occurred without the project team's insistence that community researchers be included in the analysis phase. More than a capacity-building activity, it was a trust- and relationship-building practice. Given the long history of researchers never returning to the community upon which they performed research, along with other historical atrocities that researchers have enacted, there was no reason that any research partners should share with academics. Building the relationships over a few years and collaboratively developing the question for this project was essential to building trust. Community-engaged research projects can move beyond consultation and tokenism when they acknowledge their work and relationships beyond the single project and frame their research relationships in long-term efforts to reimagine health equity. Ensuring that the collaborations extended to analysis is the next step in building relationships, anti-oppressive methodologies, and epistemic justice.

Typically, returning the data means returning already analyzed data that is often pre-embedded with recommendations to the community. Relational spaces and capacity-building require a community to be involved at all levels of the project rather than receiving information at the end. When data is returned as an already-analyzed finished product by researchers, the interpretation is a colonization of knowledge and an act of epistemicide. What is more important, the knowledge may no longer be in the form the community uses for public health, policy, or other purposes supporting wisdom. This is not the case in all data-dissemination activities; however, it raises questions about prevailing epistemicide and colonizing processes of knowledge-production and how we value disseminating and implementing research findings. Does community-engaged research produce more relevant and robust findings when a community is excluded from the analysis? Our project team reimagined what it meant to know and to be clear about the relationships that are simultaneously dismantled and reformed to create knowledge about health equity, inclusion, and social justice.

Conclusion

Following the analysis of the working groups, the team developed the plan for the historical trauma curriculum. We developed episodes for a podcast, *Historical Wisdom*.[50] The analysis guided the topics we addressed and how the episodes were produced. We also chose the title *Historical Wisdom* to acknowledge all that we had learned, to lessen the individualizing effects of focusing on trauma, and to emphasize the strengths of Native American life and knowledge. Shifting the researcher's thinking about how to be accountable, respectful, and inclusive of a different way of approaching analysis requires anti-oppressive methodologies, wherein research and community

collaboration develop a shared relational knowledge about the project, centering Indigenous knowledge and epistemologies and everyday moments to acknowledge our obligations to each other and to the data.

In Tuck and Yang's "Decolonization Is Not a Metaphor," the authors work to remind readers that the purpose of decolonization is the "repatriation of Indigenous land and life." The argument being that anything other than repatriation of land and life is not decolonization and may be "incommensurable with the work of decolonization".[51] In sitting with this definition, we understand that the academic institutions in which we work are in every iteration part of the colonial project. Is it possible to decolonize these institutions and practices through changes in research practice? Perhaps not if we attend to Tuck and Yang. However, the work of anti-oppressive methodologies shifts our understanding and practice. It decolonizes the minds of the researchers and thus can work to resist and decenter the tools of colonialism. This project disrupts and decenters research by inserting Indigenous knowledge within the medical system that provides care and can do more in supporting Indigenous life.

This project is a call to action and an act of epistemic justice. There is a reason that analysis remains the last stronghold of knowledge creation. Enacting relational anti-oppressive forms of knowledge-building will require new institutional questions, recognition, and accountability. When authors of articles are community members, how is authorship understood? Do only single-authored articles count? When time is taken to transform the institutional review boards and to train in multiple forms of analysis and interpretation, how do we value and acknowledge the work of epistemic justice? Who has the power to set the rules of engagement? This project demonstrated that we can be more intentional and anti-oppressive in community-engaged research. Data analysis is precisely that phase of research that connects us to long-standing institutional, policy, and epistemological barriers to inclusion and, consequently, health equity. In order to develop knowledge that is life-affirming, academic institutions, funding agencies, researchers, and members of the community can and must dismantle institutional and epistemic barriers to data analysis.

Notes

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