

Raphaël Bize<sup>a,b</sup>, Jacques Cornuz<sup>b</sup>, Brian Martin<sup>a</sup>

<sup>a</sup> Swiss Federal Office of Sport, Magglingen, Switzerland

<sup>b</sup> Department of Ambulatory Care and Community Medicine, University of Lausanne, Switzerland

# Opinions and Attitudes of a Sample of Swiss Physicians about Physical Activity Promotion in a Primary Care Setting

## Abstract

Little is known about the opinions, beliefs and behavior of Swiss physicians regarding physical activity (PA) promotion in a primary care setting. A qualitative study was performed with semi-structured interviews. We purposively recruited and interviewed 16 physicians in the French speaking part of Switzerland. Their statements and ideas regarding the promotion of PA in a primary care setting were transcribed and synthesized from the tape recorded interviews. The main findings are presented in the following by thematic categories:

- *Screening for sedentary lifestyle and counseling practices.* History regarding PA was consequently taken with new cases, but not in a systematic manner. Counseling was more likely to be delivered if other cardiovascular risk factors were present.
- *Counseling techniques and how to learn them.* Practical education on motivational interviewing techniques and on the use of topic-specific tools was advocated. According to some interviewees, more emphasis should be put on well-being as a motivational tool, rather than on disease prevention.
- *Barriers to counseling.* Lack of time, lack of reimbursement, lack of clear guidelines.
- *Interventions advocated by general practitioners for PA promotion in a primary care setting.* Screening for sedentary lifestyle, booklets accompanying physician counseling, patient orientation to structured PA programs or to specially trained counselors.
- *Effectiveness of counseling.* Most physicians described themselves as rather pessimistic in their perception of counseling effectiveness.

We conclude that in order to find wider acceptance in primary care settings, the conception of PA promotion should take into account physicians' barriers, and involve them in the development of a training curriculum.

### Key words:

Primary care; health promotion; physical activity; counseling

## Résumé

Les opinions, les représentations et les comportements des médecins suisses en matière de promotion de l'activité physique au cabinet médical restent largement méconnus en Suisse. Une étude qualitative a été réalisée au moyen d'entretiens semi-structurés. Nous avons intentionnellement recruté et interviewé 16 médecins en Suisse romande. Leurs opinions et attitudes concernant la promotion de l'activité physique au cabinet médical ont été transcrites et synthétisées à partir de l'enregistrement de ces entretiens. Les résultats principaux sont présentés ci-dessous par catégorie thématique:

- *Dépistage de la sédentarité et conseils en activité physique.* L'anamnèse concernant l'activité physique est régulièrement pratiquée avec les nouveaux cas, mais pas d'une façon systématique. Les conseils en activité physique sont plutôt délivrés si d'autres facteurs de risque cardiovasculaires sont présents.
- *Techniques et apprentissage du conseil en activité physique.* Une formation pratique aux techniques de l'entretien motivationnel et l'acquisition de compétences pour l'utilisation d'outils spécifiques au conseil en activité physique ont été préconisées. Alors que la prévention des maladies est souvent au premier plan, les effets de l'activité physique sur le bien-être devraient être davantage soulignés en tant qu'outil de motivation.
- *Barrières au conseil.* Manque de temps, manque de remboursement, manque de recommandations claires pour la pratique clinique.
- *Interventions préconisées par les médecins de premier recours pour la promotion de l'activité physique au cabinet médical.* Dépistage de la sédentarité, brochures d'information pour les patients, orientation des patients vers des programmes d'activité physique structurés ou vers des conseillers spécialisés.
- *Efficacité de la consultation.* La plupart des médecins se sont décrits comme plutôt pessimistes dans leur perception de l'efficacité du conseil en activité physique.

Nous concluons que pour trouver une acceptation plus large, le conseil en activité physique au cabinet médical devrait tenir compte des barrières décrites par les médecins, et intégrer ces derniers dans la conception du projet de formation.

### Mots clés:

Médecine de premier recours; promotion de la santé; activité physique; entretiens de conseil

## Introduction

Sedentary lifestyle has become more and more prevalent in Switzerland during the last decade, as shown by the successive «Swiss Health Surveys» [1]. In 2002, up to two thirds of Swiss people report they practice less physical activity (PA) than is minimally recommended [2, 3].

Sedentary lifestyle increases the risk to develop many diseases [4, 5]. It has been estimated that sedentary lifestyle is annually responsible for at least 1.4 millions of disease cases, 2000 deaths and 1.6 billions of Swiss francs of treatment costs [6].

Efficacy of primary care physicians in changing unhealthy lifestyle habits has already been demonstrated, particularly when they have been adequately trained [7]. With respect to PA promotion in a primary care setting, as many as 20 original papers [8–27] can be identified through 10 reviews of the literature [28–37]. There is some evidence that multi-sessions interventions might be effective, at least in the short term. PA promotion has however not been taken up by general practitioners on a wide scale.

As demonstrated by Eakin et al. [38] in a recent review, this reveals a gap in the existing literature, regarding the determinants of physicians' compliance toward PA counseling. This qualitative study aimed at better understanding the opinions, beliefs and behavior of Swiss physicians regarding physical activity promotion in a primary care setting.

## Methods

To favor the emergence of contrasted opinions, we used semi-structured interviews with an intentional sample of physicians from various age groups and training backgrounds, and with various individual PA behaviors. Additional physicians were recruited until saturation of data was reached.

Our final sample consisted of: 9 primary care physicians [GPs], 4 physicians primarily involved in activities related to preventive medicine [preventive physicians], and 3 physicians primarily involved in activities related to PA [PA physicians]. For a more detailed description of the sample, see *Table 1*. Interviews were conducted between October 2003 and January 2004.

Questions were established on the basis of the existing literature [8–38], and content validity was cross-checked by an expert in the field (BM). Participants were free to interpret questions in their own way. The role of the interviewer was limited to ask for precisions through reformulations. Interviews were tape-recorded, and detailed notes were taken. All interviews were carried out by one of the authors (RB), who is specialist in internal and preventive medicine.

## Data analysis

Thematic categories were identified by listening to the recorded interviews. Statements, ideas, and illustrative quotes were transcribed and grouped in a contingency table with thematic categories divided in columns and responders distributed in rows. New columns were generated in an iterative process until every theme was included in the synoptic table. For each theme, concordant ideas were summarized, and divergent opinions outlined. Emblematic quotes served to illustrate and document the process of data analysis.

## Results

Opinions and attitudes of participating physicians are presented below by thematic categories. Diverging opinions are described at the end of each section.

*Screening for sedentary lifestyle and counseling practices* – History regarding PA was consequently taken with new cases, but not in a systematic manner. Structured PA (e.g. any type of sport, fitness sessions) was more likely to be recorded as compared with everyday life PA (e.g. walking or biking to work, gardening). One GP said: «...it is under (the heading) <lifestyle> that I write: swimming, skiing, judo...». When collected, information about the duration, the frequency, and the intensity of the PA was frequently incomplete. Counseling was more likely to be delivered if other cardiovascular risk factors were present. Preventive physicians and PA physicians advocated a systematic screening for sedentary lifestyle. They furthermore anticipated that health promotion might soon become a priority task of primary care physicians.

	Mean age (range)	M/F	FMH Title	Occupation	Individual PA behavior		
					Sedentary	Active	Trained
<b>GPs (n=9)</b>	51 (41–64)	8/1	5 general medicine 4 internal medicine	5 private practitioners 4 private practitioners	5	2	2
<b>Preventive physicians (n=4)</b>	51 (41–76)	4/0	1 preventive medicine  3 internal medicine	1 retired director of a University Institute for Social and Preventive Medicine 1 director of an alcohol disorders clinic 1 director of a smoking cessation unit 1 senior researcher in a University Institute for Social and Preventive Medicine	0	4	0
<b>Physical activity physicians (n=3)</b>	45 (37–52)	2/1	1 internal medicine  1 cardiology  1 physiology	1 responsible for an obesity treatment program through physical activity 1 director of a cardiovascular rehabilitation center 1 director of a Sport and Movement Sciences Institute	0	3	0

M/F: Male/Female

FMH: Federation of the Swiss Physicians, responsible for specialization accreditation

PA: Physical activity

GPs: Primary care physicians

Preventive physicians:

Physicians primarily involved in activities related to preventive medicine

Physical activity physicians:

Physicians primarily involved in activities related to physical activity

*Table 1:* Description of responders

**Benefits of PA promotion** – Sedentary physicians were rather skeptical regarding the health benefits of PA except for well-being improvement. One GP said: «...if I start to move 30 min a day, by how much will I reduce my ten-year myocardial infarction risk? I never saw this (information). I even don't know if it does exist...». One preventive physician noted that some benefits of PA were ignored by practitioners: «...GPs are not always aware that PA promotion can be as effective as prescribing antidepressants...». The strong psychosocial component of PA and its neutral connotation was seen as an interesting way to build a good relationship with patients. One preventive physician said: «...the clinician's own behavior regarding PA is determinant for his counseling practice...».

**Counseling techniques and how to learn them** – Most physicians agreed to target an increase in the amount of everyday life PA. GPs however tended to describe the international recommendations (30 min of moderate intensity activity per day) as discouraging. More emphasis should be put on well-being as a motivational tool. One GP said: «...it's an enormous progress to have integrated the notion of walking instead of running, because there are a lot of people that could not run. They are encouraged by the idea of walking...». Stages of change of the trans-theoretical model, as well as motivational interviewing techniques were seen as relevant in this context by all participants except 1 PA physician who thought physicians should use a clearer language about sedentary lifestyle risks to motivate their patients. Sedentary physicians advocated consecrating more time (20–30 min) to PA counseling than their active counterparts (2–7 min).

**Practical needs** – Only a limited number of practical needs were reported. Guidelines and algorithms for a tailored approach to PA promotion, chart reminders and collections of all available regional resources for PA practice were the main ones.

**Barriers to counseling** – About half of the physicians thought there were few barriers. The other half mentioned as the most important ones: lack of time, competition between the different topics of health promotion and preventive medicine, lack of reimbursement, lack of clear guidelines, lack of knowledge about downstream structures, lack of structural support to facilitate behavioral changes in patients (architectural and in town planning), or physician's fear to be perceived as a «health moralist». One physician said: «...I think that having a sedentary lifestyle can make people feel really guilty...». Another one claimed that: «...we know there are people with whom it [PA promotion] won't work...». Preventive physicians and PA physicians were almost unanimous to incriminate as the main barrier physicians' lack of knowledge in PA (PA physicians) or lack of skill in counseling and motivational interviewing (preventive physicians). While he was discussing the issue of competing agendas, one GP said: «...according to what patients bring me, I tend to become less systematic. I have to deal with intermediate complaints...». A mainly curative rather than salutogenetic medical culture was also cited as a barrier. Many physicians also stated that reimbursement should be more specifically linked to health promotion counseling rather than to the more generic label of «consultation time» as it is now.

**Other settings for PA promotion** – Almost all physicians said PA promotion should not be limited to primary care setting. More visibility was advocated, for example through advertisements campaigns or institutional promotion (at workplaces, in schools, in communities...). One GP said: «...School is the right place to learn how to become regularly active...».

**Interventions advocated by GPs for PA promotion in a primary care setting** – Except 1 physician who advised against complexity, a diversified approach was thought to be useful, with the following favored axes: systematic screening for sedentary lifestyle in the waiting room, tailored motivational materials that accompany physician's counseling and patient's orientation to structured offers. Effectiveness of computer-based systems to promote PA was thought to be limited to young people, especially with large diffusion channels such as school or training workplaces.

**Delegation of counseling to specifically educated counselors** – Many physicians felt patients often prefer not to receive care from

too many different professionals. One GP said: «...I have less than 10% of the people to whom I propose to go to a nutritionist that do it, and I find it easier to recommend a nutritionist to them for their cholesterol than a sport specialist for walking...».

**Effectiveness of counseling** – Most GPs described themselves as rather pessimistic in their perception of counseling effectiveness. Most of them thought that no more than 10% of the counseled patients would initiate a regular scheme of PA. 2 preventive physicians mentioned however that these estimations compared well with the «number needed to treat» of common diseases.

## Discussion

The importance of PA for health was generally well accepted by the interviewed physicians, even if benefits were better recognized by those who were themselves more physically active. Assessing PA seemed to be widely done with new patients, but not in a standardized manner. Many participants advocated for a wide definition of health-enhancing PA, in order to avoid confronting patients with too high expectations. They also called for a multi-dimensional approach to health promotion, including other behaviors than PA.

Cited barriers to counseling included lack of time, lack of reimbursement, lack of skill and knowledge, and the fear to be perceived by patients as having a moralistic attitude. According to Booth et al. [39], this fear might be unsubstantiated. Similar barriers were found in comparable studies [38, 40]. Interestingly, contrasted opinions emerged on the perceived effectiveness of counseling for PA. Preventive physicians qualified a 10% increase in the number of physically active patients as a good result whereas GPs tended to find similar rates discouraging. More definitive evidence on the effectiveness of PA counseling in a primary care setting is certainly needed in order to gain wider acceptance.

Our findings need to be interpreted in the light of some methodological limitations. Training similarities between responders and the interviewer may have limited the emergence of original thoughts. We anticipated this disadvantage would be partially compensated by the resulting trustful atmosphere. Data extraction was conducted by 1 author. Results would have gained validity if 2 independent readings had led to the same conclusions.

This study confirms that time-efficient approaches, knowledge, skills, and the feeling of being effective might be crucial components for a wider acceptance of PA counseling by primary care physicians. To address these points, further efforts in collaboration between GPs and public health specialists will be necessary.

## Acknowledgements

The authors would like to thank the 16 participating physicians for the time they voluntarily consecrated to the realization of this study, and for their invaluable inputs.

Address for correspondence:

Raphaël Bize, MD, MPH, Department of Ambulatory Care and Community Medicine, University of Lausanne, Bugnon 44, CH-1011 Lausanne, Switzerland, Phone: +41 (0)21 314 60 63, Fax: +41 (0)21 314 48 93, E-mail: raphael.bize@hospvd.ch

## References

- 1 Martin B.W., Mäder U., Calmonte R. (1999): Représentations, connaissances et attitudes de la population suisse concernant l'activité physique: Résultats de l'enquête sur l'exercice physique. Schweiz. Ztschr. Sportmed. Sporttraum. 47: 165–169.
- 2 Martin B.W., Lamprecht M., Calmonte R., Raeber P.A., Marti B. (2000): Taux d'activité physique de la population suisse: niveaux et effets sur l'état de santé. Prise de position scientifique rédigée en commun et publiée par les partenaires suivants: Office fédéral du sport (OFSP), Office fédéral de la santé publique (OFSP), Office fédéral de

- la statistique (OFS), Réseau santé et activité physique. *Schweiz. Ztschr. Sportmed. Sporttraum.* 48: 161–162.
- 3 Pate R.R., Pratt M., Blair S.N., Haskell W.L., Macera C.A., Bouchard C., Buchner D., Ettinger W., Heath G.W., King A.C. (1995): Physical activity and public health. A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine. *J. Am. Med. Assoc.* 273: 402–407.
  - 4 Morrow J.R., Jr, Jackson A.W., Bazzarre T.L., Milne D., Blair S.N. (1999): A one-year follow-up to physical activity and health. A report of the Surgeon General. *Am. J. Prev. Med.* 17: 24–30.
  - 5 U.S. Department of Health and Human Services (1996): Physical Activity and Health: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. <http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf>
  - 6 Martin B.W., Beeler I., Szucs T., Smala A.M., Brügger O., Casparis C. (2001): Répercussions économiques du rapport entre santé et activité physique: premières estimations pour la Suisse. *Schweiz. Ztschr. Sportmed. Sporttraum.* 49: 87–89.
  - 7 Cornuz J., Humair J.P., Seematter L., Stoianov R., van Melle G., Stalder H., Pecoud A. (2002): Efficacy of resident training in smoking cessation: a randomized, controlled trial of a program based on application of behavioral theory and practice with standardized patients. *Ann. Intern. Med.* 136: 429–437.
  - 8 Bull F.C., Jamrozik K. (1998): Advice on exercise from a family physician can help sedentary patients to become active. *Am. J. Prev. Med.* 15: 85–94.
  - 9 Burton L.C., Paglia M.J., German P.S., Shapiro S., Damiano A.M. (1995): The effect among older persons of a general preventive visit on three health behaviors: smoking, excessive alcohol drinking, and sedentary lifestyle. *Prev. Med.* 24: 492–497.
  - 10 Calfas K.J., Long B.J., Sallis J.F., Wooten W.J., Pratt M., Patrick K. (1996): A controlled trial of physician counseling to promote the adoption of physical activity. *Prev. Med.* 25: 225–233.
  - 11 Dowell A.C., Ochera J.J., Hilton S.R., Bland J.M., Harris T., Jones D.R., Katbamma S. (1996): Prevention in practice: results of a 2-year follow-up of routine health promotion interventions in general practice. *Fam. Pract.* 13: 357–362.
  - 12 Elder J.P., Williams S.J., Drew J.A., Wright B.L., Boulan T.E. (1995): Longitudinal effects of preventive services on health behaviors among an elderly cohort. *Am. J. Prev. Med.* 11: 354–359.
  - 13 Elley C.R., Kerse N., Arroll B., Robinson E. (2003): Effectiveness of counselling patients on physical activity in general practice: cluster randomised controlled trial. *Br. Med. J.* 326: 793.
  - 14 Goldstein M.G., Whitlock E.P., DePue J., and the Planning Committee of the Addressing Multiple Behavioral Risk Factors in Primary Care Project (2004): Multiple behavioral risk factor interventions in primary care. *Am. J. Prev. Med.* 27 (Suppl. 2): 61–79.
  - 15 Graham-Clarke P., Oldenburg B. (1994): The effectiveness of a general practice-based physical activity intervention on patient physical activity status. *Behav. Change* 11: 132–144.
  - 16 Hillsdon M., Thorogood M., White I., Foster C. (2002): Advising people to take more exercise is ineffective: a randomized controlled trial of physical activity promotion in primary care. *Int. J. Epidemiol.* 31: 808–815.
  - 17 Jimmy G., Martin B.W. (2005): Implementation and effectiveness of a primary care based physical activity counselling scheme. *Patient Educ. Couns.* 56: 323–331.
  - 18 Kelly R.B. (1988): Controlled trial of a time-efficient method of health promotion. *Am. J. Prev. Med.* 4: 200–207.
  - 19 Lewis B.S., Lynch W.D. (1993): The effect of physician advice on exercise behavior. *Prev. Med.* 22: 110–121.
  - 20 Logsdon D.N., Lazaro C.M., Meier R.V. (1989): The feasibility of behavioral risk reduction in primary medical care. *Am. J. Prev. Med.* 5: 249–256.
  - 21 Marcus B.H., Goldstein M.G., Jette A., Simkin-Silverman L., Pinto B.M., Milan F., Washburn R., Smith K., Rakowski W., Dube C.E. (1997): Training physicians to conduct physical activity counseling. *Prev. Med.* 26: 382–388.
  - 22 OXCHECK Study Group (1994): Effectiveness of health checks conducted by nurses in primary care: results of the OXCHECK study after one year. *Br. Med. J.* 308: 308–312.
  - 23 Reid E.L., Morgan R.W. (1979): Exercise prescription: a clinical trial. *Am. J. Public Health* 69: 591–595.
  - 24 Schultz S.J. (1993): Educational and behavioral strategies related to knowledge of and participation in an exercise program after cardiac positron emission tomography. *Patient Educ. Couns.* 22: 47–57.
  - 25 Stevens W., Hillsdon M., Thorogood M., McArdle D. (1998): Cost-effectiveness of a primary care based physical activity intervention in 45–74 year old men and women: a randomised controlled trial. *Br. J. Sports Med.* 32: 236–241.
  - 26 Swinburn B.A., Walter L.G., Arroll B., Tilyard M.W., Russell D.G. (1998): The green prescription study: a randomized controlled trial of written exercise advice provided by general practitioners. *Am. J. Public Health* 88: 288–291.
  - 27 Writing Group for the Activity Counseling Trial Research Group (2001): Effects of physical activity counseling in primary care: the Activity Counseling Trial: a randomized controlled trial. *J. Am. Med. Assoc.* 286: 677–687.
  - 28 Ashenden R., Silagy C., Weller D. (1997): A systematic review of the effectiveness of promoting lifestyle change in general practice. *Fam. Pract.* 14: 160–176.
  - 29 Eakin E.G., Glasgow R.E., Riley K.M. (2000): Review of primary care-based physical activity intervention studies: effectiveness and implications for practice and future research. *J. Fam. Pract.* 49: 158–168.
  - 30 Eaton C.B., Menard L.M. (1998): A systematic review of physical activity promotion in primary care office settings. *Br. J. Sports Med.* 32: 11–16.
  - 31 Eden K.B., Orleans C.T., Mulrow C.D., Pender N.J., Teutsch S.M. (2002): Does counseling by clinicians improve physical activity? A summary of the evidence for the U.S. Preventive Services Task Force. *Ann. Intern. Med.* 137: 208–215.
  - 32 Hillsdon M., Thorogood M. (1996): A systematic review of physical activity promotion strategies. *Br. J. Sports Med.* 30: 84–89.
  - 33 Lawlor D.A., Hanratty B. (2001): The effect of physical activity advice given in routine primary care consultations: a systematic review. *J. Public Health Med.* 23: 219–226.
  - 34 Petrella R.J., Lattanzio C.N. (2002): Does counseling help patients get active? Systematic review of the literature. *Can. Fam. Phys.* 48: 72–80.
  - 35 Riddoch C.J., Puig-Ribera A., Cooper A. (1998): The effectiveness of physical activity promotion schemes in primary care: a systematic review. London: Health Education Authority. <http://www.nice.org.uk/page.aspx?o=502255>
  - 36 Simons-Morton D.G., Calfas K.J., Oldenburg B., Burton N.W. (1998): Effects of interventions in health care settings on physical activity or cardiorespiratory fitness. *Am. J. Prev. Med.* 15: 413–430.
  - 37 Smith B.J., Merom D., Harris P., Bauman A. (2002): Do primary care interventions to promote physical activity work? Melbourne, Australia: The National Institute of Clinical Studies. [http://www.cpah.health.usyd.edu.au/pdfs/2003\\_primary\\_care\\_interventions.pdf](http://www.cpah.health.usyd.edu.au/pdfs/2003_primary_care_interventions.pdf)
  - 38 Eakin G.E., Smith B.J., Bauman A.E. (2005): Evaluating the population impact of physical activity interventions in primary care – Are we asking the right questions? *J. Phys. Act. Health.* 2: 197–215.
  - 39 Booth M.L., Bauman A., Owen N., Gore C.J. (1997): Physical activity preferences, preferred sources of assistance, and perceived barriers to increased activity among physically inactive Australians. *Prev. Med.* 26: 131–137.
  - 40 Kennedy M.F., Meeuwisse W.H. (2003): Exercise counselling by family physicians in Canada. *Prev. Med.* 37: 226–232.