

## PILATES FOR NON-ARTHRITIC HIP PAIN: A MIXED METHODS APPROACH

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**Background:** Non-arthritic hip pain may result when the femur is malpositioned within the acetabulum. While conservative treatment has been shown to be effective, no existing studies use Pilates as a method to reduce non-arthritic hip pain.

**Purpose:** The primary aim of this study was to examine the outcomes of a Pilates-based treatment approach for non-arthritic hip pain. A secondary goal was to investigate the patients' lived experience with this treatment.

**Methods:** This was a cross-sectional study. Purposeful sampling was utilized to recruit six patients (15-44yo) from local physical therapy clinics with non-arthritic hip pain present for a minimum of 2 months. Patients had participated in at least 8 weeks of individualized clinic- and home-based Pilates training, supervised by a Pilates-certified physical therapist. Hip pain, functional disability, and patients' perceptions of change were quantified using the Verbal Numerical Rating Scale (VNRS), the Copenhagen Hip and Groin Outcome Score (HAGOS), and the Global Rating of Change (GRoC), respectively. Correlations between the HAGOS subscales and the GRoC were analyzed. Semi-structured phone interviews were conducted with each participant to explore their experiences. Audiotapes were transcribed, analyzed, and coded independently by each investigator. Recurrent codes were categorized into themes.

**Results:** At the time of interview, hip pain scores on the VNRS ranged from 0-4/10, HAGOS subscales indicate function scores >75% in 4 out of 5 participants, and patient ratings on the GRoC ranged from "somewhat better" to "a very great deal better." High correlations were found between the GRoC and the HAGOS pain and ADL subscales. Qualitatively, seven themes were identified, including: low patient expectations, physical benefits, and unique characteristics of Pilates.

**Conclusion:** Patients reported a positive experience with a Pilates-based intervention for their hip pain and a positive change in overall hip condition over time; however, patients continued to experience mild to moderate disability.