

## NSAID Acceptability among People of Different Ethnic Origin: A Cross-Sectional Study in Kudhavadoo Island, Maldives

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### Abstract

**Background:** Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used for pain management. However, their acceptability and use patterns vary across different ethnic groups. This study aimed to assess NSAID acceptability and use patterns among people of different ethnic origins in Kudhavadoo Island, Maldives.

**Methods:** A cross-sectional study was conducted among 125 participants from different nationalities (Russians, Chinese, Maldivians, Indians, and British) in Kudhavadoo Island, Maldives. A self-administered questionnaire was used to collect data on NSAID use and acceptability.

**Results:** The study revealed significant differences in NSAID use and acceptability among different ethnic groups. Maldivians showed the highest acceptability for Brufen (96%), while Russians and Chinese were more skeptical about NSAID use. Indians and British participants showed moderate acceptability, with 84% and

80% using NSAIDs, respectively.

**Conclusion:** This study highlights the variations in NSAID acceptability and use patterns among different ethnic groups. Understanding these differences is crucial for developing targeted interventions to improve pain management and reduce adverse effects.

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## **Introduction**

Non-steroidal anti-inflammatory drugs (NSAIDs) are commonly used for pain management worldwide. However, their acceptability and use patterns vary across different ethnic groups, influenced by cultural, social, and economic factors (1). Maldives, a popular tourist destination, attracts visitors from diverse ethnic backgrounds, making it an ideal location to study NSAID acceptability and use patterns.

The prevalence of pain and its management varies across different cultures and ethnic groups. For example, a study conducted in the United States found that African Americans were more likely to experience pain and use NSAIDs compared to Caucasians (2). Similarly, a study in the United Kingdom found that South Asians were more likely to use traditional medicines for pain management compared to Caucasians (3).

Kudhavadoo Island, Maldives, is a popular tourist destination with a diverse population of residents and visitors. The island's unique cultural and social environment makes it an ideal location to study NSAID acceptability and use patterns among different ethnic groups.

## **Literature Review**

Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used for pain management worldwide. However, their acceptability and use patterns vary across different ethnic groups, influenced by cultural, social, and economic factors (1). Studies have shown that cultural and social factors play a significant role in shaping NSAID acceptability and use patterns among different ethnic groups (2, 3).

A study conducted in the United States found that African Americans were more likely to experience pain and use NSAIDs compared to Caucasians (4). Similarly, a study in the United Kingdom found that South Asians were more likely to use traditional medicines for pain management compared to Caucasians (5). These findings suggest that cultural and social factors influence NSAID use and acceptability.

In Asia, a study conducted in China found that the prevalence of NSAID use was high among patients with chronic pain, with 75% of participants reporting NSAID use (6). Another study conducted in India found that the majority of patients with arthritis used NSAIDs for pain management, with 90% of participants reporting NSAID use (7).

In the Maldives, a study conducted among patients with chronic pain found that the prevalence of NSAID use was 65%, with Brufen being the most commonly used NSAID (8). However, there is a lack of research on NSAID acceptability and use patterns among different ethnic groups in the Maldives.

The current study aims to address this gap by assessing NSAID acceptability and use patterns among people of different ethnic origins in Kudhavadoo Island, Maldives. The study's findings will contribute to the existing literature on NSAID use and acceptability among different ethnic groups and inform healthcare providers on developing targeted interventions to improve pain management.

## **Objectives:**

To assess NSAID use and acceptability among people of different ethnic origins in Kudhavadoo Island, Maldives.

To identify factors influencing NSAID acceptability and use among different ethnic groups.

**Methodology:**

A cross-sectional study was conducted among 125 participants from different nationalities (Russians, Chinese, Maldivians, Indians, and British) in Kudhavadoo Island, Maldives. A self-administered questionnaire was used to collect data on NSAID use and acceptability. The questionnaire included questions on frequency of NSAID use, type of NSAID used, and factors influencing NSAID acceptability.

The study participants were recruited using a convenience sampling method. The inclusion criteria were:

Age 18-65 years

Ability to understand and respond to the questionnaire

Residence in Kudhavadoo Island, Maldives, for at least 3 months

The study was approved by the Institutional Review Board (IRB) of the University of Maldives. Informed consent was obtained from all participants before data collection.

**Results:**

The study revealed significant differences in NSAID use and acceptability among different ethnic groups (Table 1).

Nationality	NSAID use	Do not Use NSAID	Acceptability of Brufen	Acceptability of Naproxen	Acceptability of Piroxicam	Acceptability of Herbal Medicine
Russian (n=25)	8 (32%)	17 (68%)	5 (25%)	2 (8%)	1 (4%)	0
Chinese (n=25)	2 (8%)	23 (92%)	0 (0%)	0 (0%)	0 (0%)	23 (92%)
Maldivian (n=25)	24 (96%)	1 (4%)	24 (96%)	0 (0%)	0 (0%)	0
Indian (n=25)	21 (84%)	4 (16%)	18 (72%)	2 (8%)	1 (4%)	0
British (n=25)	20 (80%)	5 (20%)	15 (60%)	3 (12%)	2 (8%)	0

Table 1: NSAID Use and Acceptability among Different Ethnic Groups

The majority of Maldivians (96%) used Brufen, while Russians and Chinese were more likely to use herbal medicines or not use any medication for pain relief. Indians and British participants showed moderate acceptability, with 84% and 80% using NSAIDs, respectively.

**Discussion:**

This study highlights the variations in NSAID acceptability and use patterns among different ethnic groups. (9) Maldivians showed a high acceptability for Brufen, while Russians and Chinese were more skeptical about NSAID use. (10) These findings are consistent with previous studies that reported cultural and social factors influencing NSAID use (11,12).

The study's findings suggest that cultural and social factors play a significant role in shaping NSAID acceptability and use patterns among different ethnic groups. (13) For

example, the high acceptability of Brufen among Maldivians may be attributed to the country's widespread use of the medication for pain management.

The study's results also highlight the importance of considering cultural and social factors when prescribing NSAIDs. Healthcare providers should be aware of the differences in NSAID acceptability (14) and use patterns among different ethnic groups to provide effective pain management.

### **Conclusion:**

This study demonstrates the importance of understanding NSAID acceptability and use patterns among different ethnic groups. Developing targeted interventions to improve pain management and reduce adverse effects is crucial.

### **Implications:**

Healthcare providers should consider cultural and social factors when prescribing NSAIDs.

Targeted interventions should be developed to improve pain management among diverse populations. (15)

Further research is needed to explore the factors influencing NSAID acceptability and use among different ethnic groups.

### **Limitations:**

The study has several limitations. Firstly, the sample size was small, and the study was conducted in a specific location, which may limit the generalizability of the findings. Secondly, the study relied on self-reported data, which may be subject to bias.

### **Recommendations:**

Future studies should aim to recruit a larger and more diverse sample to confirm the findings.

Researchers should explore the factors influencing NSAID acceptability and use among different ethnic groups.

Healthcare providers should develop targeted interventions to improve pain management among diverse populations.

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