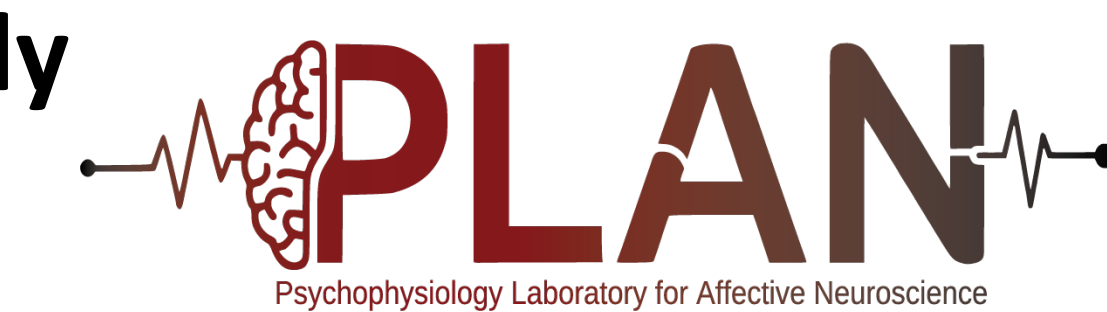


# Chronic Pain Among Native Americans: Patterns and Treatment Approaches

Taylor V. Brown, Aleiyah M. Fields, Cassandra A. Sturycz-Taylor, Tyler A. Toledo, Kayla N. Trevino, Erin N. Street, Joanna O. Shadlow, & Jamie L. Rhudy  
TSET Health Promotion Research Center, University of Oklahoma Health Sciences; Psychology Department, University of Tulsa

TSET Health Promotion Research Center

OU Health | Stephenson  
Cancer Center



## INTRODUCTION

- Native Americans face the highest chronic pain risk among U.S. racial and ethnic groups
- Despite this, they are significantly underrepresented in pain research
- Limited representation restricts understanding of Native American pain experiences
- Gaps remain in knowledge about pain profiles and treatment access for Native American communities.
- Clinical needs of Native American patients with chronic pain are not well understood

## OBJECTIVE

- This study examines the demographic profiles, pain experiences, and treatment utilization of a sample of Native Americans living with chronic pain to improve understanding and inform culturally responsive care and public health strategies

## PARTICIPANT CHARACTERISTICS

To be included in this study participants had to endorse the following:

- Identify as Native American
- Have pain daily or almost daily for 3 months or more

The study includes 136 Native American participants with chronic pain, primarily from Southern Plains tribes, representing 22 distinct Tribal affiliations

- Average Age = 50.76 years (SD = 14.91)
- Female (68%), Male (32%)
- Average BMI = 32.32 (SD = 8.48)
- 68% of the sample had a household income of less than \$35,000
- 30% of the sample was unemployed due to pain or disability

## MATERIALS & METHODS

- Eligible participants were mailed a questionnaire packet to assess pain profiles, treatment needs, and treatment utilization among Native Americans with chronic pain
- Data collected from 2015 to 2025

## CHRONIC PAIN PROFILES

Average **pain intensity** was **moderate**, with a mean score of 6.42 (SD = 2.45) on a 0–10 scale

Participants reported **moderate total pain interference** (M = 5.15/10, SD = 3.03) on a 0–10 scale

Highest averages of pain interference within sample

- (1) Recreation (M = 6.3/10, SD = 3.44)
- (2) Sleep (M = 6.2/10, SD = 3.18)
- (3) Mood (M = 5.9/10, SD = 3.14)

The majority of the sample (85%) reported **≥2 diagnosed pain conditions**

**69%** of participants reported having at least **1 parent with chronic pain**



**41%** of participants reported having **2 parents with chronic pain**

### Pain by location:

Lower back (68%), knees (48%), feet (42%), shoulder (41%), neck (39%), legs (36%), hips (35%), head (33%), hands (30%), upper back (27%), wrists (26%), ankles (24%), arms (17%), elbows (17%), chest (11%), buttocks (10%), and abdomen/pelvis (10%)

Most commonly reported chronic pain conditions were:

- (1) Degenerative disc disease (30%)
- (2) Migraine (26%)
- (3) Osteoarthritis (25%)

## CHRONIC PAIN TREATMENT PATTERNS & APPROACHES



**91%** of participants had regular access to healthcare



**63%** had regular access to chronic pain treatment

**45% of participants reported interest in a Native American culturally tailored chronic pain intervention**

**Participants waited an average of 2.5 years before seeking treatment for their chronic pain**

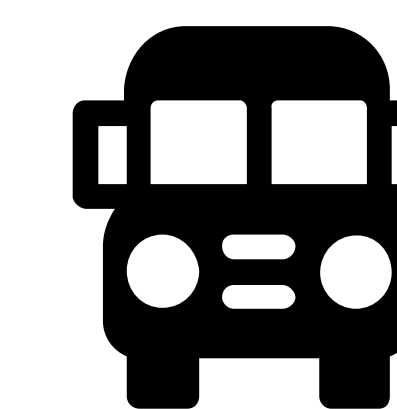
On average, participants reported trying approximately **5 different treatment approaches** to help manage their chronic pain

Five most commonly used pain treatments:

- (1) Acetaminophen (55%)
- (2) Physical therapy (53%)
- (3) Advil (44%)
- (4) Narcotics (38%)
- (5) Heat (38%)

## ACCESS TO RESOURCES

85% had access to stable housing and daily internet



91% had access to reliable transportation

## LIMITATIONS

- Findings reflect a single time point and do not capture changes in pain, care access, or treatment over time
- Reliance on self-reported diagnoses, treatment use, and access may introduce recall and reporting bias
- Native Americans represent a heterogeneous population, which may limit the generalizability of findings across tribes and regions

## CONCLUSIONS & FUTURE DIRECTIONS

- Chronic pain burden in this Native American sample was substantial, with moderate pain intensity and interference
- Gaps remain between general healthcare access and access to chronic pain-specific treatment
- Findings highlight the importance of improving understanding of pain experiences and care needs in Native American communities
- Further research is needed to develop and evaluate culturally responsive, community-informed pain interventions
- Additionally, there is a need to examine longitudinal patterns in pain, treatment use, and outcomes over time

## FUNDING & ACKNOWLEDGMENTS

The TSET Health Promotion Research Center and its activities are made possible through funding from the Tobacco Settlement Endowment Trust (TSET)

Research reported in this publication was supported by the National Center For Complementary & Integrative Health of the National Institutes of Health under Award Number R01AT012165, the Oklahoma Tobacco Settlement Endowment Trust (TSET), and the OU Health Stephenson Cancer Center (SCC) via an NCI Cancer Center Support Grant (P30CA225520). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH or TSET.