

A. SPECIFIC AIMS

Chronic Illness (CI) is the leading cause of death for all Montanans and for many types of CIs, American Indians (AIs) in Montana die earlier than whites; for example, AIs die 14 years earlier for those with heart disease and nephritis, 12.5 years for those with diabetes, and 11 years for those with cerebrovascular disease(1). The Institute of Medicine report, *Living well with chronic illness*, defines CI as “a condition that is slow in progression, long in duration, and void of spontaneous resolution” that limits individuals’ “function, productivity, and quality of life”(2). CI management, also referred to as adherence to a therapeutic and prevention program, is a daily activity for those with CI, and non-adherence rates are high. Proper management of CI can lead to lower mortality rates and a higher quality of life. Overall, 50-80% of patients do not adhere to medication and lifestyle change recommendations(3). Prevalence, hospitalization, and mortality rate disparities between our target county and Montana as a whole indicate that management of CIs requires additional attention.

This study’s purpose is to improve capabilities for CI management among Apsáalooke (Crow) Indians in Montana through a community-based intervention. The study is based on methods and findings from a 19-year community-based participatory research (CBPR) partnership between members of the Apsáalooke Nation and faculty and students at Montana State University. Community members asked the partnership to develop an effective intervention for CI management. The development, implementation, and evaluation of a culturally centered intervention for improving CI management will assist other communities and tribal nations in their efforts to improve CI health disparities and has implications for management of acute conditions.

Using a CBPR approach, we completed qualitative interviews with 20 AI men and women on the Apsáalooke Reservation who had a CI diagnosis. After we developed a culturally consonant method for co-analyzing the data with our community advisory board, we analyzed the data and used the findings to develop a conceptual framework and intervention for understanding and improving CI management, something that had not existed for this population. Our intervention will be tested across multiple CIs, as our analysis findings matched other CI management interventions in that “people with chronic conditions have similar concerns and problems”(4-6). The intervention is titled *Baa nnilah*, which translates to advice or instructions for life that are received from others, often in a story form. The method for *Baa nnilah* is centered on Apsáalooke cultural strengths. The content of *Baa nnilah* is based on our conceptual framework of influencers of CI management gleaned from the interview data. The measured outcomes flow directly from the conceptual framework and intervention content. *Baa nnilah* is a group intervention comprised of 10 groups of 11 tribal members: a trained Mentor leader, who is considered a successful manager of his/her CI, and 10 mentees, who are not managing their illness well. Each 11-member group will meet 7 times covering content and using methods outlined in our intervention manual that include a mini-discussion (lecture), talking circle and skill-building activity. The mentees will be partnered into supportive pairs who will connect a minimum of once per week outside of group meetings. Topics include those found in both our interview data and existing evidence-based self-management programs (e.g., developing a positive relationship with a healthcare provider) and Apsáalooke-specific topics from our interview data (e.g., coping with historical and current grief and loss). Consistent with the stages of behavioral therapy research(7) and using a CBPR approach, we will pursue the following Specific Aims:

Aim 1: Refine and strengthen the community-based, culturally appropriate *Baa nnilah* intervention and study protocol.

Aim 2: Test the effects of the *Baa nnilah* intervention versus usual care using a wait-list control group effectiveness trial among 200 randomly assigned AI men and women 25 and older who have CI on the Apsáalooke Reservation.

Primary hypothesis: Those AI adults on the Apsáalooke Reservation participating in the *Baa nnilah* intervention will have significant improvement in quality of life using the SF-12 measure compared to a wait-listed control group immediately following the intervention and at 6 and 12 months post-intervention.

Secondary hypothesis: Those AI adults on the Apsáalooke Reservation participating in the *Baa nnilah* intervention will have significant improvement in measures of satisfaction in and participation with social roles and activities, social isolation, patient activation, health care relationship, physical function, and depression compared to a wait-listed control group immediately following the intervention and at 6 and 12-months post-intervention. Our mixed-methods design includes a qualitative evaluation of fidelity and acceptability immediately post-intervention.