

Physical activity: Prescription in health care and relationship to different health measures

Akademisk avhandling

som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet, kommer att offentligen försvaras i Jubileumsaulan, Gula Stråket 2B, Sahlgrenska Universitetssjukhuset/Sahlgrenska, Göteborg, Fredagen den 18 december 2015 kl. 13.00

av

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Avhandlingen baseras på följande arbeten:

- I Rödjer L, Jonsdottir IH, Rosengren A, Björck L, Grimby G, Thelle DS, Lappas G, Börjesson M. Self-reported leisure time physical activity: a useful assessment tool in everyday health care.
BMC Public Health. 2012, 12:693.
- II Jonsdottir IH, Rödjer L, Hadzibajramovic E, Börjesson M, Ahlborg G Jr. A prospective study of leisure-time physical activity and mental health in Swedish health care workers and social insurance officers.
Prev Med. 2010, 51(5):373-377.
- III Rödjer L, Jonsdottir IH, Börjesson M. Physical activity on prescription (PAP): long-term effects on self-reported physical activity and quality of life in a Swedish primary care population.
Under revision
- IV Rödjer L, Jonsdottir IH, Börjesson M, Hagberg L. Physical activity on prescription (PAP) in Swedish primary care: cost-effectiveness of two PAP interventions differing in extent and design.
Manuscript



UNIVERSITY OF GOTHENBURG

2015

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ABSTRACT

Background: Physical inactivity is one of the major modifiable risk factors, contributing to the global burden of disease. Thus, reducing physical inactivity is of importance for global health. Worldwide, different methods designed to improve physical activity (PA) behaviour in patients, have been developed, including physical activity on prescription (PAP) in Sweden.

Aim: The overall aim of the present thesis was to analyse the association between self-reported leisure time physical activity level and health measures and to study the efficacy of the Swedish method of physical activity on prescription in terms of long-term effects and health-related quality of life (HRQL). Another aim was to analyse health economy and cost-effectiveness of two different variations of the Swedish PAP-method, offering different degrees of support.

The studies included in this thesis offered the opportunity to explore the usability of a single-item question to measure physical activity in different contexts.

Method: Three study populations were included in this thesis. The first study included a random sample of 3,588 adults that answered a questionnaire and collected blood samples. The second study included 3,114 individuals in a working population that received two questionnaires regarding life style, work-related factors and psychosocial health two years apart. In the PAP-study 144 patients and 54 reference patients were included. All received four questionnaires concerning PA and HRQL (SF-36). Cost-effectiveness was estimated from SF-6D derived from SF-36.

Results: The simple physical activity assessment question showed associations with other cardiovascular risk factors and was associated with stress-related mental illness at follow up. Furthermore, there was significant change in the level of PA following PAP at six and 12 months and HRQL, extending to 24 months. The health economic study supported the more supportive framework in this setting, despite being more costly.

Conclusion: The single item question measuring self-reported physical activity level seem to be a valid and feasible tool to assess risk in adults, including working population and patient populations. The efficacy of the Swedish PAP model is further established by the results of the present thesis, showing both long-term effects and cost effectiveness.

Keywords: physical activity, physical inactivity, physical activity on prescription, cost-effectiveness, health-related quality of life, quality-adjusted life year, perceived stress, cardiovascular epidemiology

ISBN: 978-91-628-9591-4 (print)

ISBN: 978-91-628-9592-1 (e-pub)

<http://hdl.handle.net/2077/40451>