

# **Good Life with osteoArthritis in Denmark (GLA:D) – Implementation of evidence-based care for knee and hip osteoarthritis into clinical practice**

**Roos, Ewa M.<sup>1</sup> (eroos@health.sdu.dk); Skou, Soren Thorgaard<sup>1,2</sup> (stskou@health.sdu.dk)**

1: Research Unit for Musculoskeletal Function and Physiotherapy, Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark, Denmark

2: Department of Physiotherapy and Occupational Therapy, Næstved-Slagelse-Ringsted Hospitals, Region Zealand, Denmark

Key words: Osteoarthritis, pain, knee, hip, implementation, clinical guidelines, physiotherapist, exercise, patient education

## **Background and purpose**

Clinical guidelines for knee and hip pain (osteoarthritis, OA) in Denmark are not sufficiently implemented, and standardized treatment tools for delivering core treatment (patient education and supervised exercise) are lacking. The purpose was to implement treatment guidelines for knee and hip OA and evaluate the results at 3 and 12 months.

## **Methods**

Good Life with osteoArthritis in Denmark (GLA:D) consists of:

- 1) A two-day course for physiotherapists (first course held in January 2013),
- 2) Three 1.5-hour sessions of patient education and 12 sessions of individualized, physiotherapist supervised neuromuscular exercise for patients with hip and knee OA,
- 3) Evaluation by the GLA:D-registry holding data from baseline, 3 and 12 months follow-ups.

## **Results**

On September 26, 2016 GLA:D is offered at 378 clinics in private physiotherapy practice and municipalities nationwide and the registry holds data from more than 16 800 patients. The average GLA:D patient is an overweight 64 year old married woman with knee pain. Most patients have problems from more than one joint and medical comorbidities are common.

On December 31, 2015 5485 patients had been evaluated at baseline and 3 months, and 2149 patients had undergone baseline and 12-month evaluation. Only 15% were on sick-leave due to their hip/knee during the year following GLA:D compared to 24% during the year prior to GLA:D. Only 45% (hip) and 37% (knee) used pain relievers (paracetamol, NSAIDs or opioids) at 3 months compared to 58% and 56% at baseline. Fear of movement and objective function (walking speed, sit-to-stand ability) were improved, and 1 out of 3 reported increased physical activity level at 3 and 12 months. Pain was decreased at 3 months (hip 10.6 mm and knee 13.5 mm) and at 12 months (12.3 and 13.4, respectively).

## **Conclusions**

The GLA:D concept is feasible and data from the first three years of enrollment demonstrate reduced pain and increased quality of life with improvements persisting 9 months after the intervention ends. Teaching content of clinical guidelines to physiotherapists and providing a free of charge registry for data collection increase the quality of care provided for patients with knee and hip OA.