

Physiotherapist as primary assessor of knee osteoarthritis in primary care

Evaluation of patients' self-assessment, preferences, quality of life, and health economy

Akademisk avhandling

Som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i Arvid Carlsson, Academicum, Medicinaregatan 3, fredagen den 19 april, klockan 9:00

av

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Avhandlingen baseras på följande delarbeten

- I. Ho-Henriksson CM, Thorstensson CA, Nordeman L. Self-assessment using 30-second chair stand test for patients with knee osteoarthritis – an intra- and inter-rater reliability study. *Submitted*.
- II. Ho CM, Thorstensson CA, Nordeman L. Physiotherapist as primary assessor for patients with suspected knee osteoarthritis in primary care – a randomised controlled pragmatic study. *BMC Musculoskeletal Disorders 2019; 20: 329*.
- III. Ho-Henriksson CM, Svensson M, Thorstensson CA, Nordeman L. Physiotherapist or physician as primary assessor for patients with suspected knee osteoarthritis in primary care – a cost-effectiveness analysis of a pragmatic trial. *BMC Musculoskeletal Disorders 2022; 23: 260*.
- IV. Ho-Henriksson CM, Thorstensson CA, Nordeman L, Zidén L. “I want to be physically active as long as I live” – Patients’ experiences of primary assessment and treatment of knee osteoarthritis by physiotherapists in primary care. *In manuscript*.

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ABSTRACT

Aim: The purposes with this thesis was to evaluate the feasibility of 30-second chair stand test as a self-test, and to investigate the effects of direct access to physiotherapist on costs and health in people with knee osteoarthritis, as well to investigate experiences of care among these individuals when physiotherapists serve as the primary assessor.

Methods: This thesis consists of four papers: Paper I investigated intra- and inter-rater reliability and the diagnostic ability of 30-second chair stand test to function as a self-test for people with knee osteoarthritis (n=114); Papers II-III investigated differences in health outcomes (Paper II) and the cost-effectiveness (Paper III) of a randomised controlled pragmatic trial using a physiotherapist assessment compared with physician's assessment in people with knee osteoarthritis in primary care (n=69); and Paper IV used a qualitative interview study to explore the expectations and experiences of a care pathway initiated with a physiotherapist assessment in people with knee osteoarthritis (n=15).

Results: The 30-second chair stand test seem feasible as a self-test with excellent intra-rater reliability and moderate to good inter-rater reliability when comparing self-test results with a physiotherapist assessment. There were no significant differences between physiotherapists and physicians as primary assessors on health outcomes, and both healthcare pathways resulted in significant improvements in health-related quality of life. Direct access to a physiotherapist could lead to cost savings with a marginal quality adjusted life-year (QALY) loss. People seeking care for knee osteoarthritis reported that they expected to be "taken seriously" and receive a proper examination so that they can get the help they need to get back to their normal physical activities. The informants viewed physiotherapist and its exercise-based treatment as a natural first option.

Conclusion: The results of this thesis imply that a 30-second chair stand as a self-test is a reliable instrument that can be useful in digital healthcare and self-assessment and that direct access to a physiotherapist could lead to cost savings without significant differences in health outcomes for individuals suffering from knee osteoarthritis. However, larger studies are needed. Informants who were assessed by a physiotherapist first felt they were understood and gained the knowledge they needed to self-manage their knee osteoarthritis. They reported feeling hopeful that they could return to their normal physical activities.

Keywords: knee osteoarthritis, physiotherapist, physiotherapy, direct access, self-assessment, reliability, physical function, experience, person-centred care