## Health and Quality of Life in Northern Plains Indians

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Topic: 26.3 American Indian/Alaska Natives

Statement of Problem: Quality of life and standard of living are consistently described as poor among American Indian and Alaska Native (AI/AN) populations. Although socioeconomic status (SES) may be low based upon general U.S. population standards, very little is known about the quality of life as assessed by what is important to AI/AN and how satisfied they are with those areas of their lives. This study examines the relationship between quality of life and depression as measured by the Beck Depression Inventory-II (BDI-II), body mass index (BMI) calculated from height and weight, age and gender as reported by participants

Subjects: Five hundred self-identified American Indian adults (35% male; 65% female) between the ages of 18 and 79 years completed surveys at gatherings in tribal communities during the summers of 2002 and 2003. The mean age of the participants was 38.4 years.

Procedure (Methodology): Participants completed self-report questionnaires through paper and pencil assessment. Glasses were provided for participants who needed reading glasses and/or assistance was provided to read the questions so the participant could respond if preferred. Questionnaires included information about demographics, health history, medication, physical activity, mental health, diet, availability and affordability of food, and acculturation. Height, weight, and blood pressure measurements were taken by trained research assistants and body mass index (BMI) was calculated. Sixteen areas are measured in the Quality of Life Inventory (Frisch, 1994) including health, self-esteem, goals and values, money, work play, learning, creativity, helping, love, friends, children, relatives, home neighborhood and community. Each factor is assigned a value for importance to the participant and for satisfaction with the factor in the participants life. A T-score is derived from total score. The Beck Depression Inventory-II (Beck, Steer, Ball, & Ranieri, 1996) is a 21-item measure of depression and the most widely used self-report instrument for measuring depression in both clinical and research settings. Score range from 0 to 63 and the higher scores indicate higher levels of depressive symptoms.

Participants were provided a bag of wild rice, a water bottle with ice water, and educational information on diet and health for participating. Data from each assessment was entered into an SPSS database, scored, and final total scores were entered into a final database containing totals from all assessments, measurements, and demographics. Analysis was conducted on the final database.

Results: ANCOVA analysis indicates a combined effect of BMI, BDI-II, and gender on QOLI T-scores. A significant main effect of the BDI-II on the QOLI T-scores (p<0.005) was found. Results indicate quality of life (p<.001) and age (p= 0.005) are inversely related to depression as measured by the BDI-II. That is, as QOLI T scores and age of participants increase depression scores (BDI-II) decrease. BMI and gender alone were not significant factors in change of QOLI T-scores.

## **Conclusions:**

As participants aged they became more satisfied with their quality of life and, therefore, less depressed. They may also have learned coping strategies that allowed them to better deal with stresses as they became older. Another factor, this region has the lowest life expectancy for American Indians of any in the U.S., so those older participants are probably more resilient while those in the younger group contain more of a mixture of those that are resilient and those that are not. Further examination of the QOLI factors and how they relate to depression is warranted to help identify what factors may be associated with that resilience.