Physical activity promotion in the health care setting in Switzerland

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Summary

The role of regular physical activity for population health has been clearly documented. Improvements in population levels of physical activity require long-term implementation of a combination of measures, including the evidence based approaches described in the "seven best investments for physical activity" (www.globalpa.org.uk): whole-of-school programmes, transport, urban planning, integration of physical activity promotion into primary health care systems, public education, community-wide programmes, sport for all. The health care setting has a particular role in this context, particularly in its access to physically inactive individuals. Switzerland has seen a number of successful research projects in this field, but there has been no wide adaptation of these approaches in the medical community. In recent years, a group of institutions including the Swiss College of Primary Care Medicine, the Policlinique Médicale Universitaire in Lausanne, the Ligue Vaudoise contre les Maladies Cardiovasculaires and the Institute of Social and Preventive Medicine of the University of Zurich have therefore focussed on the development of a physical activity counselling approach based on international evidence as well as on established tools, but streamlined to the specific demands of primary health care providers in Switzerland. PAPRICA (Physical Activity Promotion in Primary Care, www.paprica.ch) has been the result of these developments, and nearly 300 health professionals, most of them primary care physicians, have been successfully trained so far. PAPRICA is implemented together with the Swiss Society for Sports Medicine and a number of regional partners. The development of a national programme structure is currently under preparation. This will allow Switzerland to explore and better use the potential of physicians and other health professionals in the promotion of physical activity and in the fight against non-communicable diseases.

Keywords: physical activity, healthcare, counselling, chronic disease, prevention, Switzerland

Zusammenfassung

Die Rolle von regelmässiger Bewegung für die Gesundheit ist gut dokumentiert. Verbesserungen im Bewegungsverhalten auf Bevölkerungsebene können nur erreicht werden durch die langfristige Umsetzung einer Kombination von Ansätzen, die sich an den von der internationalen Gesellschaft für Bewegung und Gesundheit empfohlenen «sieben besonders erfolgsversprechenden Bewegungsförderungsmassnahmen» orientieren: Schule, Transport, Städteplanung, medizinische Grundversorgung, Öffentlichkeitsarbeit, Gemeinde- und Gemeinschaftsprogramme, Breitensport. Die medizinische Grundversorgung hat dabei eine spezielle Bedeutung, besonders im Hinblick auf den Zugang zu körperlich Inaktiven. In der Schweiz gab es eine Reihe von erfolgreichen Projekten zur Bewegungsförderung in der Arztpraxis, keines wurde aber von der Ärzteschaft breit aufgenommen. Eine Reihe von Institutionen, darunter das Schweizerische Kollegium für Hausartzmedizin, die Policlinique Médicale Universitaire in Lausanne, die Ligue Vaudoise contre les Maladies Cardiovasculaires and das Institut für Sozial- und Präventivmedizin der Universität Zürich haben deshalb die Entwicklung eines Ansatzes zur Bewegungsberatung in Angriff genommen, der auf internationalen wissenschaftlichen Erkenntnissen und bewährten Instrumenten beruht, gleichzeitig aber auf die Bedürfnisse der medizinischen Grundversorgung in der Schweiz ausgerichtet ist. PAPRICA (Physical Activity Promotion in Primary Care, www.paprica.ch) wird gemeinsam mit der Schweizerischen Gesellschaft für Sportmedizin und regionalen Umsetzungspartnern angeboten; nahezu 300 Ärztinnen und Ärzte, die meisten von ihnen Grundversorger, sind inzwischen ausgebildet worden. Zur Zeit wird eine nationale Programmstruktur für PAPRICA vorbereitet. Diese soll es erlauben, in der Schweiz das Potential der Ärzteschaft und der anderen Gesundheitsberufe in der Bewegungsförderung und im Kampf gegen die nicht-übertragbaren Krankheiten noch besser zu nutzen.

Schlüsselwörter: Physical activity, healthcare, counselling, chronic disease, prevention, Switzerland

Recommendations and levels of physical activity

The importance of physical activity for population health is well documented, and at the global level, the impact of physical inactivity is deemed to be comparable to the one of smoking or overweight (Lee et al., 2012). Recent health policy documents at the global and the European level recognise the role of physical activity promotion in the fight against non-communicable diseases, the World Health Organisation WHO has begun with the development of a European Physical Activity Strategy in 2014 (Martin-Diener et al., 2014).

The "Core Document Health-Enhancing Physical Activity" for Switzerland is available in English, German, French and Italian. Its latest edition (FOSPO et al, 2013) follows the structure of the earlier versions of the same document (Martin-Diener et Martin, 2009), but it contains updated information on the health effects of physical activity, on the levels of physical activity in the Swiss population and on the principles of physical activity promotion. For these aspects, the document relies on the Toronto Charter for Physical Activitgy Promotion (GAPA 2010) and on the "seven best investments for physical promotion" (GAPA 2011), both developed by the Global Advocacy Council for Physical Activity of the International Society for Physical Activity and Health (ISPAH). An important element of the document are also the national recommendations for health-enhancing physical activity issued in 2013 which have replaced the existing ones for adults from 1999 as well the ones for children and adolescents from 2006 (Martin et al, 2009). Additionally, there is now also a version covering specifically the age group of the elderly adults. They all are based on the first ever Global Recommendations on Physical Activity for Health issued by WHO in 2010 (WHO 2010) and have been developed in a consultative process suggested by international experts (Oja et al, 2010) and based on a comparison with other national and international documents (Kahlmeier et al., 2012). The most important difference between the 1999 and the 2013 minimal recommendations for adults is that they can be met not only by "half an hour a day on most days of the week" of moderate intensity activities, but also by other accumulations of 2 ½ hours per week or by any combination of moderate and vigorous intensity activities, using a "conversion factor" of 2 for the latter.

Switzerland still does not have any nationally representative physical activity data for adults based on internationally validated questionnaires (Martin et al., 2009), but according to the first results of the Swiss Health Survey 2012 (BFS 2012) 72% of Swiss adults report meeting the new minimal recommendations described above, an increase of 10% compared to 2002 *(figure 1)*. With respect to the stricter 2006 recommendations, the prevalence of inactivity was higher (Martin et al. 2009). The prevalence of adolescents meeting the respective one hour daily recommendations (FOSPO et al, 2013, WHO 2010) continues to be based on the Health Behaviour in School Children (HBSC) survey; it remained stable between 12% and 13% from 2002 to 2010 (Currie et al, 2012, figure 1).

Primary care in the context of other approaches to physical activity promotion

The scientific literature (Heath et al, 2012) and institutional recommendations (Bellew et al., 2011) have identified a whole range of effective approaches to physical activity promotion at the population level. They are summed up in the "seven best investments for physical activity" (GAPA 2011): whole-of-school programmes, transport, urban planning, integration of physical activity promotion into primary health care systems, public education, community-wide programmes, sport for all. Within this context, the health care system has a specific role because it provides access to individuals who are very difficult to reach for other approaches of physical activity promotion and because it can make use of established structures and procedures. Already in 2004, a representative survey showed that 80% of Swiss adults would appreciate it if their family physicians addressed their physical activity behaviour and for 81% of them their physician's advice on this topic was important (Bize et al., 2008). The respective numbers for physical therapists were 76% and 78% respectively, those for licensed pharmacists 40% and 32% (Martin et al., 2013). Good health care as such can also be an important prerequisite for physical activity behaviour, as health status has been shown consistently to be a correlate or even determinant of physical activity in adults (Bauman et al, 2012). A whole number of systematic reviews have shown the effectiveness of physical activity counselling in primary care (Orrow et al, 2012, Campbell et al, 2012) and of short counselling interventions in particular (Garrett et al., 2011, Anokye et al, 2014). The role of physicians has been well studied (Lin et al, 2010); the role of other health professionals is less clear (Tulloch et al, 2006).

The PAPRICA approach

Approaches to physical activity promotion in primary care have also been developed in Switzerland, with documentation of effectiveness for some of them. However, none of them has been widely adopted by the medical community (Bize et al., 2008). Therefore PAPRICA (Physical Activity Promotion in PRImary Care) has been developed in a multi-year and multi-partner process including the Swiss College for Primary Care Medicine, the Policlinique Médicale Universitaire in Lausanne, the Ligue Vaudoise contre les Maladies Cardiovasculaires and the Institute of Social and Preventive Medicine of the University of Zurich (Schmid et al., 2009). PAPRICA is based on international evidence as well as on established approaches and tools, but it is streamlined to the specific demands of primary care practices and has been successfully tested in both the French speaking and the German speaking part of Switzerland (Martin et al., 2013). PAPRICA's central element are short physical activity counselling interventions delivered by primary care physicians (figure 2). It offers targeted continuing education programmes, using the Thursday afternoon format established in Switzerland. These training sessions provide background knowledge, hands-on experience and counselling skills based on the motivational interviewing technique which has been successfully introduced also for other aspects of prevention and health promotion in primary care (Neuner-Jehle et al., 2009). PAPRICA uses a manual for physicians, a brochure for patients and additional counselling support. Physical activity promotion in primary care is most successful when general counselling and strategies for behavioural change can link up with local opportunities and offers for physical activity. Cooperation is also of interest for local providers of health promotion and physical activity promotion, as it enables them to extend their reach *(figure 2)*.

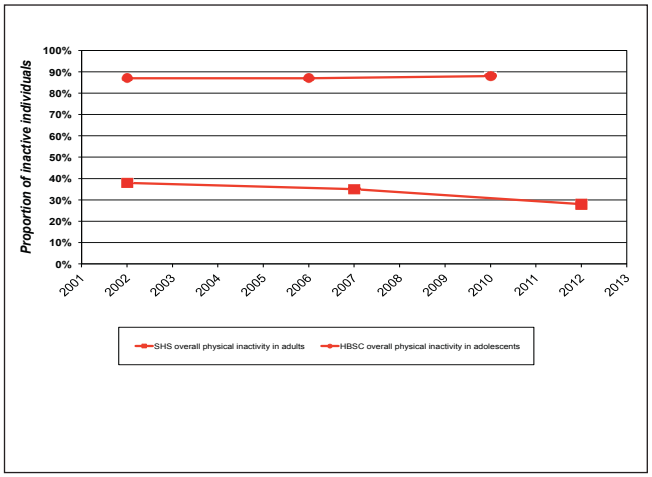

Figure 1: Best available population estimates for overall physical inactivity in Switzerland. The Swiss Health Survey (SHS) has measured leisure time physical activity in adults since 1992, from 2002 on including also data on moderate intensity activities. The proportion of adults not meeting the 2013 minimal physical activity recommendations was 38% in 2002, 35% in 2007 and 28% in 2012 (BFS 2013). According to the Health Behaviour in School-Aged Children Survey (HBSC), 87% of 11 to 15 year old adolescents did not meet the minimal recommendations of one hour of physical activity every day in 2002 and 2006, 88% in 2010 (Currie et al, 2012). Details and limitations of the methodology are described elsewhere (Martin et al., 2009).

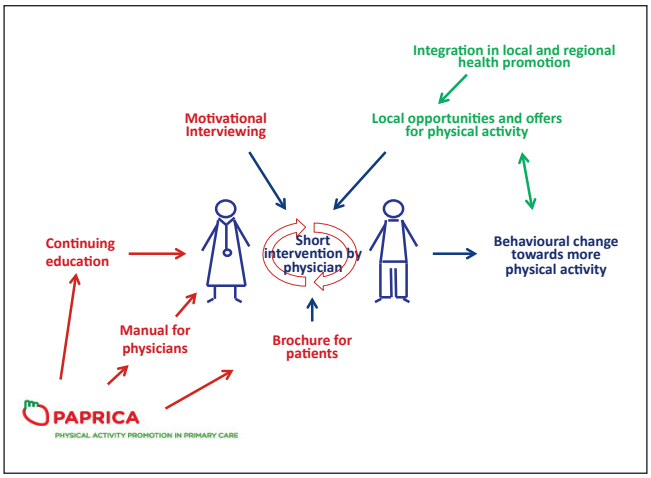

Figure 2: Principle of the PAPRICA (Physical Activity Promotion in PRImary Care) approach developed in Switzerland. Primary care physicians are trained in short counselling interventions using Motivational Interviewing techniques. They are provided with background information and communication material. Regional health promotion institutions provide information on possibilities and offers for physical activity in order to facilitate behavioural change. The website www.paprica.ch is currently available in French and in German.

Since 2009 PAPRICA is implemented in the French speaking canton of Vaud. In collaboration with the move>med Swiss Olympic Medical Center at the Balgrist University Hospital in Zurich, the training module has been adapted for the German speaking part of Switzerland. The Swiss Congress for Sports Medicine in 2012 was the national launch of PAPRICA, since then continuing education sessions are offered together with the Swiss Society for Sports Medicine (SSSM) and regional partners in a growing number of cantons. Since 2013, PAPRICA has also been integrated into the curriculum for the Certificate in Sports Medicine of the SSSM. Nearly 300 health professionals, most of them primary care physicians, have been successfully trained so far. In early 2012, an evaluation questionnaire was sent to 204 physicians trained in the French speaking part of Switzerland until then. Participation was 44% and results showed that physicians spent on average 5 minutes for the counselling intervention with their patients as originally intended, and that they rated their respective knowledge and skills as far better than before they had attended the training (Koutaissoff et al., 2012).

There have been some attempts to offer training in physical activity counselling to other professional groups in Switzerland as well. In the years 2004 to 2006, a continuing education programme using a combination of e-learning and a workshop was offered to health professionals as well as PE teachers and sport scientist. The majority of the 49 participants were physical therapists (Padlina et al, 2009). The training was rated very positively in the short term as well as in a follow-up survey in early 2006. However, it was not possible to establish funding mechanisms for the counselling activities, so training was discontinued (Martin et al., 2103).

Current developments in Switzerland

Further progress in the fight against physical inactivity will depend on a combination of measures at different levels. The PAPRICA approach has the potential to reach individuals less amenable to other measures of physical activity promotion. Projects for its use in cardiac patients and in paediatric patients are currently underway. So are preparations for research projects and the integration of PAPRICA in the training of medical students. A pilot project is planned in the canton of Ticino, where PAPRICA will be used in the Italian language for the first time and where the potential for further synergies with the "Health Coaching" approach for multidimensional behavioural counselling of the Swiss College for Primary Care Medicine (Neuner-Jehle et al., 2013) will be explored. International exchange will remain a key element for future developments (Martin 2014).

PAPRICA has not had any national level funding for its implementation so far, but currently the development of a national programme structure is underway with support from the Federal Office of Public Health and the Swiss Cancer League. Such a structure and a dedicated budget will allow Switzerland to explore and better use the potential of physicians and other health professionals in the promotion of physical activity and in the fight against non-communicable diseases.

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References

Anokye N.K., Lord J., Fox-Rushby J. (2014): Is brief advice in primary care a cost-effective way to promote physical activity? Br. J. Sports Med. 48 (3): 202–206.

Bauman A., Reis R., Sallis J.F., Wells J., Loos R., Martin B.W., for the Lancet Physical Activity Series Working Group (2012): Physical Activity 2 – Why are some people physically active and others not? Understanding the correlates of physical activity. Lancet 380 (9838): 294–305.

Bellew B., Bauman A., Martin B.W., Bull B., Matsudo V. (2011): Public Policy Actions Needed to Promote Physical Activity. Current Cardiovascular Risk Reports doi: 10.1007/s12170-011-0180-6.

BFS (2013): Schweizerische Gesundheitsbefragung 2012 Übersicht (Leporello). Bundesamt für Statistik BFS, Neuchâtel.

Bize R., Surbeck R., Padlina O., Peduzzi F., Cornuz J., Martin B. (2008): Promotion of physical activity in the primary care setting: The situation in Switzerland. Schweiz. Z. Sportmed. Sporttraumatol. 56 (3): 112–116.

Campbell F., Blank L., Messina J., Day M., Buckley Woods H., Payne N., Goyder E., Armitage C. (2012): Physical activity: Brief advice for adults in primary care (National Institute for Health and Clinical Excellence Public Health Intervention Guidance). NICE, London.

Currie C., Zanotti C., Morgan A., Currie D., de Looze M., Roberst C., Samdal O., Smith O.R.F., Barnekow V. (eds.) (2012) : Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey. WHO Regional Office for Europe, Copenhagen (Health Policy for Children and Adolescents, No. 6).

FOSPO, Federal Office of Public Health FOPH, Health Promotion Switzerland, bfu – Swiss Council for Accident Prevention, Swiss Accident Insurance Fund (Suva), Health and Physical Activity Network Switzerland (2013): Health-Enhancing Physical Activity. Core document for Switzerland. Federal Office of Sport FOSPO, Magglingen.

GAPA (2010): The Toronto Charter for Physical Activity: A Global Call to Action. Global Advocacy Council for Physical Activity GAPA, International Society for Physical Activity and Health ISPAH (www.globalpa.org.uk).

GAPA (2011): Non communicable disease prevention: Investments that work for physical activity. Global Advocacy Council for Physical Activity GAPA, International Society for Physical Activity and Health ISPAH (www.globalpa.org.uk).

Garrett S., Elley C.R., Rose S.B., O›Dea D., Lawton B.A., Dowell A.C. (2011): Are physical activity interventions in primary care and the community cost-effective? A systematic review of the evidence. Br. J. Gen. Pract. 61 (584): e125–133.

Heath G.W., Parra D.C., Sarmiento O.L., Andersen L.B., Owen N., Goenka S., Montes F., Brownson R.C. (2012): Evidence-based intervention in physical activity: lessons from around the world. Lancet 380 (9838): 272–281.

Kahlmeier S., Alpiger P., Martin B. (2012): National recommendations for health-enhancing physical activity: the situation for Switzerland in 2011 and options for further developments. Schweiz Z Sportmed Sporttraumat 60 (3): 96–101.

Koutaissoff D., Jeannin A., Dubois-Arber F. (2012) : Evaluation de la formation PAPRICA (Physical Activity promotion in PRImary CAre). Institut universitaire de médecine sociale et préventive, Lausanne (Raisons de santé, 200).

Lee I.-M., Shiroma E.J., Lobelo F., Puska P., Blair S.N., Katzmarzyk P.T., for the Lancet Physical Activity Series Working Group (2012): Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet 380 (9838): 219–29.

Lin J.S., O›Connor E., Whitlock E.P., Beil T.L. (2010): Behavioral counseling to promote physical activity and a healthful diet to prevent cardiovascular disease in adults: a systematic review for the U.S. Preventive Services Task Force. Ann. Intern. Med. 2010 153 (11): 736–50.

Martin B., Padlina O., Martin E., Bize R., Cornuz J., Kahlmeier S. (2013): Bewegungsförderung 2013/Promotion de l'activité physique 2013. Physioactive (5): 21–27.

Martin B.W. (2014): Health-enhancing physical activity in Europe and in Switzerland: the health care setting and beyond. Schweiz. Z. Sportmed. Sporttraumatol. 62 (2): 5–6.

Martin B.W., Mäder U., Stamm H.P., Braun-Fahrländer C. (2009): Physical activity and health – what are the recommendations and where do we find the Swiss population? Schweiz Z Sportmed Sporttraumatol 57 (2): 37–43.

Martin-Diener E, Martin BW (2009): Two base documents for Switzerland: "Health-Enhancing Physical Activity" and "Muscle-Powered Mobility". Schweiz Z Sportmed Sporttraumatol 57 (2): 44–47.

Martin-Diener E,. Kahlmeier S., Vuillemin A., van Mechelen W., Vasankari T., Racioppi F., Martin B. W. (2014): 10 years of HEPA Europe: what made it possible and what is the way into the future? Schweiz. Z. Sportmed. Sporttraumatol. 62 (2): 6–12.

Neuner-Jehle S., Schmid M., Grüninger U. (2013): The «Health Coaching» programme: a new patient-centred and visually supported approach for health behaviour change in primary care. BMC Fam. Pract. 4: 100.

Orrow G., Kinmonth A.L., Sanderson S., Sutton S. (2012): Effectiveness of physical activity promotion based in primary care: systematic review and meta-analysis of randomised controlled trials. Brit Med. J. 344: e1389. doi: 10.1136/bmj.e1389.

Padlina O., Jimmy G., Martin B.W. (2009): Acceptance of an Internet-based programme to train physical activity counsellors during the development phase and in regular use. Schweiz. Z. Sportmed. Sporttraumatol. 57 (2): 65–68.

Schmid M., Egli K., Martin B.W., Bauer G. (2009): Health promotion in primary care: evaluation of a systematic procedure and stage specific information for physical activity counselling. Swiss Med. Wkly 139 (45–46): 665–671.

Tulloch H., Fortier M., Hogg W. (2006): Physical activity counseling in primary care: who has and who should be counseling? Patient Educ. Couns. 64 (1–3): 6–20.