

Physical activity as medicine: time to translate evidence into clinical practice

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EDITOR'S
CHOICE

Follow-up investigations of large cohorts of men and women in USA demonstrate that a low cardiorespiratory fitness constitutes the largest attributable fraction for all cause death.¹ These findings are highly relevant for a majority of populations all over the world. Sedentary lifestyle is a dangerous modern health threat. Physical inactivity is linked to almost all common health problems including cardiovascular diseases, type II diabetes, obesity/overweight, cancer, dementia and depression. Furthermore, the great value of physical activity in the prevention and treatment of disease has been proven over recent years. Physical activity is essential for improved health as well as for longevity. The last decade has also provided strong data that counselling on physical activity in healthcare is effective. A systematic literature review concluded that advice and counselling of patients in everyday clinical practice increased physical activity by 12–50% for at least 6 months after the counselling session.²

THE DRUG OF CHOICE: EXERCISE ON PRESCRIPTION

Over recent years, 'physical activity on prescription' has proven to be a feasible way to increase an individual's or patient's physical activity levels.^{3–6} The method has been in use for decades in Sweden, New Zealand and elsewhere. Physical activity on prescription is a personalised written prescription of physical activity for any kind of patients visiting a health professional with symptoms or diseases where physical activity would improve health.

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The prescription can be used for prevention and/or treatment. All healthcare professionals can prescribe physical activity. It is essential that the prescription be based on the individual situation and on a dialogue between patient and clinician. The written prescription is usually made on a special prescription form.

A Swedish study in primary healthcare on patients receiving physical activity on prescription demonstrated good adherence after 6 months. A majority of patients reported adhering fully to the prescription (65%). Partial adherence was reported by 19% and only 16% reported total non-adherence.⁷ The results are encouraging given that many patients with chronic diseases have difficulties adhering to prescribed regimens in general.

ARE WE PREPARED?

There is an urgent need to spread new evidence on physical activity as well as evidence on how to promote physical activity. *Physical Activity in the Prevention and Treatment of Disease*, featured on the cover of this issue of *BJSM*, is a comprehensive handbook recently translated from Swedish.⁸ This tool for healthcare professionals summarises the up-to-date scientific knowledge on how to prevent and treat various diseases and conditions using physical activity. The book covers most areas of disease where physical activity has a documented effect. By combining recommendations on suitable exercise activities with a description of the potential risks of physical activity for various patient groups, the handbook provides a valuable resource for anyone working with physical activity and health. The handbook consists of 47 chapters. Fourteen of these address general aspects such as the effects of physical activity, how to motivate individuals, how to assess and control physical activity and chapters on physical activity for paediatric, pregnant and older populations. The other 33 chapters address the effects of and

recommendations for physical activity in diseases and conditions within cardiovascular and metabolic medicine, psychiatry, orthopaedics, neurology, gastrointestinal medicine, nephrology, rheumatology, pulmonary medicine and more. The handbook is especially tailored to help health professionals prescribe physical activity. The method is currently used by well over half of all general practice units in Sweden; our international colleagues see no reason why that should not be the case in many parts of the world. The book (in English) is available for personal use from <http://www.fyss.se> as a pdf-file.

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REFERENCES

1. Blair SN. Physical inactivity: the biggest public health problem of the 21st century. *Br J Sports Med* 2009;**43**:1–2.
2. Swedish Council on Technology Assessment in Health Care (SBU). Metoder för att främja fysisk aktivitet. [Methods of promoting physical activity.] En systematisk litteraturoversikt [A systematic literature survey]. English Summary. Swedish Council on Technology Assessment in Health Care Stockholm; 2007.
3. Lawton BA, Rose SB, Elley CR, et al. Exercise on prescription for women aged 40–74 recruited through primary care: two year randomised controlled trial. *BMJ* 2008;**337**:a2509.
4. Elley CR, Garrett S, Rose SB, et al. Cost-effectiveness of exercise on prescription with telephone support among women in general practice over 2 years. *Br J Sports Med* Published Online First: 16 November 2010. doi:10.1136/bjism.2010.072439.
5. Grandes G, Sanchez A, Sanchez-Pinilla RO, et al. Effectiveness of physical activity advice and prescription by physicians in routine primary care: a cluster randomized trial. *Arch Intern Med* 2009;**169**:694–701.
6. Kallings LV, Sierra Johnson J, Fisher RM, et al. Beneficial effects of individualized physical activity on prescription on body composition and cardiometabolic risk factors: results from a randomized controlled trial. *Eur J Cardiovasc Prev Rehabil* 2009;**16**:80–4.
7. Kallings LV, Leijon ME, Kowalski J, et al. Self-reported adherence: a method for evaluating prescribed physical activity in primary health care patients. *J Phys Act Health* 2009;**6**:483–92.
8. Swedish National Institute of Public Health. Physical Activity in the Prevention and Treatment of Disease. Professional Associations for Physical Activity, Sweden, 2010. <http://www.fyss.se>