

# **Association of Health-Related Quality of Life With Dual Use of Prescription and Over-the-Counter Nonsteroidal Antiinflammatory Drugs**

**Arthritis & Rheumatism (Arthritis Care & Research)  
February 15, 2008, Vol. 59, No. 2, pp 227–233**

Stacey H. Kovac, Kenneth G. Saag, Jeffrey R. Curtis, and Jeroan Allison

## FROM ABSTRACT

### Objective.

Inadequate prescription therapy pain management, lack of doctor-patient communication about over-the-counter (OTC) medications, and easy accessibility of OTC medications may contribute to patients using more than 1 medication to manage pain.

It is well established that taking multiple nonsteroidal antiinflammatory drugs (NSAIDs) can lead to serious gastrointestinal problems.

Little is known about whether use of more than 1 NSAID (i.e., dual use) is related to patient self-reported outcomes, specifically.

We hypothesized that dual use of NSAIDs would be associated with reduced health-related quality of life.

### Methods.

Patients from a managed care organization who filled >1 NSAID prescription over a 6-month period were eligible for a telephone interview focusing on NSAID use, which included the Short Form 12 (SF-12) Health Survey.

Dual use was defined as taking 2 NSAIDs, either prescription or OTC, at least twice weekly during the past month.

### Results.

Dual use was associated with poorer health-related quality of life, after controlling for clinical and demographic factors.

### Conclusion.

Patients may self-manage their pain to improve their daily activities by taking more than 1 NSAID.

However, by attempting to obtain symptom relief, patients may be putting themselves at risk for complications.

## THESE AUTHORS ALSO NOTE:

"Prescription nonsteroidal antiinflammatory drugs (NSAIDs) are used to reduce pain and inflammation, particularly for musculoskeletal conditions such as arthritis."

"Arthritis affects one-third of all adults and it is expected that by 2020, 60 million Americans will have musculoskeletal conditions and 20% will experience resultant limitations in their daily activities."

"NSAIDs are one of the most commonly prescribed medications worldwide."

"Among individuals with arthritis, almost 30% report daily use of OTC NSAIDs."

"Arthritis-related conditions are the leading cause of disability in the US."

"Given the availability of both prescription and OTC NSAIDs, patients may take both concomitantly (dual use)."

"It is well established that taking multiple NSAIDs can lead to adverse events, including serious gastrointestinal events."

## RESULTS

Approximately half of the participants had rheumatoid arthritis or osteoarthritis and almost one-quarter had chronic back pain.

Approximately 80% of dual users were using a prescription NSAID and an OTC NSAID.

The other 20% were taking 2 prescription or 2 OTC NSAIDs.

After controlling for other factors, dual NSAID use was a significant independent predictor of lower systemic health scores (by 351%).

## DISCUSSION

"In our study of prescription NSAID users from a large regional managed care organization, we found that 26% of the population reported dual use of a prescription and OTC NSAID, or the use of 2 prescription NSAIDs or 2 OTC NSAIDs." **[Wow!]**

Dual NSAID use was also found to be an independent factor associated with lower health-related quality of life.

"Taking high doses of NSAIDs, including the use of more than 1 NSAID, is an important patient safety concern."

Analyses from the Centers for Disease Control revealed that 26% of respondents were dually using aspirin and ibuprofen.

"A national survey with the American Gastroenterological Association found that 38% of individuals were dually using a prescription and OTC NSAID."

"To our knowledge this is the first study to establish an association between dual NSAID use and physical health-related quality of life."

"Dual users may take multiple NSAIDs to reduce their pain, and may knowingly or unknowingly do this despite NSAID safety risks."

#### KEY POINTS FROM DAN MURPHY

- 1) "It is well established that taking multiple nonsteroidal antiinflammatory drugs (NSAIDs) can lead to serious gastrointestinal problems."
- 2) "Prescription nonsteroidal antiinflammatory drugs (NSAIDs) are used to reduce pain and inflammation, particularly for musculoskeletal conditions such as arthritis."
- 3) "Arthritis affects one-third of all adults and it is expected that by 2020, 60 million Americans will have musculoskeletal conditions and 20% will experience resultant limitations in their daily activities."
- 4) "NSAIDs are one of the most commonly prescribed medications worldwide."
- 5) "Among individuals with arthritis, almost 30% report daily use of OTC NSAIDs."
- 6) "Arthritis-related conditions are the leading cause of disability in the US."
- 7) "Given the availability of both prescription and OTC NSAIDs, patients may take both concomitantly (dual use)."
- 8) Approximately half of the participants had rheumatoid arthritis or osteoarthritis and almost one-quarter had chronic back pain.
- 9) Approximately 80% of dual users were using a prescription NSAID and an OTC NSAID.
- 10) After controlling for other factors, dual NSAID use was a significant independent predictor of lower health-related quality of life (by 351%).

11) "In our study of prescription NSAID users from a large regional managed care organization, we found that 26% of the population reported dual use of a prescription and OTC NSAID, or the use of 2 prescription NSAIDs or 2 OTC NSAIDs." **[Wow!]**

12) "Taking high doses of NSAIDs, including the use of more than 1 NSAID, is an important patient safety concern."

13) Analyses from the Centers for Disease Control revealed that 26% of respondents were dually using aspirin and ibuprofen.

14) "A national survey with the American Gastroenterological Association found that 38% of individuals were dually using a prescription and OTC NSAID."

#### COMMENTS FROM DAN MURPHY

Nonsteroidal anti-inflammatory drugs are extensively used and readily available, both by prescription and over-the-counter. These drugs are associated with numerous side effects, including some that are catastrophic, including gastrointestinal bleeding, kidney damage, liver damage, heart attacks and strokes. This article indicates that more than 25% of patients with rheumatoid arthritis, arthritis, and back pain are taking more than one nonsteroidal anti-inflammatory drug products, including 80% who are taking both a prescription nonsteroidal anti-inflammatory drug and an over-the-counter anti-inflammatory drug. This article reiterates that such a practice places them at great risk for adverse drug reactions, and affects their health-related quality of life.