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**THE IMPACT OF MEDICATIONS ON QUALITY OF LIFE IN OSTEOARTHRITIS
PATIENTS: A REVIEW OF PATIENT-REPORTED OUTCOMES**

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Osteoarthritis (OA) is the most common arthritis, affecting over 300 million people worldwide by damaging joint cartilage and surrounding tissues, causing pain, stiffness, and reduced function. Though clinical trials give safety and efficacy data, patient-reported experiences highlight real-life treatment impact. OA becomes more common after age 50, especially in postmenopausal women, and typically affects the knees, hips, and hands. Risk factors include aging, obesity, joint injury, repetitive stress, and genetics.

The pharmacological treatment of OA includes various drug classes that relieve symptoms, improve joint function, and enhance quality of life. NSAIDs like Diclofenac, Naproxen, and Meloxicam are most commonly used for their anti-inflammatory and pain-relieving effects. Acetaminophen (Non-anti-inflammatory NSAID) is used for mild to moderate pain but is less effective, especially in advanced stages. Opioids such as tramadol are reserved for moderate to severe pain when NSAIDs are ineffective or not tolerated, though side effects limit their use. Intra-articular corticosteroids and hyaluronic acid injections are also used, but patient feedback on these was not included in this study due to limited online data.

Data was collected from Drugs.com, specifically from the OA medication review page, sorted by most helpful reviews. Meloxicam received an average rating of 6.8 out of 10. About 54% of users reported significant symptom improvement, while 31% experienced no change and 15% noted worsened symptoms. Commonly cited side effects included stomach upset, dizziness, and fatigue. Diclofenac scored higher with an average rating of 7.4. Approximately 69% of users experienced improvement, 21% saw no benefit, and 10% experienced worsening symptoms. Reported side effects included nausea, gastrointestinal discomfort, and elevated blood pressure. Naproxen had an average rating of 6.3, with 50% of users reporting symptom relief, 35% no improvement, and 15% experiencing worsening. Side effects such as acid reflux, stomach pain, and headaches were common. Celecoxib, a COX-2 selective NSAID, had an average score of 7.1, with 60% of users reporting improvement, 30% noting no change, and 10% experiencing deterioration. It was generally well tolerated, though users mentioned side effects like fluid retention, gastrointestinal issues, and dizziness. Acetaminophen had a lower average rating of 5.5. Only 40% of patients noted improvement, while 45% found it ineffective and 15% reported worsening symptoms. Although side effects were minimal, some users expressed concern over potential liver damage with prolonged use. Tramadol, an opioid analgesic, had a mixed reception with an average rating of 6.6. Around 55% of users reported symptom relief, 25% experienced no benefit, and 20% saw a deterioration in their condition. Common side effects included nausea, drowsiness, constipation, and concerns about dependency, which significantly affected overall satisfaction despite its effectiveness in pain control. Patient feedback underscores the variability in response to OA medications. Meloxicam and Diclofenac generally yielded the highest satisfaction and improvement in QoL, particularly in pain relief and functional mobility. Acetaminophen showed limited efficacy, particularly for more severe symptoms. Tramadol served as an effective option for patients unresponsive to other treatments but carried concerns about safety and dependence. These real-world insights highlight the importance of individualized treatment approaches.

This review of patient-reported experiences provides meaningful insights into the real-world effectiveness and tolerability of OA medications across various pharmacological classes. While NSAIDs tend to offer the most benefit, their side effect profiles must be weighed carefully. Patient satisfaction varies widely, emphasizing the need for personalized care plans. Integrating patient experiences into clinical decision-making may enhance adherence and improve quality of life.