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Promotion of physical activity in the primary care setting: The situation in Switzerland

Abstract

Although many harmful effects of a sedentary lifestyle on health are well known, we still need to better understand how regular physical activity in the general population can be promoted effectively. Among the currently explored strategies, screening for sedentary lifestyle and promoting physical activity in the primary care setting seem promising. Despite recommendations from governmental agencies and professional associations in favor of physical activity counseling, this approach has not been widely adopted so far. This article summarizes the steps taken in Switzerland with the aim of developing physical activity counseling in the primary care setting. It describes how the early implication of primary care physicians influenced in a concrete way the development of the project.

This article is an English adaptation of a review originally published in French (Bize et al., 2007c).

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Zusammenfassung

Während die gesundheitsschädigenden Effekte der Inaktivität zunehmend bekannter werden, wird weiterhin nach geeigneten Methoden gesucht, um die Bevölkerung zu einem bewegteren Lebensstil zu animieren. Unter mehreren bereits untersuchten Ansätzen zeigte sich das Inaktivitäts-Screening verbunden mit Bewegungsberatungen in der Arztpraxis als vielversprechend. Dieser Artikel fasst die in der Schweiz vorgenommenen Schritte zur Förderung der Bewegungsberatung in der Arztpraxis in chronologischer Reihenfolge zusammen. Er beschreibt, wie der frühe Einsatz von Hausärztinnen und Hausärzten die Entwicklung eines Projekts zu diesem Thema in konkreter Weise beeinflusst hat.

Introduction

Two thirds of the Swiss population do not meet current guidelines (*table 1*) for health-enhancing physical activity (Haskell et al., 2007; Martin et al., 1999, 2000).

It has been estimated that in Switzerland physical inactivity causes 2.1 million cases of illness, 2900 premature deaths and 2.4 billion Swiss Francs (1.5 billion Euro) in health care costs each year (Swiss Federal Office of Sport, 2006).

Based on a review of the scientific literature (Eden et al., 2002), the US Preventive Services Task Force has concluded that the evidence is insufficient to judge the effectiveness of physical activity counseling in primary care in achieving sustainable increases in physical activity behavior in patients. Several government agencies and professional associations are already recommending physical activity counseling in the medical practice (Jacobson et al., 2005). Motivational interviewing and similar patient approaches are beginning to emerge as preferred methods (Amati et al., 2002). Nevertheless, the concept has not yet been accepted by general practitioners on a large scale (Wee et al., 1999).

The establishment of physical activity counseling in the medical practice seems to be correlated with the perceived effectiveness of physicians as well as with the acceptability of the specific approach which is offered to them (time requirements of the counseling, financial recompensation; Aittasalo et al., 2007; van Sluijs et al., 2004).

Historical background

Synergies emerged with the Swiss experiences in the field of physician's training for smoking cessation (<http://www.vivre-sans-tabac.ch>; Cornuz et al., 2002; Humair and Cornuz, 2003). For the promotion of physical activity, several approaches through primary care have already been developed and evaluated in Switzerland.

For example a randomized controlled trial with 161 patients has studied the effectiveness of a pilot project called «Vom Rat zur Tat» («active upon advice»; Jimmy and Martin, 2005). The minimal intervention group patients were briefly encouraged by their physician to become more physically active. The structured intervention group subjects received in addition a motivationally tailored leaflet and were offered – on a voluntary basis – a session with a specifically trained physical activity counselor. 133 participants had complete data with 14 month follow-up. In the 69 participants of the structured intervention group, only 25 (38%) choose to take advantage of the physical activity counselor session.

After 14 months, 47% of the participants reported that they had taken up a physical activity behaviour in line with international recommendations, without any statistically significant difference between the two groups. The absence of a difference between the two groups might be explained by the strong motivation of the study physicians. The external validity of these findings has to be judged with caution, as the lack of time usually is an important barrier for less motivated general practitioners (Eakin et al., 2005).

At least 30 min of moderate intensity physical activity (like brisk walking, gardening or housework) on 5 days of the week (A)
OR
20 min of vigorous intensity activities (like running, cycling or swimming) 3 times a week (A)
The 30 min of moderate intensity activities can be split up into bouts of 10 min or more (B)
The recommendations can be met by combining activities of moderate and vigorous intensity (B)
Additional benefits can be expected from strength training of the major muscle groups 2 times a week (A)
These recommended activities are supplementary to the activities of daily living of light intensity (such as walking short distances at the workplace or doing the dishes)
Level of evidence: (A) Results based on several randomised clinical trials (B) Results based on a single randomised clinical trial or on several non randomised trials (C) Consensus based on expert opinion

Table 1: Recommendations for physical activity in adults 18–65 years old

Among other projects, publications appeared recently on the following projects: «Gesund bewegt» («healthy in movement», a project initiated by the physicians for the protection of the environment in the Basel area; Allenspach et al., 2007), «SO!PRA» (promotion of physical activity in elderly people in the region of Solothurn; Märki et al., 2006b), and «ZhaBe» (feasibility study in the Zurich area; Märki et al., 2006a).

Qualitative study with a sample of French-speaking Swiss physicians

In the French-speaking part of Switzerland, a qualitative study was carried out to explore the opinions and attitudes of physicians concerning the promotion of physical activity in the medical practice. 16 physicians took part in semi-structured interviews (Bize et al., 2007a).

The following conclusions could be drawn from this project:

- The assessment of physical activity is more likely to be carried out with new patients.
- Physical activity counseling is rather delivered to sedentary patients presenting additional cardiovascular risk factors (secondary prevention).
- According to some physicians, the benefits of physical activity to improve quality of life should be emphasized more.
- Several participants were of the opinion that the international recommendations (at least 30 min of moderate intensity activities on 5 days per week) were too ambitious and therefore discouraging.
- The mastering of the techniques of motivational interviewing was deemed essential for physical activity counseling. The spreading of scientific and practical knowledge in this field was advocated.
- A practical suggestion was improved access to information about local physical activity offers for patients.

Prevalence, appreciation and credibility of physical activity counseling delivered by the general practitioner in Switzerland

Before detailed information on physical activity behaviour was available from the Swiss Health Survey (Meyer et al., 2005), the Swiss Federal Office of Sport carried out a series of surveys on health-enhancing physical activity, the so called HEPA surveys

(Martin, 2002). In the HEPA survey 2004, a random sub-sample of 811 individuals took part in a telephone interview on physical activity counseling in primary care. 28% of respondents, who had seen their general practitioner during the last 12 months, indicated that the latter had addressed their physical activity behaviour, and 19% reported that they had received advice on the issue. The physician addressing the topic of physical activity would be appreciated «much» or «rather» by 80% (the other options being «indifferently», «little» and «not at all»). «Great» or «moderate» importance would be attributed to physician's advice on the issue by 81% (the other options being «indifferent», «little» and «no importance at all»). Judging by these last two numbers, in our sub-sample the general practitioners had a leading position in the counseling of physically inactive people, ahead of physiotherapists, physical education teachers, fitness instructors and pharmacists.

A concept for physical activity counseling, including procedures and tools

The experiences mentioned above have resulted in the development of a concept for physical activity counseling in primary care. Two patients' booklets were created (one for middle-aged, one for elderly patients) as well as a physical activity counseling manual for the training of primary care physicians. The final versions of these elements will be available once the development and evaluation phases will be completed.

Following the expectations of general practitioners, a central characteristic of the approach is its flexibility. The algorithm presented in *figure 1* (taken from the physicians' training manual) distinguishes two possible entry points which can be chosen according to individual general practitioner's interests and preferences. Management of activity-related risks is an integral part of the approach (American College of Sport Medicine, 2007). This project was also designed to be integrated at a later stage into a multi-risk factors prevention concept for primary care practitioners.

Patients should not be discouraged by recommendations that might seem impossible to meet. Therefore it is emphasized that already small increases in physical activity behaviour can have important health effects in previously sedentary people. *Figure 2* (also appearing in the patients' booklets) uses a dose-response curve to illustrate this notion. In addition, a project has been carried out to provide a better documentation of the potential benefits of physical activity for quality of life (Bize et al., 2007b).

Another way to tackle the recommended levels of physical activity in a progressive manner consists of presenting a physical activity pyramid to the patients (*figure 3*, simplified extract from the patients' booklets). Each level of the pyramid can be seen as an objective by itself, the first level having been conceived in order to be achievable by the greatest number of patients.

Development of a training curriculum in physical activity counseling for primary care physicians

A half-day continuing education course is currently under development in order to accompany the future diffusion of the material (training manual for physicians and patients' booklets). This formation will proceed according to the following didactic sequence:

- Assessment of preconceptions and knowledge about physical activity
- Theoretical update on the health effects of physical activity
- Presentation of the material intended for the practice of counseling in physical activity
- Introduction to the motivational interviewing techniques, in particular using video sequences with a standardized patient
- Experimentation of the different intensity levels of physical activity, according to the principles developed in the courses «Allez hop!» (Martin et al., 2001)

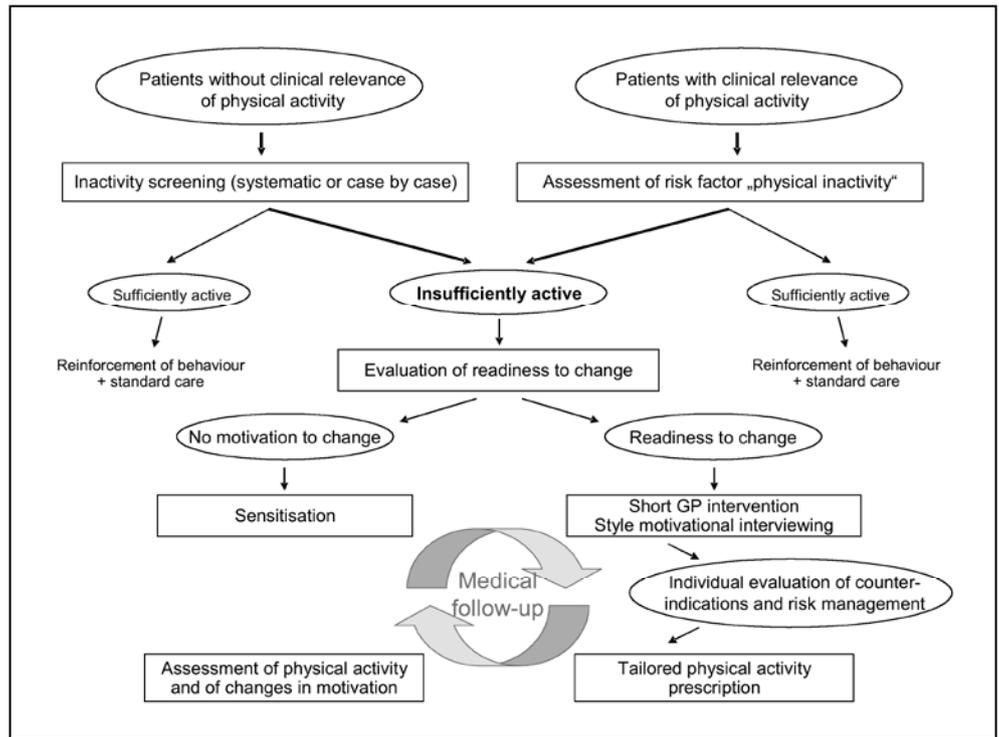


Figure 1: Flow-chart for physical activity counseling in sedentary patients

Initial evaluation of the concept and the booklets intended for the patients

Primary care physicians and patients were repeatedly consulted in order to guide the development of the material and the procedures. The detailed report of these development stages, as well as the provisional material in French and German are available on Internet at the following address: <http://www.hepa.ch/gf/hepa/khm/>.

In short, the following points arose from two «focus groups» with six experts per group, an interview with an expert, a questionnaire sent to general practitioners (14 completed questionnaires/17 sent), and another sent to patients (28 completed questionnaires/38 sent; Ceesay-Egli, personal communication):

Concerning the conception of physical activity counseling

The procedure suggested in figure 1 corresponded well to the practitioner’s expectations. The use of a questionnaire to screen for sedentary lifestyle was considered to be tedious for the daily practice. The use of a prescription form to recommend physical activity was perceived like an acceptable means to communicate the recommendations, even if that could raise expectations among patients in terms of refunding of the prescribed physical activities by health insurances. The doctors thought the financing of their counseling activities should be clarified. Practitioners also expressed the wish to see physical activity counseling integrated into a broader concept of prevention and health promotion in the primary care setting. It was indeed seen as a very specific topic, which could often be approached jointly with other aspects of prevention and health promotion.

Concerning the patients’ booklets

The booklets were very favorably evaluated by the general practitioners and the patients. The general impression was good, the realization and format were described as pleasant and appealing. The typography was quite readable, and wording was comprehensible. A diagram showing examples of physical activities, or testimonies could be used to reduce the text. Contrary to the doctors, the elderly patients found the attractiveness of the photographs limited, and wished that these images transported more of the pleasure of being

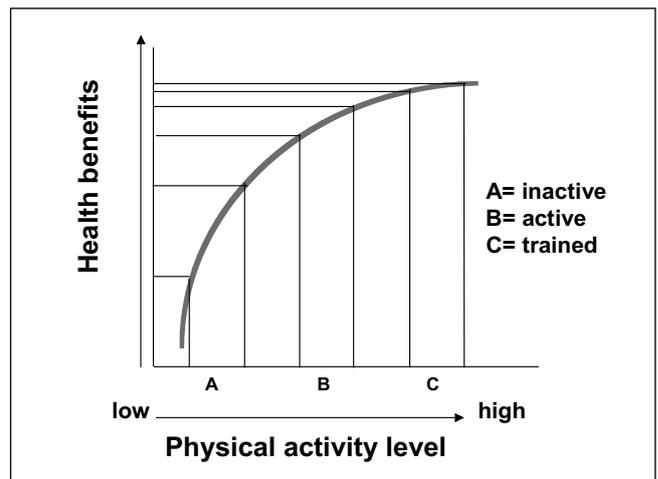


Figure 2: Dose-response relationship for physical activity and health (modified from Pate et al., 1995)

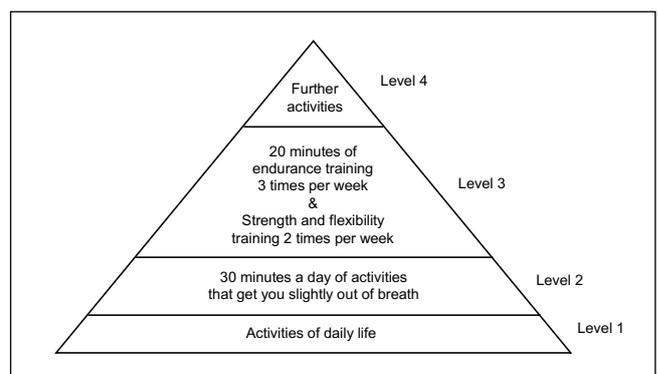


Figure 3: The physical activity pyramid

physically active. Practitioners suggested to merge the two age-specific booklets in one single document.

Testing of the procedure and material in the primary care practices

Nineteen physicians who participated in the continuing education seminar «Jeudi de la Vaudoise» agreed to test the material in their practices. The realization and evaluation of this stage were carried out by the canton of Vaud health promoting organization called «Les Ligues de la Santé». The majority of participating physicians estimated that the material modified the manner they counseled their patients.

In general, the following effects were stated:

- The introductory training course made physicians feel better qualified
- The training material promoted a more accurate evaluation of physical activity
- The counseling material facilitated the provision of structured advices
- The listing of the regional offers for the practice of moderate-intensity physical activity made counseling more concrete
- Notes in the patients charts encouraged follow-up

Remarks concerning the training manual for physicians

The physicians found that the handbook was of good quality, complete but bulky. No general practitioner could make use of it in its entirety because the trial period was too short for that. The majority of physicians considered that it was useful to study the handbook as a preparation but deplored the fact that it was impractical to use with the patient. On this subject, three of the physicians put forward the idea to create a document which would summarize the essential elements and could be used for illustration with the patients.

A translated version of the material is currently tested by a sample of German-speaking physicians. Once the suggested modifications will be incorporated, a study will evaluate the effectiveness and the costs of the suggested approach.

Summary

Many efforts have been invested at the international level in the study of the theoretical effectiveness of physical activity counseling in the primary care setting. Early evaluation of the applicability of the concept with primary care physicians seemed also of paramount importance.

The participation of representatives of the Swiss College of Primary Care Medicine in the development of the concept and the material was thus conceived from the beginning as indispensable for the successful integration of physical activity counseling in clinical practice.

The realities of patient encounters in the primary care setting impose a brief intervention (5-10 min), especially when the patient has other reasons than lack of physical activity to see the physician. In order to improve the effectiveness of counseling, physicians need to be provided with effective and practice-oriented material.

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