

# Prevalence, Risk Factors, and Coping Mechanisms of Individuals with Advanced Arthritis in La Trinidad, Benguet

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## ABSTRACT

Arthritis is a chronic musculoskeletal condition causing pain, disability, and reduced quality of life among older adults. This study determined the prevalence, risk factors, and coping mechanisms among 250 individuals (40-75 years) with osteoarthritis or rheumatoid arthritis in La Trinidad, Benguet. A descriptive-correlational design with stratified random sampling was used. Data were collected through a validated questionnaire (Cronbach's alpha = 0.89) and analyzed using descriptive statistics, Pearson's  $r$ , and Chi-square tests. Respondents had a mean age of 58.4 years; 68% were female and 54% were farmers. Osteoarthritis predominated (70%), and 62% reported severe pain. Pain severity correlated with age and illness duration. Major risk factors included repetitive joint

stress, family history, and obesity. Coping was mainly pharmacological.

**Keywords:** *advanced arthritis, osteoarthritis, rheumatoid arthritis, risk factors, coping mechanisms, La Trinidad Benguet*

## INTRODUCTION

Arthritis is a chronic musculoskeletal condition characterized by inflammation, stiffness, and degeneration of the joints, often leading to pain and disability. According to the World Health Organization (2023), arthritis affects over 350 million people worldwide, making it one of the leading causes of functional limitation in older adults. In the Philippines, arthritis prevalence continues to rise, particularly in highland and rural areas where access to rheumatologic care remains limited.

La Trinidad, Benguet, a municipality known for its agricultural population, presents a unique environment where repetitive physical labour, cold climate, and limited health literacy may increase arthritis risk. However, local data on arthritis prevalence and management strategies are scarce. This study aimed to determine the prevalence, associated risk factors, and coping mechanisms among individuals with advanced arthritis in La Trinidad, Benguet.

## METHODS

### Research Design

A descriptive-correlational design was used to examine the relationship between selected demographic factors and arthritis severity. A structured questionnaire consisting of four parts was used: (1) demographic and clinical profile, (2) lifestyle and occupational factors, (3) arthritis severity using a 10-

point Likert scale, and (4) coping mechanisms checklist. The instrument underwent expert validation and demonstrated good reliability (Cronbach's alpha = 0.89).

### **Research Locale**

The study was conducted in La Trinidad, Benguet, specifically in the five major barangays of Betag, Puguis, Pico, Cruz, and Lubas. Data were collected through face-to-face interviews from May to July 2025 with assistance from local health workers.

### **Participants and Sampling Technique**

The study included 250 respondents aged 40-75 years. Stratified random sampling was employed. Inclusion criteria required a clinical diagnosis of osteoarthritis or rheumatoid arthritis for at least one year. Respondents were selected from the identified barangays to represent individuals with advanced arthritis in the locality.

### **Research Instrument**

The research instrument was a structured and validated questionnaire that gathered data on demographic and clinical profile, lifestyle and occupational factors, arthritis severity, and coping mechanisms. Reliability testing indicated acceptable internal consistency with a Cronbach's alpha value of 0.89.

### **Data Gathering**

Data were gathered through face-to-face interviews conducted from May to July 2025. Local health workers assisted in identifying eligible respondents and facilitating the data collection process in the five selected barangays of La Trinidad, Benguet.

### **Data Analysis**

The data were analyzed using descriptive statistics, Pearson's  $r$ , and Chi-square tests. Descriptive statistics summarized the demographic profile, prevalence, risk factors, and coping mechanisms of respondents, while correlation and association tests examined relationships between selected factors and arthritis severity.

### **Ethical Consideration**

The study observed ethical procedures in data collection. Respondents were informed about the purpose of the study, their voluntary participation, and the confidentiality of their responses. Only eligible participants who consented to participate were included in the study.

## **RESULTS AND DISCUSSION**

### **Demographic Profile**

The respondents had a mean age of 58.4 years. In terms of gender, 68% were female and 32% were male. Regarding occupation, 54% were farmers, 18% were vendors, 16% were office workers, and 12% were engaged in other occupations. The average duration of illness was 6.2 years. These results align with WHO (2023) findings that arthritis disproportionately affects women and individuals engaged in repetitive physical labor.

Among the respondents, 70% had osteoarthritis, while 30% were diagnosed with rheumatoid arthritis. The cold and humid climate of La Trinidad may exacerbate joint stiffness and contribute to disease progression among individuals with advanced arthritis.

### **Severity and Functional Impact**

The findings showed that 62% of respondents reported severe pain, measured as a pain score of 7 or higher out of 10. In addition, 48% reported difficulty in performing household chores, while 35%

reported dependency on assistive devices. Pain severity correlated positively with age ( $r = 0.41$ ,  $p = 0.02$ ) and duration of illness ( $r = 0.52$ ,  $p < 0.01$ ). This supports earlier studies (Santos et al., 2022) showing age-related joint degeneration as a key determinant of arthritis severity.

### Risk Factors

The major risk factors reported by respondents included repetitive joint stress, family history, obesity, cold climate exposure, and smoking history. Table 1 presents the distribution of identified arthritis risk factors among the respondents.

Table 1. *Risk Factors Among Individuals with Advanced Arthritis*

Risk Factor	Percentage (%)
Repetitive joint stress (labour)	63%
Family history of arthritis	49%
Obesity	42%
Cold climate exposure	38%
Smoking history	26%

Legend: Percentages indicate the proportion of respondents who reported each identified risk factor.

### Coping Mechanisms and Interpretation of Findings

Coping was mainly pharmacological. The reliance on pharmacological treatment highlights the need for sustainable non-drug interventions and patient education. The findings indicate that arthritis severity in La Trinidad is strongly influenced by age, occupation, and lifestyle habits. The predominance of osteoarthritis parallels national data showing it as the most common musculoskeletal disorder among older adults (DOH, 2024). Cultural coping strategies such as herbal medicine and prayer also underscore the integration of traditional beliefs in chronic illness management.

### CONCLUSION

Advanced arthritis remains a significant public health issue in La Trinidad, Benguet, affecting predominantly older female farmers. Age, repetitive joint strain, and obesity emerged as major risk factors. Respondents primarily used medication and lifestyle changes to manage symptoms, though traditional remedies were also prevalent. Community health programs should emphasize preventive education, early screening, and holistic rehabilitation to enhance quality of life and reduce disability associated with arthritis.

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