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Promoting physical activity globally

GAPA
GLOBAL ALLIANCE FOR PHYSICAL ACTIVITY

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Marie-Claude Lamarre and Michael Pratt

Physical activity and health promotion

The ideas expressed in this article are those of the authors and do not represent any official position of the US Centers for Disease Control and Prevention (CDC) or the International Union for Health Promotion and Education (IUHPE.)

"Mens sana in corpore sano"... The adage is indeed not new. Attributed to Montaigne, the famous French writer from the XVIth century, it is in fact deeply rooted in the Antic Greek civilisation which has forever promoted physical activity and sport as an instrument of human development and peace. At this time health was already conceived as an art of living, a positive effort, a permanent tension towards harmony between the human being and his environment. Olympic Games were revived at the end of the 19th century, envisioned as a vehicle to promote the physical, intellectual and spiritual growth of participants through sport, promoting friendship, peace and understanding throughout the world.

The modern conception of physical activity in all its forms integrates these values as well, and can be fully understood only when it is placed within the context of broader developments of health promotion which call on strategies aimed at creating supportive environments for physical activity and health and well-being. Admittedly, "physical activity is a key determinant of energy expenditure, and thus is fundamental to energy balance and weight control. However, physical activity also reduces risk for cardiovascular diseases, breast and colon cancers and diabetes and has substantial benefits for many conditions, not only those associated with obesity" (WHO, 2002). But it goes far beyond that. Physical activity is recognised as a key determinant of mental, social and environmental health. Relationships with family, friends and peers, the community in which social relations are developed, the school, the work place, the neighbourhood, the social and cultural norms, the physical environment in terms of accessibility and security are all individual and collective determinants which will increase or reduce the capacity that a person may have to engage in regular physical activity and that this activity may in turn have on his or her physical, social and mental health and well-being. Physical activity should be considered as "a global public good", which is "non excludable", has "non-trivial benefits, that cut across borders, generations and populations" (Kaul *et al.,* 1999).[2] "*When communities lack social and physical infrastructures that support and affirm their members, people often do not develop to their fullest individual potential"* (Baum, 1999; Marshall *et al.,* 2005)·

Despite the prominent position of physical inactivity in contributing to ill-health, there remains a significant gap between the evidence base and the level of investment in sustained action to reduce levels of inactivity (WHO, 2002; WHO, 2005).

Since 2002, the International Union for Health Promotion and Education (IUHPE) has entered into an Agreement with the United States Centers for Disease Control and Prevention (CDC), an agency of the Department of Health and Human Services, which includes an important project element on physical activity and health. The collaboration focuses on research, capacity building, advocacy and networking activities linked with other projects on urban development and health. IUHPE and CDC are taking an evidence-based approach to physical activity as a population health issue, and using the development of public health strategies for physical activity as an entry point for much needed health promotion and chronic disease prevention action. Several recent scientific meetings and expert consultations supported by the World Health Organization (WHO) and CDC and involving the IUHPE addressed the WHO Global Strategy on Diet, Physical Activity & Health and the broader agenda of developing public health action for physical activity (Bull *et al.,* 2006). These discussions highlighted the role of non-governmental organisations (NGO) in supporting physical activity promotion, the challenges for developed and developing countries in promoting physical activity, and the barriers to action and needs of countries and regions at varying levels of economic development. As a natural outcome of these consultations the Global Alliance for Physical Activity (GAPA) has been established, involving a wide range of organisations, some already highly mobilised and extremely active in physical activity promotion and others currently less involved but with the potential to make a global impact by becoming a part of this effort. GAPA will provide a unified and strong voice for physical activity and will be a catalyst of the activities and actions developed by these international and national NGOs, as well as civil society, to help countries commence, continue and increase their efforts to address physical activity within the broad agenda of non-communicable disease prevention and health promotion.

This integration of a comprehensive evidence-based approach to physical activity promotion with a modern understanding of health promotion and disease prevention is the hallmark of the IUHPE and CDC collaboration and is reflected as well in this special issue of *Promotion & Education.* Effective health promotion practice and public health strategies for physical activity share philosophy, tools, and methods: a policy framework, advocacy, surveillance, evidence-based interventions, evaluation, partnerships and networks to facilitate communication and programme implementation. Physical activity promotion may be an especially good first step towards a comprehensive health promotion and disease prevention programme for non-communicable diseases for many public health organisations. In addition to the well established health benefits of physical activity there are three factors elucidated in the special issue that make

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implementing public health programmes for physical activity both feasible and attractive. The clarity, simplicity and consensus around the public health recommendation of 30 minutes of moderate physical activity most days of the week greatly facilitates communication (Pate *et al.,* 1995). Tools exist to deliver good public health programmes for physical activity: surveillance measures, effective interventions, and specific evaluation methods. And finally, networks and multi-sectoral partnerships which address physical activity promotion from a variety of perspectives have much potential for synergy. Physical inactivity is a global public health problem and in this special issue of *Promotion & Education* we present a cross-section of responses by health promotion practitioners from around the world.

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Physical activity promotion programme team under the IUHPE and CDC Cooperative Agreement: (top from left) Thomas Schmid, Michael Pratt, Martha Perry, Luis Fernando Gómez, Diana Parra, Adrian Bauman and Victor Matsudo; (bottom from left) Sandra Matsudo, Fiona Bull, Andrea Neiman and Olga Lucia Sarmientos. Not pictured here: Mauricio Ardila, Marie-Claude Lamarre and Janeth Mosquera.

Wolf Kirsten, Adrian Bauman and Michael Pratt

Promoting physical activity globally for population health

The ideas expressed in this article are those of the authors and do not represent any official position of the World Health Organization (WHO), the US Centers for Disease Control and Prevention (CDC) or the International Union for Health Promotion and Education (IUHPE).

The global rise in chronic [non–communicable] disease has been described by the World Health Organization (WHO) as an epidemic (WHO 2005). Physical inactivity is now established as one of the central risk factors for NCDs, especially cardiovascular disease and type 2 diabetes. Physical inactivity contributes to 2-3% of the global burden of disease (WHO, 2002) In addition to the disease burden, inactivity contributes to major direct economic costs, as well as indirect costs due to morbidity and lost productivity.

Over the past two decades, increasing epidemiological evidence has identified numerous health and social benefits of physically active populations. Nevertheless, physical inactivity is increasing in many nations of the world, especially in rapidly developing countries (WHO, 2002). This paradox has led many experts in the field to believe that we are not effective enough in conveying the positive benefits of physical activity, nor are we convincing decision-makers to invest more in the promotion of health-enhancing physical activity. The need for action has been recognised, and was reinforced through the policy directions suggested by the WHO-auspiced Global Strategy on Diet and Physical Activity (WHO, 2004). The field needs to speak cohesively with one voice and advocate strongly for a public health approach to physical activity, just as previous efforts considered a healthy diet and a smoke free environment.

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New window of opportunity

Many different players and organisations could potentially be involved in the field of physical activity, some directly – with a mission to promote physical activity, active commuting or sport for all – and some indirectly – health-related organisations with a specific disease or health function as their priority. In particular the non-governmental and non-profit sector play a potential role, for example, in the sports clubs in various European countries. The sports sector is a potential partner for the advancement of health-enhancing physical activity as, in some countries, policy directions have shifted from a performance-related focus towards community-based participation. Harnessing the expertise and networks of national and international organisations and getting them to work in partnership to promote physical activity remains a major health promotion goal. This coordination is the prime focus of the Global Alliance for Physical Activity (GAPA), which has been formed under the leadership of the International Union for Health Promotion and Education (IUHPE) and the US Centers for Disease Control and Prevention (CDC). GAPA will provide strategic coordination and communication to ensure that the activities and efforts around physical activity promotion of international and national non-governmental organisations (NGOs), civil society, and governments are synergistic and focused. The goal of GAPA is to facilitate global physical activity promotion within a health promotion framework and coordinate efforts, but not to deliver programmes or carry out technical assistance directly. The IUHPE will play a key role in this endeavor through its large international network of health promotion organisations and professionals. A priority for the IUHPE is to create synergies and partnerships through interactions with other on-going health promotion projects.

The Global Alliance for Physical Activity (GAPA)

The formation of a global alliance comes at an opportune moment as the World Health Organization (WHO) recently developed and endorsed the Global Strategy on Diet, Physical Activity and Health (GLDPAH) (WHO, 2004), which outlines an overall plan and guidelines following an international consultation process and has generated some considerable interest internationally (Bauman & Craig, 2005 IJBNPA). As this window of opportunity may close soon in light of new and competing interests, swift action is recommended. The GSDPAH emphasises the need for a multi-sectoral and multi-disciplinary approach based on the principles of the Ottawa Charter on Health Promotion. Such an approach is essential for the physical activity field if it is to move beyond advocating for a more active lifestyle to enabling environments and supportive policies (Bauman & Bellew, 1999). For example, alliances with the Transport and Urban development sectors can pay huge dividends. How many cities or regions can claim that their infrastructure or transport system favours physical activity? This trend is especially evident in the cities of rapidly developing countries: growing number of motor vehicles, fewer bicycles or walking commuters, lessened infrastructure such as sidewalks and fewer green spaces. It is also recommended to develop strategies within the settings. The workplace alone – where a majority of adults work – provides an enormous opportunity to raise awareness, influence individuals and create supportive environments.

The burden on developing countries

Policy makers and the general community, especially in rapidly industrialising countries, may not recognise the huge burden that will be posed by increases in non-communicable diseases (NCDs). The growing burden due to NCD is surpassing the already existing burden due to communicable disease and poor environmental health (WHO NCD report 2005). Physical activity is on the decline due to rapid development and automisation. For example, Latin American countries display similar inactivity levels to those found in Europe and North America (Pratt, Jacoby & Neiman, 2004). Therefore, country-specific feasible initial programmes and strategies need to be implemented rapidly in many developing countries. Barriers remain high as governmental support, leadership, infrastructure and resources are lacking and little has been done at the population level. However, the success stories of Agita São Paulo and Muevete Bogotá provide evidence of how programmes to increase physical activity in developing country-settings are possible. Agita started out as a regional programme in the state of São Paulo and evolved into a programme of national and international scope and prominence, stimulating the formation of Agita Mundo, a global network to promote and increase awareness about physical activity. Muevete Bogotá is part of a vibrant national physical activity promotion network in Colombia largely supported through local government.

This issue holds...

This special issue presents the state of the art of physical activity around the globe structured around the strategic priorities of IUHPE: advancing knowledge, advocacy and networking. Cavill, Foster, Oja & Martin take a systematic look at evidence-based public health approaches to physical activity promotion in Europe and show how such an approach can differ in various countries. Bauman, Phongsavan, Schoeppe & Owen underline the importance of measuring physical activity and provide an inventory of established measures for use in health promotion at the national and local level. Trevor Shilton makes a very good case for enhanced physical activity advocacy by introducing a model of the 'Why, What and How' of physical activity advocacy. Advocacy is a key priority of GAPA, especially with regard to pushing national population-based action plans and policies. Very few countries have implemented comprehensive national public health programmes to promote physical activity – this shortcoming is highlighted by Bull, Shephard, Pratt & Lankenau. They also point out the critical role of NGOs in global advocacy and introduce the GAPA initiative. This special themed issue also includes articles focusing specifically on success stories from Latin America. Schmid, Librett, Neiman, Pratt & Salmon outline a framework for evaluating community-based physical activity promotion programmes in Latin America. The remaining two articles make the case for effective partnerships to promote physical activity and health. Muevete Bogotá is a unique multi-sectoral approach to promoting physical activity in an urban setting, its model is explained to serve as strategic reference for other urban areas of the world. The contribution from colleagues in Brazil, Sandra Matsudo and Victor Matsudo, highlight the necessary elements for successfully building networks and forming coalitions for physical activity promotion using the examples of Agita São Paulo, the Physical Activity Network of the Americas (RAFA-PANA) and Agita Mundo.

Outlook

The unique opportunity provided by the Global Strategy on Diet, Physical Activity and Health and related international consultations and discussions needs to be seized via enhanced international collaboration and by involving as many active organisations as possible. NGOs have a leading role to play in promoting and advocating for health-enhancing physical activity and in integrating physical activity into health promotion and disease prevention efforts globally.

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Adrian Bauman, Philayrath Phongsavan, Stephanie Schoeppe and Neville Owen

Physical activity measurement– a primer for health promotion

Abstract: As the importance of physical activity is recognised in health promotion, the task of measuring it becomes a central research and practice challenge. Measurement of physical activity is important to policy makers interested in population surveillance, as well as to practitioners interested in programme evaluation and research. This review outlines 'best practice' in physical activity measurement, and provides an inventory of established physical activity and related measures for use in health promotion programme evaluation, research and surveillance at the national and local level.

The measurement of physical activity (PA), and of the factors influencing it, is an important part of health promoting efforts to address physical inactivity. Increasing physical activity is now considered to be as important as tobacco control, promoting a healthy diet and obesity prevention in minimising the burden of non-communicable diseases (WHO 2005, Mathers et al., 1999; WHO, 2002). Substantial increases in non-communicable diseases – including cardiovascular diseases and stroke, diabetes, cancers and respiratory problems have been observed in developed and developing countries (WHO, 2002), usually with concomitant increases in obesity and decreases in PA at the population level. Thus, efforts to increase PA in populations and communities merit priority attention in health promotion.

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Recognising the need for a broad-ranging approach to the global non-communicable disease burden, the World Health Organization, in May 2004, released a Global Strategy on Diet, Physical Activity and Health. The strategy emphasises the health promotion relevance of PA promotion in many countries, as part of broader population-wide health and non-communicable disease prevention strategies (WHO, 2004).

Accurate and reliable measurement and monitoring of behaviours and their attributes is considered an important part of health promotion research and evaluation practice. The optimal measurement of PA underpins all of the major elements of the evidence base for, and the practice of, health promotion (Sallis & Owen, 1999). Physical activity measurement thus has several important uses, in informing the overall health promotion effort:

- It is used in epidemiological research, to understand the relationship between PA and a range of physical health and mental health outcomes.
- It is used in the monitoring and surveillance of PA levels in and among populations.
- It is used to understand the correlates and determinants of PA, and to explain why some people or groups are more active than others.
- It is used to measure the impact and effectiveness of health promotion programmes and interventions designed to increase PA.
- It is used to provide a sound and strong evidence base for broader initiatives in health promotion policy and practice.

This paper provides an overview on the principles and approaches to the measurement of PA, with special reference to health promotion surveillance, practice and interventions. It is beyond our scope to deal with the specifics of PA measurement among children and adolescents, among older adults, and among indigenous and culturally diverse populations. Thus, we focus here on the measurement of PA for the general adult population.

The first section defines PA in a health promotion context and indicates the qualities of health promotion relevant to PA measures. Relevance for population surveillance and monitoring is then discussed. Then, a conceptual framework for evaluation measurement is presented and, finally, specific examples of established PA measures are provided, so that health promoters can readily identify existing measures in this area; these may be put to practical use when evaluating and researching PA programmes.

Comprehensive and relevant measurement is fundamental to health promotion

The values of health promotion underpin the PA agenda. Health promotion has shifted from changing individual skills, knowledge and attitudes, to influencing behaviour through changing social and environmental factors. This shift in focus reinforces the need for broader PA measures to complement individually based indices.

Implicit in this shift is the recognition that PA is determined not only by intra-personal and biological factors, but equally by the interaction between individual attributes and distal factors such as the social, political, physical and cultural environments (Sallis & Owen, 2002). In this context, health promotion measures need to be developed to increase the evidence base for health promotion (Bauman *et al.,* 2002). Such measures may be used to capture dimensions of health promotion: to

Keywords

- physical activity
- measurement
- health promotion
- surveillance
- reliability
- validity

identify what works (ie. impact and or/outcome evaluation) and why things have worked (ie. correlates research or programme-specific process evaluation), so that limited resources can be appropriately targeted to yield the best health outcomes.

The broadening of the measurement base implies a need for a greater diversity of measures related to physical activity. Individual or small group measures are still required, especially for programme evaluation. These include measures of self efficacy, behavioural intention and other intermediate outcome measures. Examples of these individual-level measures are shown in Table 2 (on page 99). It is important that measurements are developed at broader levels, including inter-personal, environmental, social and policy measurements. This is consistent with a broader socio-ecological approach to promoting physical activity (Sallis & Owen, 2002).

Measurement at the population level is useful to track the net sum effects of health promotion programmes over time. For example, tracking rates of tobacco use in a population provides evidence of any changes in smoking prevalence, and identifies the groups who have quit smoking; this justifies public health programme expenditure in tobacco control. Measurements should also be responsive, such that a change in the indicator reflects real change in the attribute under observation.

The challenge in health promotion measurement is to develop the right sets of measurements that will be relevant for the programme or population attribute being assessed, while at the same time maintaining rigorous and reliable data collection. In summary, health promotion measures should be scientifically sound as population-level measurements, be theory-informed, have strong policy implications, and be amenable to change.

What does PA measurement involve?

Before addressing measurement, it is necessary to define the terms 'physical activity' and 'exercise'. Physical activity is defined as the behaviours that result in 'any movement contributing to human total energy expenditure' (Caspersen, 1985). It includes all large muscle movement, for whatever purposes, carried out throughout the day. 'Exercise' is a subset of 'total physical activity', being purposive and repetitive movements with the aim of improving measurable cardio-respiratory or other dimension of fitness. Exercise is usually comprised of more structured physical activities, often performed at a vigorous intensity.

Measures of PA for health promotion purposes are usually by self-report, through the completion of questionnaires, interviews and surveys (Welk, 2002). Alternatives include PA diaries or PA logs where information on all forms of activity is recorded each day. Other methods of measuring PA include more direct, objective and physiological measures, such as measures of fitness (direct and indirect maximal oxygen uptake assessments, fitness tests), measures of energy expenditure using direct calorimetry with doubly labelled water or heart rate responsiveness to fixed workloads (Welk, 2002). Other objective assessments of PA can be made with motion sensors, which measure activity in one or more planes of movement.

The simplest objective instrument is a pedometer, which counts the steps that a person takes, and is particularly useful for capturing walking behaviour (Tudor-Locke & Myers, 2001). It does not assess intensity or pace, but the total volume walked is still of importance. More complex devices, known as accelerometers, can measure motion and also record the time and assess the intensity of the movement; this is more useful for characterising the total volume of activity, and estimating energy expended, which is the number of minutes per day multiplied by the intensity of the activities carried out (Welk, 2002).

Some researchers use direct observation of PA behaviours, which can be used to assess activity patterns in young children in school or preschool environments; these measures, such as SOFIT (System for Observing Fitness Instruction Time) and SOPLAY (System for Observing Play and Leisure Activity in Youth) can be used to assess activity patterns of a population of children in a defined space such as a school playground or park (McKenzie *et al.,* 2000). Other indirect measures might be used to assess the number of people using a trail or bike path; here, unobtrusive motion sensors with an infra-red beam might be placed so as to record most uses of the path or trail. Interruptions to the beam are instances of movement on the trail, which can be counted; this kind of measurement can be used to evaluate new trails or walking paths (Brownson *et al.,* 2000, Merom *et al.,* 2003).

Measurable components of self report PA

Physical activity is a complex set of behaviours, with possible measurements made of its duration, frequency, intensity or setting. The PA behaviours that usefully may be measured in health promotion studies include:

- *How often physical activity is undertaken:* measures of frequency are usually expressed in a defined time frame. For example, a recently recalled period might be the past week, or a 'usual week', on a usual weekday and weekend day; in the past 2 weeks. For longer-term recall periods, past month; past year; lifetime or life course pattern of PA may be asked.
- *Duration of physical activity* per session, expressed as total time per day; or per time frame chosen (usually reported as an average of, or total hours and minutes of, PA).
- *Intensity of activity:* based on self-perceived intensity; or on specific energy expenditures known to be associated with specific activities (Ainsworth *et al.,* 2000). Activities may be classified as light, moderate or vigorous based on their assigned energy expenditure values (these are referred to as 'MET' values, or multiples of basal resting energy expenditure).
- *Type of activity:* some instruments ask about each specific PA or sport performed; others ask about broader categories of activity, such as moderate intensity activities, vigorous intensity activities (these usually provide examples of activities within each category).
- *Domains or settings where the activity is performed:* this describes the location or setting where the activity is carried out; a typology might be developed as:

  a. Leisure time PA (LTPA), which usually is activity for exercise or recreation:

– Organised activity such as team or individual sport, organised recreation or walking groups, gym classes.
– Non organised, recreational sport, PA such as walking for exercise or recreation, incidental PA in everyday life, "active living".
b. Occupational activity: energy expended through work, occupations.
c. Domestic setting: includes gardening, yard work, domestic chores, child-minding activity.
d. Active commuting: transport-related PA, including walking or cycling, to get to or from places.
e. Other incidental energy expenditure, such as using stairs instead of elevators in buildings.
f. Measures of time spent in *'sedentary behaviour settings'* (time spent sitting at work, watching television, computer use/screen time, reading).

Note that all of these domains reflect activity patterns except measures of sedentariness [see f, above]. It may be that in some countries, aspects of leisure time PA are not in decline, but other aspects of daily life are contributing to reduced total energy expenditure, in particular the amount of time people sit at work, in front of televisions or other 'screen time'. This may be an independent indicator which may be related to ill health, obesity rates, reduced social interaction and also reduced PA. For these reasons physical 'inactivity'is included as a lifestyle-relevant domain. From the measurement perspective, sedentary time is the least well measured dimension, compared to other domains of PA.

Reliability and validity of PA measurement

Key elements of any measurement are that they are reliable and valid.

Reliability (reproducibility) is the stability of a measure, which should classify people's PA in the same way on repeat administration of the measure (Washburn *et al.,* 2000; Brown *et al.,* 2004). Reliability means that, following repeat administration of surveys or measures, people should show similar scores (for continuous measures, like physical activity minutes) or should be similarly classified (for categorical data; see Nutbeam and Bauman 2006). In other words, PA reports should not change due to random variation. The same time period of recall should be used in such repeatability studies, as PA behaviour may differ across weeks (Booth *et al.,* 1996).

Validity is a way of decribing that the measure is assessing what it is intended to measure. It is often in the form of 'criterion' ('gold standard') validity, comparing a measure such as a questionnaire to a closer representation of the true underlying phenomenon of interest. These 'gold standards' may be a physical or physiological measure, or may be a better representation of the behaviour of interest. For example, validity studies explore the relationship between self-report PA measures and more objective phenomena such as cardio-respiratory fitness tests, results from motion sensor monitoring, and more intensive reports through PA logbooks and diaries. These latter two, motion sensors and diaries, are among new instruments and technologies for assessing the behaviours which comprise daily PA, their settings, frequency and duration in optimal ways, and behavioural surveys can be compared to them. It is not clear whether there is a true 'gold standard' measure for comparison, as these criterion measures may 'miss' some PA behaviours, if the behaviour is not sufficient to change physiological or other objective parameters. Among objective measures, motion sensors (accelerometers and pedometers) reflect movement related aspects of 'physical activity' with high validity, although they are poor at classifying some common behaviours such as swimming or cycling.

Assessing validity is determined by the specific behaviours or attributes of interest. We may have a survey asking people about their physical activities, but what kinds of 'gold standard' measures can we compare the survey against? For example, if we are really interested in walking, then pedometers may suffice, but if we are interested in intensity and time spent in physical activities, then accelerometers are required. If we want to measure total energy expended in very accurate ways, then expensive laboratory based measures, such as direct calorimetry, are possible. For individual-level interventions, it may be desirable to have valid outcome measures of energy expenditure, but for broader population monitoring, self-report assessment of the different domains of PA may be data that can be afforded in large representative samples.

Research into reliability and validity of measurement

The level of agreement among different measures has been assessed in numerous studies to ensure that the choice of measures used is of the highest quality (Washburn *et al.,* 2000). It is important to use the relevant statistics when assessing agreement for particular purposes. For categorical data (for example, either reaching or not reaching the threshold of being sufficiently active for health benefits; see below), kappa statistics are often reported. For repeatability studies using continuous data (hours per week of activity), the intra-class correlation is often cited, whereas for inter-method comparisons, the Spearman's rho correlation coefficient is often used (as the data distribution may be skewed).

A preliminary review of around thirty reliability and validity studies of PA measures developed for surveillance and monitoring purposes (Washburn *et al.,* 2000; Bauman & Merom, 2002) suggested that self report studies showed better repeatability (test-retest) with agreement coefficients usually between 0.6-0.8, but that inter-method comparisons (e.g., telephone interview vs. self-completion) between different self report measures were modest (agreement 0.3-0.5), and that self report compared to objective measures (validity studies) showed only fair to poor agreement (coefficients range from 0.2-0.4).

This does not necessarily mean that self-report PA has poor validity, as self-report may measure different dimensions of the behaviour compared to the putative 'gold standards'. Nevertheless, individual-level recall bias and daily and seasonal variability of PA patterns do contribute to measurement error, and care should be taken with these measures. Self-report measures may provide a reasonable snapshot of population levels of PA, but may not be suitable for intervention research; more detailed and extensive PA measures are usually used in assessing the effects of PA programmes.

Monitoring progress towards national and public health goals for PA

The public health goal is to increase the proportion of the adult population who meet a threshold for health benefit of being active. Over recent years, the

recommended amount of PA for health has changed. Initially, evidence developed by exercise scientists recommended vigorous activity at least three times per week for ≥ 20 minutes duration, which was sufficient to produce a cardio-respiratory training effect (ACSM 1978). This was thought to represent the quantum required for health benefit. More recent PA guidelines have recommended the 'accumulation of at least 30 minutes of moderate intensity PA on most days of the week' (USDHHS, 1996). This message was derived from reviews of epidemiological studies of the associations between PA and disease, where PA was usually assessed using leisure-time PA measures, although a few recent studies have also shown benefits to active commuting, regular walking and other incidental physical activity if it is of sufficient intensity and duration (Andersen, 2000; Manson, 2002). These studies consistently show that moving inactive populations to achieving a half-an-hour of daily moderate activity or walking is likely to confer much of the necessary reduction in risk of developing diabetes or coronary heart disease (USDHHS, 1996; Bauman, 2004). The health promotion message, "go for a moderate-brisk walk or participate in other physical activity for half an hour on most days", seems an achievable health promotion target for most adults, even for those with pre-existing chronic disease.

More recent epidemiological and clinical studies have identified some limitations to this message. Some health promotion programmes, specifically for cancer prevention or weight loss, may require greater duration or intensity of PA, perhaps up to an hour of activity per day (Thune & Furberg, 2001; Saris *et al.* 2003, Cerin *et al.* 2005). The type of activity also matters. For example, activity to prevent falls in the elderly may require types of PA that involve resistance activity and muscle strength training. Thus, the health promotion measurement to be used will depend very much on the purpose for which PA is being recommended.

Measures for monitoring and surveillance at the population level

A key goal of national health promotion measurement is to assess trends in health risk factors and their antecedents and correlates. National or regional health surveys often measure PA, but mostly do so using different measures, even within country (Bauman, 1987, Craig *et al.,* 2004). As examples of the kinds of measures used in this context, Table 1 is provided to demonstrate the range of PA measures, which have been widely used at the population level. These current measures assess whole community levels of participation in regular health-enhancing PA, and are designed to estimate proportion of the population who achieve a threshold level of 'sufficiently active for health'. Others are still used, such as the National Health Interview survey, and national health and nutrition examination surveys (NHANES), in the USA. Measures for youth surveillance are not presented here, but include the YRBSS in the USA, and the HBSC instruments, which are both widely used in population-level adolescent monitoring surveys (see: http://www.cdc.gov/HealthyYouth/yrbs/index.htm and http://www.hbsc.org/).

It can be easily seen that these measures differ from each other in the questions asked and PA domains that they capture. Efforts to standardise measurement for international comparability have been undertaken, with the short IPAQ (International Physical Activity Questionnaire) instrument widely researched. However, it is generic and does not measure separate domains of activity, and the slightly longer GPAQ (Global Physical Activity Questionnaire) instrument is now being used in several countries as part of their national cardiovascular surveillance protocols.

It may be more useful, for a period of years, to continue to use one of these measures, to gain experience with them cross-nationally, and to compare prevalence estimates of PA behaviours in different populations. Methodological and interpretation problems have been reported from both of these instruments in some settings, but this is difficult to overcome – no measure will be perfect. Overall their use has been acceptable to many populations and their relevance will continue given the importance of cross-sectional comparisons and trends over time for research and public health planning and monitoring, as different countries implement the Global Strategy on Diet, Physical Activity and Health in different ways.

There are also other measures being trialled across countries. For example, questions relating to the physical environment are being tested through the IPEN collaboration (International Physical Activity and the Environment Network: www.ipenproject.org). These and other international developments in PA measurements are a necessary part of monitoring and surveillance, to assess the net sum outcomes of country-level or regional actions to promote and encourage PA.

A conceptual model of evaluation measures for PA promotion

Figure 1 presents a conceptual model that can be applied to the measurement tasks in any evaluation of a PA programme. The left hand column shows the programme features, and the next column shows the level of measurement in the programme evaluation. This is explained further in the column showing PA-relevant measures. Some of these PA measures are part of programme development or monitoring, some are measures of individuals and some are measures at the community or policy level.

The first step, developing the programme, can be assessed with formative evaluation measures (Nutbeam and Bauman 2006), examples of which are shown in the far right column. The reach of the programme can be assessed through the next measurement level, often described as process evaluation, and measures the implementation of the programme and the populations who are aware of, who access the programme, or who use the programme. Formative evaluation is developmental, and it is completed by the time the programme is launched; everything after that point is monitoring programme implementation and usage, and is 'process evaluation'.

Most PA programmes are initially evaluated using short term (proximal) measures (Cavill and Bauman, 2004). This includes individual level measures, as well as contextual measures, such as attributes of the social or physical environments. These may be proximal measures (such as programme awareness or understanding) or other intermediate measures thought to be on the causal pathway to changing PA behaviour. For example, if a person increases their confidence that they can walk regularly

Figure 1 **Conceptual model of PA measures for health promotion (intervention) programmes**

Programme stages [health promotion perspective]	Level of measurement	Stages of PA-relevant measures	Examples of measures
	Programme design and conceptual development	Formative evaluation measures	Responses of target group to testing of PA messages or programme materials; perception of stakeholders of programme's likely success
Programme initiated and conducted →	Population(s) reached	Process measures; implementation measures ##	# or proportion of people attending the programme or community events; # or% of health professionals participating; programme delivered as intended; environmental changes carried out as planned; inter-agency planning / partnerships materialise and are maintained
	Proximal effects	Individual level measures	Awareness of PA health benefits; cognitive changes such as self-efficacy, intention to be more active, beliefs
		Inter-individual measures	Social supports; enhanced social influences; social environment; social capital [collective efficacy]
	Health promotion impact measures	Individual level measures	PA behavioural changes – increased walking behaviours, increased moderate and vigorous activities; decreased sedentary or screen time; increases in incidental PA, active commuting
Programme sustainability		Physical environmental measures	Changes to physical environments completed
		Community level change ##	Policies developed and implemented; programme elements institutionalise in the (health or other) system; programme elements self-sustaining without the programme initiators on board
Programme derived policy	Long term outcomes	Health outcomes	Reduced disease incidence or mortality from inactivity-related conditions; improved well-being/ quality of life/ social capital
		Other [non health] outcomes ##	Environment which facilitates PA better, such as improved public transport, better parks, urban planning, cultural norms and values changed to demand PA infrastructure
Diffusion and dissemination			Sustained policy changes to facilitate PA enhancements
			Spread of PA promoting culture and its policy and resources for effective programmes to all regions where inactivity is a problem

some of these measures may be to define process and implementation measures – they are simple counts of phenomena, and although a very important part of programme evaluation, they do not need the measurement development and reliability and validity testing of some other PA measures described here; note some 'qualitative concepts'such as assessing the characteristics of environments may need audits or simple counts as measures (Pikora 2003), or more complex measurement development and testing (Evenson 2005)

[self-efficacy] or their social environment improves or facilities are provided in ways that are more supportive of walking, then this will increase the likelihood of actual changes in walking.

At the next levels, the impact of the programme on meeting its key objectives (such as increasing PA or changing environments) is sought. This 'impact evaluation' is a usual endpoint of most health promotion programmes, but may it be difficult to achieve sustainable behaviour change or improvements to the physical environment within a short time frame (Nutbeam, 1998; Nutbeam & Bauman, 2006).

The changes to support sustainable maintenance of PA behaviour require the institutionalisation and policy adoption of the programme elements (left hand column of Figure 1). Changing policies, influencing environments and impacting community level change should be part of the measures adopted in the long term evaluation of any comprehensive national or large scale PA programme (Sallis *et al.,* 1998) for that reason, they are included in Figure 1.

Finally, (long-term) health outcomes are shown at the bottom of the Figure. This is sometimes termed outcome evaluation, and is only differentiated from impact evaluation by the time of follow up and by the end-point health conditions described as 'outcomes'. The epidemiological research evidence for PA and health outcomes is derived from observational studies with many years of follow up. Hence, these longer-term health outcomes, such as reduced cardiovascular disease incidence or reduced all-cause mortality may take many years to be realised; and, it may be even more difficult to link them in a causal relationship to a specific intervention programme. For this reason they can be mentioned as part of the rationale for the programme, but seldom should the programme be held accountable to their achievement. Specific examples of secondary prevention trials of lifestyle programmes do exist but may be unrealistically expensive as population health interventions (such as the Diabetes Prevention Programmes in Finland, Tuomilehto *et al.,* 2001). For a few health outcomes, more rapid effects may be seen; examples of these include mental health or functional status improvements and reductions in falls in the elderly, which may follow in the short term after PA programmes.

Commonly used PA measures for research and interventions

This section provides a brief inventory of current measures useful for practitioners assessing correlates and determinants of PA or assessing the impact of small-scale PA programmes or programmes implemented at the local level. Commonly used measures are shown; these were sought as part of a project to systematically compile an inventory of health promotion measures.

The inventory was divided into measures of PA behaviour, measures of the intra-individual correlates of PA, and (self report) measures of PA environments. Measures published in peer-review journals since 1980 were identified through searches in electronic databases including MEDLINE, CINAHL and PsycInfo, as well as through a review of the 'grey' literature. Selection criteria for measures were that the instrument is well known and has been widely used in a range of settings, has shown good psychometric properties (reliability, validity), is brief and easy to administer via mail, telephone and/or face-to-face interview is accessible through the internet or upon request to the authors, and is available in English. For the purposes of this paper, only those correlates for which there is consistent evidence of association with PA behaviour have been included as examples (e.g. physical environments, social support, self efficacy).

Table 2 (on page 99) shows a range of individual level intermediate outcome measures of PA correlates based on sound theoretical constructs and empirical evidence. The different instruments presented tap slightly different, but overlapping characteristics, domains or correlates of PA. They include measures of: intention to be active and control over exercise (theory of planned behaviour, theory of behavioural control); expectancies and self-efficacy (social cognitive theory) and; social support for exercise. These measures could be used if the programme uses these theoretical approaches to change PA behaviour.

Table 3 (on page 100) shows a range of established PA measures, primarily emphasising the leisure time PA domain. Some are useful for older adults (Champs, Yale) and others for intervention studies or epidemiological research (Godin, PAR, Paffenbarger). Their potential uses are shown in the far right hand column, and the information provided should act as a guide to their uses.

Table 4 (on page 101) shows a range of the perceived physical environment measures; these are newer measures, and their measurement properties have been less well explored than individual-level measures. These self-report environmental measures can be complemented by objective environmental measures, using GIS (Geographic Information System) databases to characterise urban form, road and transit attributes, green space and residential density (Owen *et al.,* 2004). These are supra-individual measures of the physical environment indicated in Figure 1. Other measures describe audits of the physical environment, which are time intensive but can characterise neighbourhoods in conceptually clear ways (Pikora *et al.,* 2003; Craig *et al.,* 2002).

The availability of such a plethora of PA instruments requires that there be careful scrutiny of the reliability and validity of these measures. For the sake of clarity, this paper has simplified some of the technical issues of measurement to be considered when evaluating the quality of a PA measure. Numerous guidelines have been published to assist health promotion practitioners in identifying PA instruments that would best meet programme needs, and readers are recommended to seek these references for more in-depth discussion (Kriska & Caspersen 1997, Washburn *et al.,* 2000). Only the most well established measures are presented in this paper as the relevant exemplars, so that practitioners will have some starting points for health promotion programme measurement. There are other attributes that are less well developed or standardised, so are not presented in this discussion. Such measures still need to be further developed, to systematically capture PA policy and community level changes, and the measures of programme and policy diffusion.

Concluding remarks

The primary goal of PA measurement is to obtain the best possible scientific evidence to enhance our understanding of the role of individual and contextual level factors in influencing PA. Such information is central to developing and implementing effective health promotion programmes in the now-burgeoning area of PA and population health.

Physical activity measurement is a challenging area for health promotion practice. We have focused on measures of PA for the general adult population, but additional challenges exist for PA measurement among children and adolescents, older adults, and with indigenous and culturally diverse populations. The advantages for health promotion of self-report measures are their relatively low cost, population acceptability and convenience. Although PA is a complex behaviour to measure accurately at the population level, it is possible to obtain useful information based on self-report, provided the right measurement instruments are chosen and used correctly.

We do not yet know the health benefits of all of the domains of PA. Nevertheless, there is general agreement that efforts should continue in developing the most valid and reliable self-report measures for eliciting the highest quality of information from individuals about their PA habits. The information gained will be useful for developing comprehensive measures that will reflect what we hope to influence through our PA policies, campaigns, messages and guidelines. The measures, the related concepts and the purposes of measurement that we have described are all critical to a comprehensive understanding of health promotion programme effectiveness. Better measures will reduce the chances of inappropriately concluding that programmes or environmental and policy initiatives are ineffective, when they actually are achieving what is intended.

Table 1 **Physical activity monitoring and surveillance instruments for population-level measurement**

Questionnaire	Key reference	Description of items (number of items)	Potential use
Finbalt Health Monitor	Prättälä *et al.* 1999; Prättälä *et al.* 2003; Helasoja *et al.* 2002	Recall period: usual day/ week/ month Daily duration, intensity of walking/ cycling to and from work, intensity of PA at work; usual leisure-time exercise for at least 30 minutes; rating of current physical fitness status	Cross-sectional, on-going population-based surveys to determine prevalence and trends in PA; for cross-national monitoring of health-related behaviour including PA
Behavioural Risk Factor Surveillance State (BRFSS) Questionnaire	CDC 2003, Stein *et al.*, 1993; Washburn *et al.,* 2000; Nelson *et al.,* 2001	Recall periods: last month, usual week Domains: leisure-time related PA, occupational PA (including sitting/standing), housework/ yard work Frequency, duration of moderate-intensity/ vigorous PA for at least 10 min in a usual week; any non-work-related PA in the past month	Cross-sectional, on-going population-based surveys to determine prevalence and trends in PA
International Physical Activity Questionnaire (IPAQ)	Craig *et al.,* 2003, www.ipaq.ki.se	Recall periods: last 7 days Short form: frequency, duration of time spent on walking/ vigorous/ moderate-intensity/ sedentary activity (sitting) Long form: domains specified: household/ yard work, occupational, self-powered transport, leisure-time related PA as well as sedentary activity (sitting on a weekday/weekend day); pace of walking / cycling	Cross-sectional population-based studies; short form particularly for cross-national monitoring of PA/ inactivity
Global physical activity questionnaire GPAQ	WHO Steps program http://www.who.int/ncd_surveillance/en/stepsinstrumentcore_exp_v1.4.pdf	14 items, similar to IPAQ short [derived from IPAQ], but with domain specific estimates possible for work/domestic related PA, active transport, leisure time PA and total sitting time; recall period is usual week Domains - work/domestic moderate and vigorous activities; # days, time/day - active travel/ commuting by walk/cycling; # days, time/day - leisure time PA; # days, time/day - sitting; time/day	Used in WHO Steps program for national level cardiovascular surveillance 2003-2005 Slightly longer but similar to IPAQ short version, but provides domain specific PA estimates Cross-sectional, on-going population-based surveys to determine prevalence and trends in PA
Active Australia measure	Brown & Bauman 2000, Bauman *et al.,* 2003; Brown *et al.,* 2004	Short instrument - Mostly LTPA (walking, moderate, vigorous); also some active commuting and optional vigorous domestic activity. Asks about physical activities in the previous 7 days, elicits weekly # sessions and total time for each category; threshold of '5 sessions and 150 minutes per week'for health benefit	Used in national & state health surveys via CATI system [telephone] to describe prevalence of PA and track annual trends (measurement properties well described, [Armstrong 2000, Brown *et al.,* 2004]
Sub-Saharan Africa Activity Questionnaire	Sobngwi *et al.,* 2001	Recall period: the past 12 months; Frequency, duration, intensity of leisure-time and occupational PA as well as walking/cycling	Epidemiological studies in Sub-Saharan populations
Canadian Physical Activity Monitor, Canada Fitness survey	PAM reports: http://www.cflri.ca/cflri/pa/ Craig *et al.,* 2004, 2003; Kriska & Caspersen 1997	Adapted from Minnesota Leisure-Time Physical Activity Questionnaire (MLTPAQ) assessing physical activities recalled in previous 12 months; PA levels calculated in MET-hours per week by summing the products of the metabolic cost of each activity, its duration in hours and the average occasions per week across the 12-month period (Craig 2004); using nationally representative samples of Canadian adults; threshold for 'sufficient activity for health' defined as 3+ MET–hour daily or 1260 MET-minutes per week (Craig 2004).	Cross-sectional, national Canadian surveys 1981, 1988, 1995 and annual or biennial from 1995 onwards – prevalence, trends and correlates of PA assessed; measures shown to be reliable and valid

Table 2 **Examples of intermediate programme measures: self-reported cognitive and psychosocial measures relevant to PA***

Psychosocial Construct	Questionnaire	Key reference	Item examples (Number of items)	Potential use
Control over exercise	Perceived Behavioural Control Scale	Kerner & Grossman 2001	How much control do you have over whether you do or do not exercise on a regular basis (3 items) (7-point scale, with 3 responses of complete control, very easy, extremely likely)	The brevity of the scale allows if to be used in population-wide surveys or correlational studies as well as intervention studies. Although wording focuses on exercise, can be adapted to measure different domains of PA. Intervention studies
	Exercise Perceived Behavioural Control Questionnaire	Rhodes & Courneya 2003	How much do you feel that engaging in regular exercise over the next 2 weeks is beyond your control, even if you really wanted to do so?7-point scale ranging from 1 = 'Not at all' to 7 = 'Very much' Is engaging in regular exercise over the next 2 weeks up to you if you wanted to do so? 7-point scale ranging from 1 = 'Not at all' to 7 = 'Very much'	
Enjoyment of exercise	Physical Activity Enjoyment Scale	Kendzierski & DeCarlo 1991	Please rate how you feel at the moment about the physical activity you have been doing….energising/boring/fun… (18 items) (7-point scale: 'I find it energising' to 'I find it tiring')	Intervention studies with adults to assess enjoyment of PA for exercise or sport.
Expected benefits/ outcomes/ Pros/cons	Decisional Balance Questionnaire	Marcus *et al.*, 1992	Pro item: Exercise would help me relieve tension. Con item: I would have less time for my family and friends if I exercised regularly. (16 items) (5-point scale: Not important to important)	Assess decision to exercise or not and can be used in intervention or correlational studies.
Intention to exercise	Intention to Exercise Scale	Kerner & Grossman 2001	Intend to adhere to a program of physical exercise during the next 12 months to get into shape/get healthier/reduce stress (11 items) (7-point scale: very unlikely to very likely)	Intervention studies with general adult population and those with chronic health conditions to assess intention to exercise for physical and mental health benefits.
Self-efficacy	Self-efficacy for Exercise Scale	Resnick & Jenkins 2000	How confident are you right now that you could exercise three times per week for 20 minutes if the weather was bothering you/had to exercise alone/felt tired…(9 items) (11-point scale: Not confident to confident)	Instrument tested with older adults (65+ yrs), but potential for use in intervention studies with younger adults to assess self-efficacy for engaging in exercise (not PA). Scale measures two dimensions: self-efficacy for resisting relapse and making time for exercise in various situations. Potential use for assessing mediating effects of exercise self-efficacy in intervention studies.
	Self-efficacy for Exercise Behaviour Scales	Sallis *et al.*, 1988	Whether you exercise or not, please rate how confident you are that you could really motivate yourself to do things like these consistently, for at least six months: get up early, even on weekends, to exercise/stick to your exercise program after a long, tiring day at work (12 items)	
Social support	Social Support for Exercise Habits Scale	Sallis *et al.*, 1987	During the past three months, my family or friends exercised with me/talked about how much they like to exercise (15 items)	Can be used to assess friends and family PA support in intervention studies aimed at improving social support. Also potential use in correlational studies.

* Selected instruments developed based on a theoretical framework, evidence for associations with PA, and have demonstrated moderate to good scale reliability.

Table 3 **Examples of self-reported instruments for assessing PA (behaviour)**

Questionnaire	Key references	Description of items (number of items)	Potential use
Community Health Activities Models Program for Seniors (CHAMPS)	Harada *et al.,* 2001; Stewart *et al.,* 2001; Denmark-Wahnefried *et al.,* 2003	Recall period: a typical week during the past 4 weeks Weekly frequency, duration, intensity of PA in the domains leisure-time/recreation, housework/yard work as well as activities to socialise; option to estimate caloric expenditure per week in all exercise-related activities as well as in moderate-intensity exercise-related activities E.g. In a typical week during the past 4 weeks, did you…e.g. walk leisurely for exercise or pleasure? How many times per week? How many total hours a week did you usually do it?	For evaluation of the effectiveness of programs aimed at increasing PA in older adults in a community setting.
Godin Leisure Time Exercise Questionnaire	Godin *et al.,* 1986; Godin & Shephard 1985	Recall period: a 7-day period Frequency per week of strenuous (heart beats rapidly), moderate (not exhausting) and mild (minimal effort) exercise for more than 15 min; frequency of regular activity long enough to work up and sweat	Cross-sectional intervention studies to assess exercise behaviour among population groups
Minnesota Leisure-time Physical Activity Questionnaire	Richardson *et al.,* 1994, Jacobs 1997; Taylor *et al.,* 1978; Folsom *et al.,* 1986	Recall period: last 12 months Frequency, duration of sports, recreational, yard and household activities; respondents report along a list of 63 activities 'Did you perform this activity?'	Large scale surveillance of PA as well as studies in smaller settings, eg., health facility settings.
Paffenbarger Physical Activity Questionnaire	Rauh *et al.,* 1992; Ainsworth *et al.,* 1993; Washburn *et al.,* 1991; Albanes *et al.,* 1990	Recall periods: usual weekday/ usual weekend day over the past week or past year Intensity of walking/ stair climbing on a usual day; duration, intensity, type of PA on a usual weekday/ weekend day as well as sitting/ reclining/ sleeping; participation in PA long enough to sweat/ get out of breath for at least once a week; average frequency, duration of sport, recreation or other PA in the past year Eg., On a usual weekday and weekend day, how much time do you spend in the following activities? Vigorous activity (eg., digging in garden, strenuous sports, bicycling on hills, etc); Moderate activity (eg., housework, light sports, etc); Light activity (eg., office work, driving a car, strolling, etc); Sitting activity (eating, reading, watching TV, etc); Sleeping or reclining	Assess usual global leisure time physical activities retrospective, prospective cohort or intervention studies.
Seven-Day Physical Activity Recall (PAR)	Sallis 1997, Dishman & Steinhardt 1988; Jacobs *et al.,* 1993; Rauh *et al.,*1992; Taylor *et al.,* 1984	Recall period: last 7 days Duration, intensity of leisure-time/ occupational PA as well as gardening, walking and sleeping during morning/ afternoon/ evening; option to estimate total kilocalories per day from hours spent on these activities	Acceptable for use in community surveys or controlled experiments with general or clinical populations.
Yale Physical Activity Survey	DiPietro *et al.,* 1993; Harada *et al.,* 2001	Recall periods: a typical week in the last month and certain activities (walking and standing) during the past month. Eg., "Here is a list of common types of physical activities. Please tell me which of them you did in a typical week in the last month…" Participant shown a list of 28 different types of PA occurring at work, home, and leisure	Questionnaire assesses usual specific activities relating to household, exercise and recreational PA. Intervention studies with older adults. Interview-administered questionnaire.
Scottish Physical Activity Questionnaire (SPAQ)	Lowther *et al.,* 1999	Recall period: last 7 days Leisure-time and occupational PA, stages of exercise behaviour change	To measure outcomes in PA interventions; for use with large sample sizes

* Selected instruments developed based on a theoretical framework, evidence for associations with PA, and have demonstrated moderate to good scale reliability.

Table 4 **Examples of self-reported and objective measures of physical environments related to physical activity**

Instrument	Key reference	Assessment method	Description of items	Potential use
Systematic Pedestrian and Cycling Environmental Scan (SPACES)	Pikora *et al.,* 2002	Direct observation	Walking/cycling surface, streets, permeability, personal safety, traffic safety, aesthetics streetscape, views, destination facilities, subjective assessment	Comprehensive instrument to measure the physical environmental factors that may influence walking and cycling in local neighborhoods Setting: neighborhood, community, open space
Neighborhood Environment Walkability Scale (NEWS)	Saelens *et al.,* 2003	Self-report via mail	Residential density, land use mix-diversity, land use mix-access, street connectivity, walking/cycling facilities, aesthetics, pedestrian/automobile traffic safety, crime safety	Cross-sectional studies to measure neighborhood characteristics related to lifestyle PA, particularly walking for transport Setting: neighborhood, open space
Home Environment Scale, Neighborhood Environment Scale, Convenient Facilities Scale	Sallis *et al.,* 1997; King *et al.,*2000	Self-report	Exercise equipment at home (eg., weight lifting equipment, aerobic workout video, audio), neighborhood characteristic (eg., sidewalks, hills, enjoyable scenery, crime rate, perceived safety), convenient facilities (eg., to basketball court, bike lane or trail, spa, gym, public park)	Setting: home, neighborhood, community, open space
Environmental factors / No name of the scale /	Wilcox *et al.,* 2000	Self-report via telephone interview	Presence or absence of sidewalks, heavy traffic, hills, streetlights, unattended dogs, enjoyable scenery, frequently observe others exercising, high levels of crime, easy access to walking trails/ swimming pools/ recreation centres, bicycle paths	Setting: neighborhood, community, open space
Perceptions of Environmental Supports Questionnaire Objective measures of the environment	Kirtland*et al.,* 2003; Addy *et al.,* 2004	Self-report via telephone interview + GIS	Accessibility, neighborhood characteristics, barriers to PA, social issues/other people's PA behaviour, use of recreation facilities E.g. connectivity, density of recreation facilities, shops, walking/cycling trails	Setting: neighborhood, open space
Perceived environment / No name of the scale	Ball *et al.,* 2001	Self-report via telephone interview	Aesthetics, safety, convenience of facilities, social environment (companionship) for walking	Cross-sectional or intervention studies to assess walking for exercise in the community Setting: community, open space
Perceptions of the neighborhood environment, perceived access to neighborhood facilities / No name of the scale Access to recreational facilities	Giles-Corti & Donovan 2002	Self-report + GIS *	Neighborhood attractiveness, safety and interest, social support for walking locally, traffic and traffic hazards, availability of sidewalks, convenience of public transport/park/shop Indices for recreational facilities (e.g. golf courses, gym/ health club/ exercise centre, public open space)	Setting: neighborhood, open space
Awareness of PA facilities / No name of the scale, no scale	Leslie *et al.,* 1999	Self-report via mail	Awareness of PA facilities on a campus	Cross-sectional study Setting: campus
Environmental influences / No name of the scale, no scale provided	Booth *et al.,* 2000	Self-report via face-to-face interview	Exercise equipment at home, safety in neighborhood, access to PA facilities, social environment: offers of friends/family to jointly be active/ helpful reminders/ encouragement to be active	Cross-sectional study Setting: home, neighborhood
Personal Environment Scale, Media Environment Scale, External Environment Scale, Local Opportunity Scale	Ståhl *et al.,* 2001	Self-report via telephone interview	Personal Environment Scale: friends/ acquaintances, spouse/ family/ relatives, workplace, school support PA Media Environment Scale: journals/newspapers, TV/ radio External Environment Scale: health insurance, doctor, politician, community Local Opportunity Scale: access to PA facilities in the community, awareness of local programs/opportunities for PA, belief of the extend the country's health policy helps to do enough PA	Cross-cultural study conducted in different countries Setting: community, open space

* GIS - Geographic Information System. Physical environment attributes: Accessibility of facilities, opportunities for activity, aesthetics, safety, weather.

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Nick Cavill, Charlie Foster, Pekka Oja and Brian W. Martin

An evidence-based approach to physical activity promotion and policy development in Europe: contrasting case studies

Abstract: Evidence-based public health takes many of the principles of evidence-based medicine and applies them to public health. This is a relatively young discipline however and is not universally applied to public health issues – especially such multi-disciplinary topics as physical activity. This paper sets out to provide guidance on this issue by characterising four 'key tasks' that form the basis of a systematic evidence-based approach to promoting physical activity. These tasks are based in part on the physical activity promotion model (Brownson *et al.*,1999). These are illustrated with examples from work in three contrasting European countries: Finland, England and Switzerland.

'Task one' is concerned with using the evidence for the health benefits of physical activity to 'make the case' and increase action by policy makers. Here, all three countries took a similar approach, conducting academic reviews to draw together the existing evidence of the health benefits of physical activity.

'Task two' is concerned with conducting surveillance to collect evidence on the prevalence of physical activity. Here, Finland and Switzerland were careful to collect trend data and use them for advocacy, while in England continuous changes to questionnaires and survey methodologies have led to poor trend data.

'Task three' is to review evidence on 'what works' in increasing physical activity to influence practice. England appears to be taking a more systematic approach to this task, with a comprehensive approach to reviewing evidence on what works and disseminating this to influence good practice, while the other countries rely mainly on individual evaluation studies.

'Task four' is the evaluation of practice and it is clear that in all three countries this remains a significant challenge – one requiring additional training and dedicated funding. As a result much of current "good practice" is based upon experience (usually unevaluated) and not evidence.

This brief analysis shows that there are some common tasks that need to be undertaken as a central part of an evidence-based public health approach. However, cultural and political factors in each country studied have influenced the manner in which these tasks were undertaken, and the importance attached to each component.

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The field of Medicine, like many other areas of human achievement, has some of its roots in the collection and application of evidence. The concept of 'Evidence-Based Medicine' has a long and distinguished history: the discovery of bacteria in 1675 or penicillin in 1928 relied on a systematic approach being taken to collecting evidence. Yet it is only relatively recently that the scientific principles of an evidence-based approach have been applied consistently to the broader discipline of public health. The concept of evidence-based public health has been defined as "...the development, implementation, and evaluation of effective programs and policies in public health through application of principles of scientific reasoning, including systematic uses of data and information systems, and appropriate use of program planning models (Brownson *et al*,1999)". This approach takes many of the principles of evidence-based medicine and applies them to public health. These include the initial quantification and assessment of the issue based on descriptive epidemiological data; developing and implementing intervention approaches based on the best available evidence on their effectiveness; and comprehensive evaluation to inform current and future practice. Although this may seem an obvious and logical approach to those schooled in scientific methods, it is not necessarily the preferred way of working for all professionals engaged in efforts to increase participation in health-enhancing physical activity. One of the most striking characteristics of physical activity promotion is that it brings together people from very diverse disciplines. These might include epidemiologists, behavioural scientists, health economists, sports scientists (physiologists, psychologists, sociologists), health promotion specialists, sports officials and people qualified in public relations or marketing. From this perspective it is perhaps not

Keywords

- physical activity
- sport
- policy
- Europe
- evidence

surprising that there is no agreed common approach to developing the evidence base for physical activity promotion.

The scientific principles which can be applied to physical activity are also less clear-cut than other issues. It is rare to find evidence from randomised controlled trials, and it can be difficult to isolate the effect of single factors in multi-faceted interventions– such as counselling combined with written materials and telephone support. The time from intervention to outcome is often much longer, and the approaches taken are often the result of input from a more diverse range of professionals than that normally encountered in medicine. All of these factors combine to make the use of a clear evidence-based approach seem extremely complex. There is clearly no single answer, and a variety of approaches may need to be applied according to the circumstances.

The purpose of this article is to attempt to simplify the issue by characterising four 'key tasks' that form the basis of a systematic evidence-based approach to promoting physical activity. These tasks are based in part on the physical activity promotion model (Brownson *et al.,* 1999). This will be illustrated with examples from work in three contrasting European countries: Finland, England and Switzerland. These countries were selected as they demonstrate interesting differences in their approaches: Finland has the longest continuing tradition in physical activity promotion in Europe, and (along with Canada) is one of only two countries in the world to have demonstrated consistent long-term increases in physical activity (Cavill, 2004). England has had a large scale national physical activity programme and a broad range of scientific work in the field; Switzerland is a country with a long tradition in 'Sports for All', but with a relatively young history in public health and physical activity promotion. While each country has taken a different approach, they are united in their focus on health-enhancing physical activity (HEPA) – the type of physical activity which can be undertaken as part of everyday life, and which has been associated with a multitude of health benefits (US Department of Health and Human Services, 1996). While precise recommendations vary, HEPA is normally promoted as activity of at least moderate intensity (including activities such as brisk walking) undertaken for at least half an hour on five or more days of the week. In this context all such physical activities at home, work, transport and leisure time are included. The differing approaches taken to these four 'tasks'will be described, and the successful and unsuccessful elements explored. The intention is that the learning from this analysis will be of value to policy-makers in countries involved in developing an evidence-based approach to promoting physical activity.

Task one: using the evidence for the health benefits of physical activity to 'make the case' and increase action by policy makers

For any public health subject, the first question to be answered is: 'what evidence is there to demonstrate that there is a relationship between a factor and changes in health status? This is known as Type I evidence, which shows the strength of the relationship between a disease and a risk factor such as physical inactivity. This differs from Type II evidence which shows the relationship between an intervention and the prevalence of the risk factor. So Type I evidence says that 'something should be done' (in this case something should be done to increase physical activity), while Type II evidence is used to say exactly what should be done. (Brownson, 1999)

The first task for any evidence-based approach to promoting physical activity is therefore to gather the Type I evidence together and use this to make the case strongly that 'something should be done'. This evidence is used to raise the profile of the subject and persuade politicians and policy makers that this is an issue worthy of public attention – and indeed public expenditure. This is frequently a competitive business: physical activity has to fight for its place on the budget sheet alongside other health (and non-health) issues, so the evidence has to be presented in as persuasive a format as possible.

Fortunately there is now an extremely strong global literature on the relationship between physical activity and many aspects of health and well-being (United States Department of Health and Human Services, 1996; Department of Health, 2004). Many aspects of the physical activity – health relationship deserve further investigation, but this is the preserve of research scientists. Those concerned with developing a global public health strategy for physical activity should instead turn their attention to assembling the evidence into the most authoritative format possible, and using this to 'make the case' for investment at the highest level.

Finland: integrating physical activity into sport and health policy

As early as 1990 the National Sports Committee of Finland proposed a sports policy for the 1990's (Opetusministeriö, 1990). One of the 3 key target areas for development was physical activity for fitness, health and recreation among the adult population. This choice was based on a literature review on the health benefits of physical activity written by Professor Ilkka Vuori.

One of the committee's proposals was to launch a pilot study on how to run a national health-enhancing physical activity programme. The pilot programme "Finland on the Move" tested a top-down model for stimulating local HEPA initiatives. (Pyykkö *et al.,* 1995) This model was consequently adopted in "Fit for Life", a major national HEPA promotion programme which started in 1995 and has run for two consecutive 5-year periods. A third 5-year period began at the beginning of 2005 (Vuori *et al.,* 1998). The key element of the programme has been to generate the development of HEPA promotion projects in different local settings by "seed money", training, information services and consultation. By the end of 2003 more than 1500 local projects have been supported by the programme. Parallel to these action programmes further research evidence on the social significance of sport and physical activity was gathered and published in several consecutive documents (e.g. Ilmarinen 1993; Liikunnan ja kansanterveyden edistämissäätiö, 1994; Mertaniemi & Miettinen, 1999), These experiences and evidence-based documentations preceded the new Sports Act in 1998. Objectives of the Sports Act included the promotion of the well-being and health of the population, and the establishment of the national

committee on the development of health-enhancing physical activity. This led to the Government Resolution on policies to develop health-enhancing physical activity in Finland (Sosiaali- ja terveysministeriö, 2001). This resolution defines all aspects of HEPA policy including organisation, finance, structure, research and monitoring, and is binding for different government authorities, organisations, municipalities, and NGOs.

England's report of the Chief Medical Officer

In contrast, England was a late arrival to the physical activity scene. Some solid developmental work had been done in the 1990s to establish the physical activity message for adults and young people (Killoran *et al.,* 1994; Biddle *et al.,* 1998) but there had been no 'official' government publication on the benefits of physical activity. In 2002 any health professional writing to the Department of Health in England asking for the evidence on the health benefits of physical activity would have been sent a short ten year old leaflet. In retrospect this seems remarkable, considering the wealth of research evidence available, and the extensive government reports that existed on other health issues such as nutrition or smoking (Committee on Medial Aspects of Food Policy, 1984; Royal College of Physicians; 1962). But this only goes to show how relatively young the topic of physical activity is on the public health agenda. This oversight was rectified in 2004 when the Department of Health published its report of the Chief Medical Officer in England (Department of Health, 2004). This impressive publication provided a comprehensive review of the global literature on the relationship between physical activity and health, and was produced with the assistance of the leading exercise scientists in the UK and overseas. Although it is difficult to provide objective evidence of the impact of this report, it does seem clear that this provided an absolutely essential foundation for work on this topic, and provides an authoritative and comprehensive set of arguments for increasing attention to physical activity. The report has now received numerous citations and is the first reference point for anyone in England looking to justify action on physical activity.

Figure 1 **Trends in the proportion of men and women in Finland classified as active (leisure time physical activity at least 30 minutes at least twice a week)**

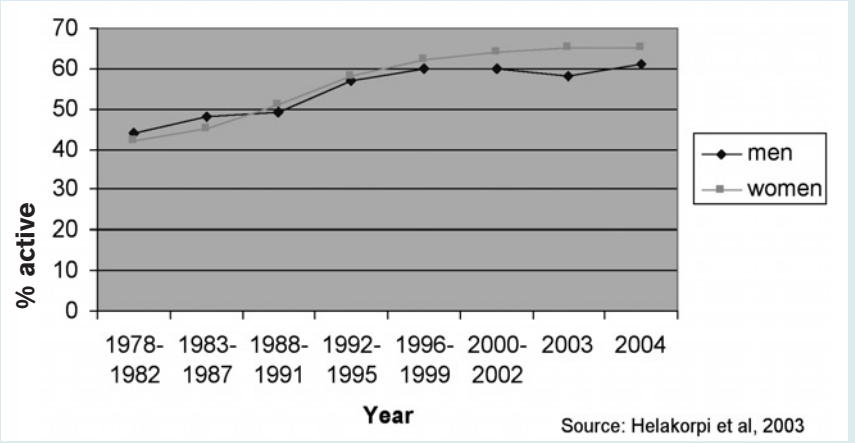
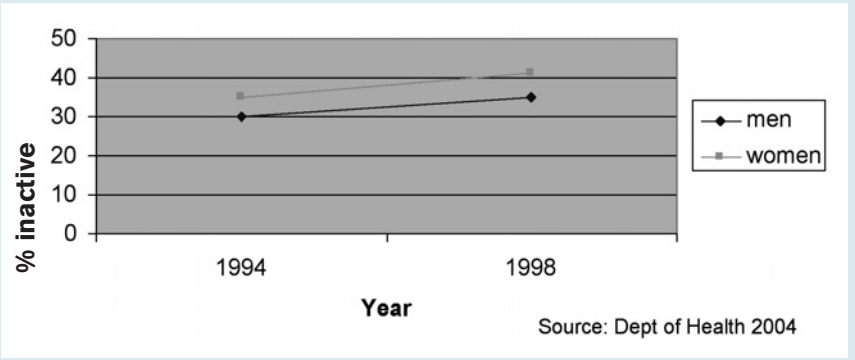


Figure 2 **Trends in the proportion of men and women in UK classified as inactive (activity less than 30 minutes once per week)**



The Swiss approach: from the 1995 Magglingen Symposium to the Swiss National Sport Concept

Since 1972 the promotion of sports has been the responsibility of the Swiss Confederation, including sport promotion to improve public health. But it was not until 1995 that the evidence for the health effects of physical activity was systematically presented and discussed at a national symposium. In the following years, the evidence from international research was communicated to a broader national audience through the emerging health-enhancing physical activity (HEPA) network. In 2000 a new "Concept for a National Sports Policy in Switzerland" was prepared. An expert group was formed to develop a strategy document for HEPA promotion that included a summary of the scientific evidence for the health effects of physical activity. When the concept was accepted by the Federal Government at the end of 2000, health was defined as the first priority of the national sports policy in Switzerland and "more physically active people" as its first main objective. This seems to be well in line with public opinion, as representative surveys in 1999 and 2001 have shown consistently that more than 90% of the Swiss population deem that "physical activity is important for health" (Martin, 2002).

Task two: conducting surveillance to collect evidence on the prevalence of physical activity

Surveillance of population levels of physical activity is an important task in using evidence to construct a case for physical activity promotion. By building a picture of the extent of the problems of

physical inactivity, it is possible to add weight to the arguments and increase the chances of funding and political support for physical activity promotion. An assessment of the scale of the problem allows calculation of the population attributable risk, and identification of groups with higher levels of risk. These groups could become a priority for specific interventions to promote physical activity.

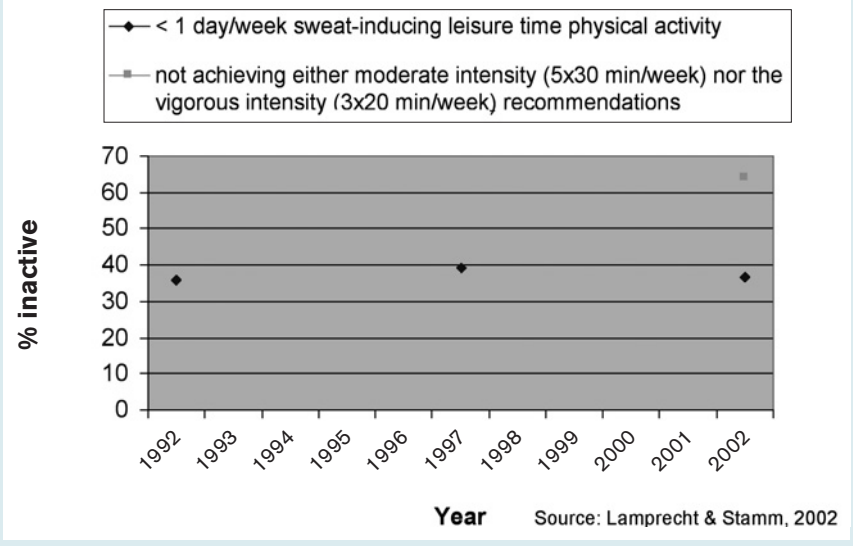
The most important factor in any population measure is to keep the measure the same over time. On-going surveillance will allow detection of any changes in physical activity or physical inactivity prevalence and an assessment of trends over time. Some countries in Europe have been very successful in establishing an annual population level survey for physical activity using the same measure over time. This may be a reflection of the political support for physical activity promotion at local and national levels.

Surveying physical activity over 20 years in Finland

Finland provides an excellent example of a consistent approach to physical activity surveillance. The National Public Health Institute has conducted an annual survey of health-related behaviour of the adult population since 1979 (Helakorpi *et al.,* 2003). The survey has included the same questions on leisure-time and work-commuting physical activity every year. The overall trend is that the proportion of people undertaking leisure-time physical activity for at least half-an-hour, at an intensity to cause slight sweating, at least twice a week increased from about 40% to about 60% from the late 70's to the mid 90's, with women starting from a slightly lower level but ending at slightly higher levels. During the same time period regular work commuting walking and cycling (5 times a week, at least 15 minutes per day) decreased from about 60% to less than 50% in women and from about 35% to 25% in men. After the mid 90's the prevalence of both indicators has levelled off with the exception of women's leisure-time activity, which has continued to increase, but at slower pace.

These data have been used extensively to indicate that the majority of the adult population is insufficiently active for health benefits and used to motivate the development of policy and programmes for health-enhancing physical activity. However, it is interesting to note that the questions used were based on earlier physical activity recommendations and so are not fully consistent with the new concept of health-enhancing physical activity. They may thus give a slightly inaccurate picture of the current levels of health-enhancing activity and the trends. This points to the need for surveillance systems that can adapt to changing recommendations and standards, to ensure that the most up to date and useful information is being collected.

Figure 3 **Trends in the proportion of Swiss adults classified as inactive**



The National Fitness Survey and Health Survey for England

In England, efforts at widescale assessment of physical activity began early (and on a grand scale) but have since faltered. The National Fitness Survey took place in 1990 and was the most comprehensive survey of its kind in the world, combining both a questionnaire-based assessment of physical activity with measures of fitness taken in mobile laboratories. The methodology from the physical activity assessment component of the fitness survey was adopted (and adapted) by the Health Survey for England. This began in 1991 and was designed to provide regular information on various aspects of the nation's health. Surveys have covered the adult population aged 16 and over living in private households in England, with children included in every year since 1995. Physical activity has been measured in 1994, 1997, 1998 and 2003 for both adults and children. Unfortunately each survey used different questions to assess different types of physical activities so trend data are difficult to compare. The recent report by England's Chief Medical Officer (Department of Health 2004) reported only data from 1994 and 1998, showing an increase in the proportion of men and women classified as inactive. Analysis of longer-term trends are unreliable due to continued inconsistency in methods. Without adequate population measures of physical activity it is unsurprising that physical activity promotion remains the poor relation to other lifestyle intervention programmes in England.

The Swiss approach: from an initial review to the Swiss Health Survey

In the 1995 Symposium 'Sport – Physical Activity – Health' the first estimates on physical activity in Switzerland were presented. However, these were still based on a review of existing local studies and not on national representative data. This information was available two years later, when a secondary analysis of the Swiss Health Survey 1992 was published with 35.7% reporting less than one day per week of sweat-inducing physical activity during leisure time. This indicator of inactivity has been measured consistently every five years in the Health Survey, a representative population survey of up to

20,000 participants. As a result of this survey, the prevalence estimates of physical inactivity have shown an increase to 39.4% in 1997, but then a decrease to 36.8% in 2002 (Lamprecht & Stamm, 2002).

The first estimates of achievement of current physical activity recommendations were derived from smaller HEPA surveys in 1999 and 2001 and were the basis for the economic estimates that were published in 2001 (Martin *et al.,* 2001). These estimates found great resonance and contributed to the decision to allocate 25% of the new funds available for the sports policy from 2003 on (1% of the total budget of the Federal Office of Sports) to the promotion of physical activity and sports. Since 2002 items on moderate intensity activities were also included in the Health Survey. Results were published in September 2004 and met great interest with the media: 64.1% of the adult population of Switzerland meet neither the moderate intensity (5x30 min/week) nor the vigorous intensity (3x20 min/week) recommendations.

Task three: reviewing evidence on 'what works' in increasing physical activity and influencing practice

The next 'task' involves moving on from establishing the nature and extent of the physical inactivity problem, to deciding what to do about it, based on the best available evidence. If we lived in an ordered, scientific, and logical world this would mean that we would only implement policies or programmes that had been based on the known determinants of physical activity (Trost *et al.,* 2002) and which had been rigorously tested and evaluated in high-quality scientific studies and shown to be effective - from so-called 'Type II evidence'. However, the real world is different, with politics, opinion, bias, prejudice and 'real life experience' influencing decision-making. Many decisions are made about health promotion programmes based less on evidence and more on historic precedents, ideology, instinct or personal preferences. These can be extremely valuable factors in decision-making however, and the real challenge is in synthesising all the findings from different types of evidence – and bringing them together into a meaningful format which could provide guidance for practitioners.

"Finland on the Move" programme: a pilot study

The "Finland on the Move" pilot programme tested a top-down model to promote health-enhancing physical activity through financial, communication, training and consultation support for a wide variety of small-to-medium local projects. The programme proved to be feasible, cost-effective and successful in generating new grass-root physical activity interventions (Pyykkö *et al.,* 1995). Based on the programme evaluation and a review of other available research evidence the characteristics for successful promotion projects were identified. These included: well defined basic idea; realistic goals; broad acceptance; clear identity; genuine commitment; tailoring for target groups; monitoring sensitive to small changes; phasing of activities; focused financial support; combining individual and community approaches, and competence building for personnel. The model was chosen as the framework for the subsequent national "Fit for Life" programme. In the programme the competition for project funding has been the key instrument to initiate and support local HEPA projects. During the first 5-year programme phase 855 projects were funded with a total sum of about 2 million euros. While there is currently no reliable scientific evidence to show increased physical activity or improved health and function at the population level, a recent external evaluation indicates a variety of positive impacts from the programme generating new collaboration, improving pre-requisites for HEPA, increasing HEPA awareness among the population, activation of new middle-aged people, and generation of new HEPA services (Oja *et al.* 2005).

Evidence into practice in England

In England the task of synthesising evidence on the effectiveness of physical activity interventions and producing guidance was the responsibility of the former Health Development Agency (HDA) Collaborating Centre for physical activity – a collaboration between Oxford and Loughborough Universities (and the South East Public Health Observatory). Two of the authors (N. C. and C. F.) were involved with this project. The former HDA was the national public health agency with the remit to help the translation of 'evidence into practice'. The HDA commissioned the Collaborating Centre to pool their expertise in reviewing evidence from the academic literature and reflecting the experiences of practitioners, to produce practical evidence-based guidance. The process took place during 2004 and involved the following stages:

- A 'review of reviews' of physical activity interventions (Hillsdon *et al.,* 2005). This reviewed papers which were in themselves reviews of the literature. While this meant that the findings were one step removed from the original studies, it did mean that an enormous body of literature could be synthesised
- Using the review of reviews to produce evidence-based recommendations for practice
- Testing these recommendations in focus groups of experienced physical activity practitioners
- Analysing transcripts of the focus groups to produce themes – notably facilitators and barriers to action
- Producing guidance which built on both the review-level evidence and the 'lifeworld' of practitioners.

The workshops showed that while the majority of recommendations from the evidence base were thought to be feasible, there were some significant issues where practitioners' views were at variance with the published evidence. In general it was thought to be an extremely useful approach – especially as it valued the experiences of practitioners rather than relying only on what was in the literature.

The Swiss approach: from worksite interventions to the Internet

The development of culturally adapted interventions and the study of their effectiveness have been a recent priority of Swiss physical activity promotion. A limited number of model interventions have been developed and shown their potential in the workplace, in primary health care interventions, in the conscript Swiss Army, and in kindergarten (Titze *et al.,* 2001; Jimmy & Martin, in press). Other attempts like physical activity counselling in tourist

destinations had to be aborted after unsuccessful pilot studies (Martin *et al.,* 2001). The documented evidence from primary care has been instrumental in establishing a recent cooperation with the Swiss College of Primary Care Medicine, the worksite experiences have been integrated in one strand of the multi-partner "Allez Hop" programme (which provides a range of physical activity offers to a wider public) but the other approaches (e. g. with the conscript Swiss army and in the kindergarten) have not been taken up so far. Current research projects are focussing on the potential of transport interventions for physical activity promotion (Thommen & Braun, 2003).

Task four: evaluating practice

Any physical activity promotion initiative should have three components: a) planning b) implementation and c) evaluation. Evaluation is the key to good project management and is just as important as setting clear aims and objectives for the project. Evaluation should be part of overall project planning and ideally it should start before implementation of the project. Evaluation doesn't need to be expensive but the World Health Organization recommends that evaluation should take up at least 10% of the budget for any new health promotion project (World Health Organization, 1999).

There are two main types of evaluation: outcome and process. The aim of an outcome evaluation is to see whether the project meets its aims and objectives. For example, was the project successful in increasing the level of physical activity among participants? The aim of a process evaluation is to see why the project meets or does not meet its aims and objectives. For example, what aspect or component of the project helped people to become more active? Outcome and process evaluations therefore seek to answer different types of question about the project. Neither type of evaluation is superior - the two types of evaluation are complementary. Often an evaluation will seek to answer both outcome and process questions. Different stakeholders in physical activity promotion programmes will require different types of evaluations for example national campaigns might be looking for outcomes assessed using national prevalence surveys. Evaluation must be reflected at every level of a physical activity programme and supporting the evaluation of local physical activity projects. However, evaluation practice will rely upon appropriate measures and often these are not available or used by practitioners who embark on evaluations (Foster *et al.,* 2000).

Evaluation: Finland's "Fit for Life" project

The national "Fit for Life" programme was evaluated at the end of its second 5-year phase by an independent expert group. The general purpose of the evaluation was to assess the significance and impact of the programme on the Finnish HEPA promotion. The evaluation utilised the principles and methods that have been used recently in the evaluation of Finnish research and expert institutions. Specific evaluation aspects were the following programme features: purpose and objectives, operating principle, organisation and networking, management, administration and resources, project management, communication, training and expert services, international activities, and follow-up and research.

According to the evaluation, the programme has had many strengths as well as weaknesses. The results are being fed systematically into the activities of the programme's third five-year phase in order to improve its performance. Despite many impressive results of the Finnish HEPA promotion, evaluation and subsequent implementation of the results have rarely been built-in into promotional activities. The need for systematic evaluation possesses an imperative future challenge for Finnish HEPA promotion.

Evaluation in England

There have been few national-level evaluations of physical activity programmes, or studies of local–level evaluation processes in the UK. The evaluation of the National Active for Life programme (Hillsdon *et al.,* 2001) used a strong cohort design methodology to provide outcome measures for the effectiveness of the three year campaign, but reported no process evaluation measures. The outcome data showed that the programme did not achieve any statistically significant increases in population level physical activity behaviour, although it did measure an increase in knowledge of the recommendations for physical activity. But this tells us nothing about the detail of the programme, or what might have been achieved 'behind the scenes'– for example, in terms of changing attitudes and social norms, professional beliefs or behaviour, or take-up of campaign resources. All of these can be valuable proximal measure of changes which may have come about as a result of the interventions (Cavill & Bauman, 2004).

At a local level the picture is perhaps even less encouraging. A survey of 250 HEPA promotion programmes found that the quality of evaluation conducted was low, and only a tiny minority of projects used valid physical activity measures (Foster *et al.,* 2000). In one region a mapping exercise produced 140 projects which claimed to be promoting physical activity in some manner. Only 10 of these could clearly state their aims and objectives and evaluation methods, and only around five of these could provide outcome data to demonstrate the effectiveness of their projects (Cavill *et al.,* 2004). Many of the project leaders admitted in semi-structured interviews that they needed help on evaluation, and that it was seen only as a 'necessary evil'to secure grant funding. It appears that in the UK there is an urgent need for simple and clear guidance on evaluation methods for physical activity promotion along with many other public health topics, such as, nutrition education.

Evaluation as a new concept in Switzerland

"Sports for all" has been promoted for several decades in Switzerland, but scientific evaluation of interventions is relatively new. The national programme *Youth+Sports* has been running for more than 30 years, reaches about half a million 10-20 year olds each year, and currently absorbs more than 40% of the budget of the Federal Office of Sports. Programme evaluation has begun in 2004 and a first study of its effectiveness is currently being prepared.

The programme "Allez Hop" has existed since 1996 and reached about 24,000 adults in 2004 in courses for Nordic walking, walking (walking with adapted ski poles) and other activities. The evaluation studies carried out so far have

shown encouraging results, but must be interpreted with caution due to methodological limitations. In addition, a Swiss website has been developed over a four year period and provides physical activity counselling in German, French and Italian to currently about 50,000 individuals per year (www.active-online.ch). Process evaluation is established and outcome evaluation under way.

Important infrastructures like the national hiking network of more than 60,000 kilometres have existed for decades and are well known and used, but no formal evaluation exists. More recent developments like the Vita Parcours, a network of more than 500 openly accessible fitness trails, have been evaluated in more detail (Marti *et al.,* 2002). Since 2004, the observatory "Sport and Physical Activity Switzerland" is integrating more and more of the existing programmes. (Lamprecht *et al.,* 2004). An approach which was successful in promoting local intervention projects in other countries has failed in Switzerland. In 2002 a seed money project had to be abandoned after only about one third of the original sum could be distributed to local projects and the participating projects were very reluctant in taking up the evaluation support offered.

Discussion

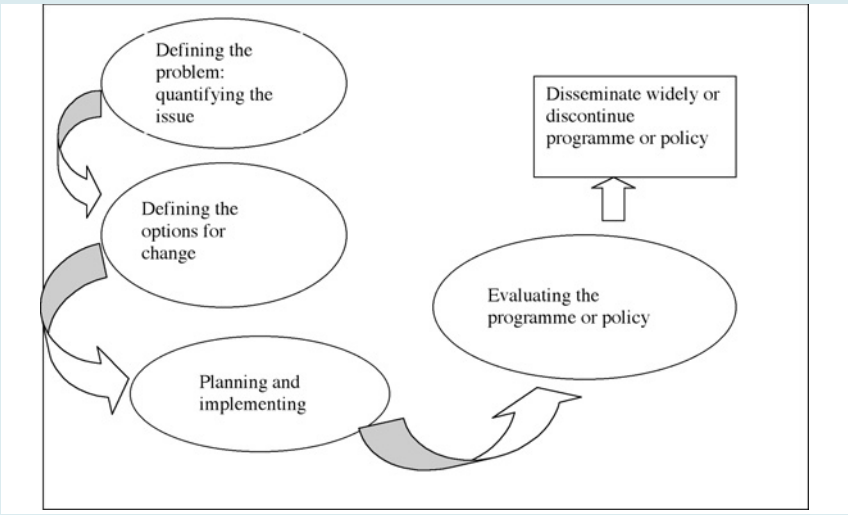
This brief three-country international comparison has shown some interesting similarities– and some striking differences – between countries. It appears that all countries have travelled along common paths when it comes to an evidence-based approach. These tend to answer the following questions:

- What is the nature of the problem?
- What are the problem's extent and its economic consequences?
- What is the most effective way to tackle this problem?
- How can progress be monitored and evaluated?

However, the attention paid to each component has been very different. All three countries took very similar approaches to 'making the case' for physical activity using academic reviews, but then paths diverged. Finland and Switzerland were careful to collect trend data and use them for advocacy, while in England the biggest survey in the world gave way to some of the worst monitoring. However, England seems to have 'caught up' with its comprehensive approach to reviewing evidence on what works and disseminating this to influence good practice, while the other countries rely mainly on individual evaluation studies. In all countries, the evaluation of projects and programmes clearly remains a significant challenge – one requiring additional training and dedicated funding. As a result much of current "good practice" is based upon experience (usually unevaluated) and not evidence.

Some of these differences may be a result of cultures of evidence and scientific approaches in each country. For example, Switzerland has a long tradition of *sports for all* promotion, but public health approaches are a relatively new concept. This means that the vast majority of the resources for interventions is still spent based on historical precedents and not on international or national evidence of effectiveness. By contrast in the UK, there is a strong evidence culture and physical activity may suffer here as it does not have the evidence of effectiveness to place it on a level playing field with other public health interventions. In Finland, on the other hand, the quite impressive HEPA development has been in part a 'survival reaction' in the face of the risk of radical reduction of public funding for sport and physical activity. This may have led to the emphasis of visible action without systematic evaluation.

Figure 4 **Physical activity promotion model – From Brownson *et al.***



Conclusions

The systematic collection, analysis and dissemination of evidence is a vital aspect of the public health approach to promoting physical activity, and is essential to influence political processes. It has been shown that there are some common 'tasks' that need to be undertaken as a central part of an evidence-based public health approach. Cultural and political factors in each country studied have clearly influenced the manner in which these tasks were undertaken and the importance attached to each component. However, it does appear that in general more attention is being paid to evidence-based approaches to physical activity in recent years.

However, there are also clear barriers to the use of evidence, including limited resources, competing priorities, ignorance, misconceptions or even concerns about exposing unsuccessful interventions. It is essential that these barriers are overcome. The highest possible standards in evidence-based decision making need to be applied, to ensure that the discipline of physical activity for health is developed and takes its rightful place as a key component of international public health policy. Professionals engaged in physical activity should be actively encouraged to use evidence and evaluation to improve the effectiveness of interventions, and to be prepared to compete for limited resources with other fields and health behaviours requiring public and private interventions. In particular this means continued raising of standards in evaluation, to ensure that we are measuring the effects of what we do.

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Thomas L. Schmid, John Librett, Andrea Neiman, Michael Pratt and Art Salmon

A framework for evaluating community-based physical activity promotion programmes in Latin America

Abstract: A growing interest in promoting physical activity through multi-sectoral community- based programmes has highlighted the need for effective programme evaluation. Meeting in Rio de Janeiro, an international workgroup of behavioural, medical, public health and other scientists and practitioners endorsed the principle of careful evaluation of all programmes and in a consensus process developed the Rio de Janeiro Recommendations for Evaluation of Physical Activity Interventions". Among these recommendations and principles were that when possible, evaluation should 'built into' the programme from the beginning. The workgroup also called for adequate funding for evaluation, setting a goal of about 10% of programme resources for evaluation. The group also determined that evaluations should be developed in conjunction with and the results shared with all appropriate stakeholders in the programme; evaluations should be guided by ethical standards such as those proposed by the American Evaluation Association and should assess programme processes as well as outcomes; evaluation outcomes should be used to revise and refine on-going programmes and guide decisions about programme continuation or expansion. It was also recognised that additional training in programme evaluation is needed and the Centers for Disease Control and Prevention's Physical Activity Evaluation Handbook could be easily adapted for use in culturally diverse communities, especially in Latin America. This paper describes a 6-step evaluation process and provides the full set of recommendations from the Rio de Janeiro Workgroup. The handbook has been translated and additional case studies from Colombia and Brazil have been added. Spanish and Portuguese language editions of the Evaluation Handbook are available from the Centers for Disease Control and Prevention, Physical Activity and Health Branch.

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Physical activity reduces the risk for many chronic diseases and conditions, it is associated with lower morbidity and mortality, and enhances functional status and quality of life (US Dept of Health and Human Services 1996; Pratt, 2003). The World Health Organization recognises the fact that physical inactivity is a major public health issue in both developed and developing countries (WHO, 2002a; WHO, 2004). In Latin America the magnitude and pattern of inactivity reflects those found in North America and Europe, for instance, data from Chile, Peru, Argentina, Brazil and a PAHO study found adult prevalences of physical inactivity between 50% and 91% (Pratt *et al.,* 2004). Many countries in Latin America have recognised that increasing the level of physical activity in the population is a priority health issue, but few have well developed national programmes for physical activity promotion. Dozens of innovative community-based physical activity promotion programmes are emerging in the region.(PAHO, 2002; Jacoby *et al.,* 2003; Pratt *et al.,* 2004). However, few of these have been carefully evaluated, and fewer still are reported in the peer reviewed scientific literature. More information on practical programme design, implementation and evaluation of community-based interventions is needed.

This paper describes the recommendations of an international workshop of experts on the rationale and strategies for conducting practical and informative evaluation of physical activity promotion programmes in both developed and developing countries. A 6-step programme evaluation framework is described and a formal resolution documenting the importance of and support for evaluation by workshop participants and sponsors is provided (Schmid *et al,* 2004).

Disclaimer

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the United States' Centers for Disease Control and Prevention.

Keywords

- physical activity
- evaluation
- Latin America
- logic models

Although there is a credible research knowledge-base in the area of behaviour change to increase physical activity, there is a significant gap in practice-based information about developing and implementing programmes to encourage initiation of and long-term adherence to participation in regular, physical activity. Key elements in providing this practice-based information are effective evaluation of current physical activity programmes and inclusion of an evaluation component in all new initiatives. Information gained through effective programme evaluation is essential in establishing the case to policy makers and funders that resources should be provided for physical activity promotion programmes. Evaluation is also important for the ongoing management and enhancement of programmes as well as for sharing information with other professionals about what works and what does not work (WHO European Working Group on Health Promotion Evaluation, 1998).

The theoretical bases and purposes of evaluation are often different from research, with research generally focusing on testing hypotheses and seeking generalisable principles and relationships while evaluation is focused more on providing practical information for programme monitoring, improvement and decision making. For this paper, the authors are using the WHO definition of evaluation: "the systematic examination and assessment of features of an initiative and its effects, in order to produce information that can be used by those who have an interest in its improvement or effectiveness" (WHO, 2005). For many practitioners, developing and implementing an evaluation component for their programme may seem to be a daunting task. Although many professionals in the field have had at least an introduction to evaluation as part of their education, few have the background to develop and implement effective programme evaluation strategies.

To address this problem, and to better understand how existing evaluation resources could be tailored to the needs of practitioners in Latin America, an international Workgroup, comprised of experts in the design and evaluation of community-based physical activity promotion programmes was convened in Rio de Janeiro, Brazil, at the invitation of the US Centers for Disease and Control and Prevention/WHO Collaborating Center for Physical Activity and Health Promotion (CDC/WHO CC). Other sponsors for the workshop included the Centro do Estudos do Laboratorio de Aptidao de Fisica de Sao Caetano do Sul (CELAFISCS), the Pan American Health Organization (PAHO), and the American College of Sports Medicine (ACSM). The workshop focused on these four key objectives:

1. Establish a framework for evaluation of population-based physical activity promotion, building upon the *CDC Physical Activity Evaluation Handbook* (http://www.cdc.gov/nccdphp/dnpa/physical/handbook/index.htm).
2. Focus attention of the international public health community on evaluation of physical activity interventions.
3. Assess the suitability and adaptability of the CDC Physical Activity Evaluation Handbook for developing countries in general and in Latin America in particular.
4. Develop generalisable evaluation recommendations (i.e. the "Rio Recommendations") and products with a clear orientation toward their application in the Americas.

The Workgroup began with the premise that physical activity programmes and interventions should be evaluated in a comprehensive fashion in order to guide their implementation, and determine their impact, challenges and successes. The goal was to establish a culturally appropriate resource for the evaluation of national and community-based physical activity interventions. Participants in the workshop discussed several case studies of physical activity evaluation currently being undertaken in national and community-based programmes in the Americas. These case studies served as the basis for development of the Rio Recommendations and informed deciding how to revise the Evaluation Handbook. One initial observation by the workgroup was that there is less emphasis placed on evaluation of community-based programmes in Latin America than in North America. The workshop participants observed that there was a significant need for evaluation resources to provide learning opportunities for practitioners who have minimal experience in programme evaluation. Thus, the importance of adapting the *CDC Physical Activity Evaluation Handbook* for use in culturally diverse communities particularly in Latin America was underscored.

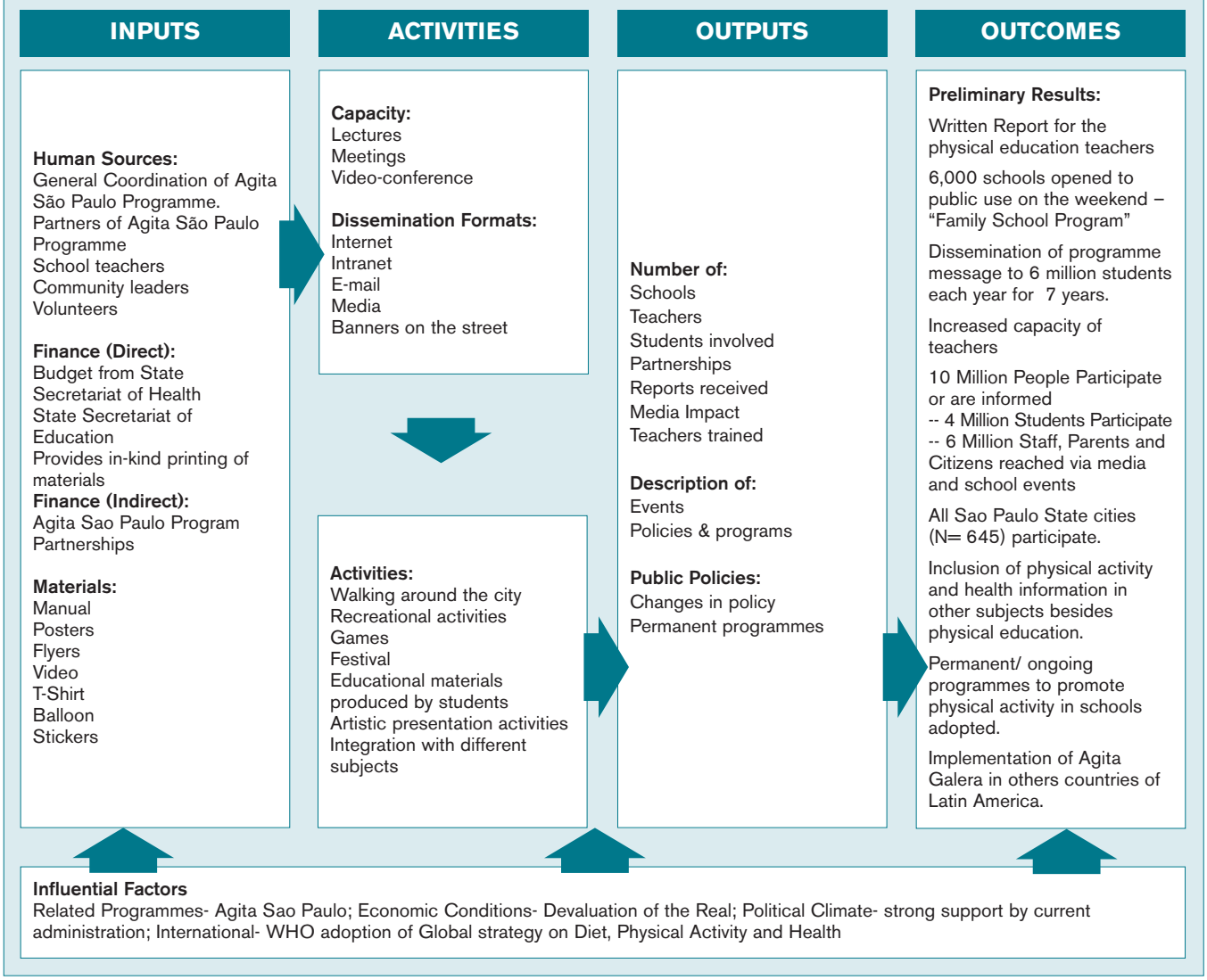
Handbook for Evaluation of Physical Activity Programs in Latin America

The *CDC Physical Activity Evaluation Handbook* is designed for practical use by programme staff with the goal of helping evaluate physical activity programmes across a wide range of communities. This handbook has been updated and revised to reflect the suggestions made by the Rio workshop participants and others, including the addition of two illustrative case studies from the Americas. The revised handbook now titled *Handbook for Evaluation of Physical Activity Programs in Latin America* is available in Spanish and Portuguese (PAHB, 2005).
The handbook presents evaluation as a cycle of on-going activity rather than something undertaken at the end of an intervention to see if it "worked." In this context evaluation outcomes provide an opportunity to address issues of programme accountability, influence policy makers and funders, measure effectiveness, build community capacity, share what works and what does not work with other communities, and ensure funding and sustainability.

The framework provides a process that logically interweaves data collection into intervention delivery. The handbook describes 6 steps for planning and implementing practical programme evaluations. Because intervention programmes and their evaluations are dynamic these steps may be conducted simultaneously, in a different order or repeated as programme activities evolve. There was a strong consensus in the Workgroup that, while it is possible to design good evaluation of programmes even after they have begun or have been completed, it is much preferred that evaluation be built into the programme when it is initially designed. The 6 steps as discussed in the workshop, are briefly described below.

1- Engage stakeholders
Evaluations should begin by engaging stakeholders. Stakeholders are the persons or organisations that have a vested interest in the programme and the

Figure 1 **Logic model for Agita Galera**



evaluation results. Stakeholders must be consulted and involved to the extent possible in all stages of the evaluation to insure their evaluation needs are addressed and increase their ownership in the evaluation process and results. The process of engaging stakeholders begins with asking them what they want to learn from the evaluation. Experience has shown that when evaluations are carried out by those who are not closely involved with the intervention and without adequate consideration of who has an interest (a "stake") in the results of the evaluation, evaluation reports go underutilised or even un-read. At the same time it is important to protect against bias in the evaluation process. Just as evaluations conducted by external evaluators risks misinterpreting data and overlooking important programme activities, evaluations conducted by programme staff or individuals whose self interests are enhanced by positive evaluations can foster bias or the appearance of bias in how the results are interpreted.

2- Describe or plan the intervention (programme)

Once the stakeholders are engaged, the components of the intervention should be thoroughly reviewed with them. Descriptions should be sufficiently detailed to ensure a clear understanding and facilitate agreement about the intervention's strategies and goals. Details should include the intervention's capacity to effect change, its stage of development, the need or problem being addressed, the purpose and rationale and the programme's history. A graphic logic model illustrating presumed causal and temporal relationships between project activities and between evaluation elements should be developed as part of this process. This intervention description sets the frame of reference for the appropriate design of the evaluation. Figure 1 provides a simplified logic model from Agita Galera, a physical activity promotion programme in Sao Paulo, Brazil. Typical Logic Models include a description of "Inputs" or resources (people and money), available to the programme, "Activities" (events or actions), "Outputs" (direct products of the programme) and "Outcomes" (short, medium and long term effects of the programme) and "Influential Factors" (social, political and physical environment in which the programme is conducted).

3- Focus the evaluation

Not all evaluation design options are equally suited to meet the information

needs of the various stakeholders. A thorough evaluation plan anticipates intended uses and creates an evaluation strategy with the greatest chance of being useful, feasible, ethical, and accurate. Among the items to consider for an evaluation is the evaluation purpose: who will use the results and for what purpose, what questions are important, and what methods are necessary to answer the questions identified? Because many programmes consist of a number of interrelated and overlapping activities, it is critical that the specific focus of the evaluation be clearly articulated and agreed upon by relevant stakeholders. Exactly which aspects of the programme will be monitored, how, and what will be considered evidence of success or failure should be determined as part of this process.

4- Gather credible evidence
An evaluation should collect information that conveys a well-rounded picture of the intervention so that the evaluation's primary users see the information as credible. Stakeholders should perceive evaluation results as believable and relevant for answering their questions. Such decisions depend on the evaluation questions being posed and the motives for asking them. For some stakeholders, 'strong qualitative' evidence may be required while for others compelling or illustrative quantitative information, such as, quotes from participants or informed observers may be persuasive.
A triangulation of data from qualitative and quantitative sources provides further credibility and a richer source of information on programme process, interpretation of intervention outcomes, and the reasons for those outcomes. Logic models can help determine where appropriate data should be obtained, and credibility will be enhanced by a clear description of the methods used to obtain the data, its relevance to the topic and efforts made to insure validity and reliability.

5- Justify conclusions
The evaluation conclusions are justified when they are linked to the evidence gathered and are judged against agreed-on values or standards set by the stakeholders. Stakeholders must believe that conclusions are justified before they will use the evaluation results with confidence. Evaluators are bound by standards of conduct and ethics that require careful review of the sources of data and the conclusions drawn from them.

6- Ensure use and dissemination of lessons learned
Evaluation results are useful only if acted on. Preparing for and facilitating their use requires strategic thinking and continued vigilance in communicating results. This process begins in the earliest stages of stakeholder engagement and continues throughout the evaluation process. Just as evaluators are ethically bound to ensure accurate conclusions from the data, they are bound to share these conclusions with all relevant decision-makers, stakeholders, including programme participants and representatives of the community in which the intervention was conducted.

This framework is a synthesis of evaluation practices and is a practical approach to evaluation in public health settings. This framework is purposely general, to serve as a guide for designing and conducting specific evaluation projects in diverse international settings.

Conclusions

While there is a rich tradition of academic research and inquiry in Latin America, evaluation that focuses on programme process and outcomes with a goal of obtaining practical information for programme management is a relatively new concept. Promotion of physical activity through multi-sector community-based programmes is a growing and important element in our efforts to combat the epidemic of inactivity (WHO, 2002a; WHO, 2000b; Shepard *et al.,* 2004). The Rio Workgroup's overriding goal is to nurture and ensure the evolution of a culture of evaluation for physical activity and health promotion related efforts. In addition to the use of an evaluation framework such as that illustrated in the Handbook, the Workgroup made a number of observations on evaluation in general, as well as, specific observations about developing a culture of evaluation in the Americans. Specific observations and recommendations are codified in the Rio Recommendations and are included in *Appendix A* and general themes and observations are described below.

As mentioned previously, a theme of much of the discussion was the observation that the theoretical bases and purposes of evaluation are often different from research, with research generally focusing on testing hypotheses and seeking generalisable principles and relationships while evaluation is focused more on providing practical information for programme monitoring, improvement and decision making. The Workgroup agreed that evaluation is a programme management tool, providing process information useful for midcourse adjustments as well as information on short and long term outcomes for judging programme effectiveness and whether the programme met its objectives. The Workgroup also noted that it is important to be strategic in the use of programme resources, and that evaluators should beware of spending programme resources in collecting too much data and then not having adequate time or resources to analyse it. One Workgroup member suggested the idea "do good process evaluation always, do good outcome evaluation selectively". The Workgroup emphasised that evaluation is a learning process not a rigid system, and steps outlined in the Handbook can overlap or be done in a different order. Logic models or other methods of graphically illustrating programme components and their relationships can be very useful but do not necessarily need to follow the rigid model illustrated in the handbook and in most cases training on their use is also needed. The Workgroup noted that qualitative and quantitative data should be used together when possible and recognised that good qualitative data may provide sufficient or even better programme insights than quantitative data. The Workgroup noted that although financial support for evaluation of health promotion programmes is often difficult to secure the goal of fostering a culture of evaluation, it can be buttressed by reminding decision makers that in other domains, such as business, evaluation is integral to success. Finally, the Workgroup noted that while additional training and more resources are needed there are existing evaluation resources at academic institutions, through networks such as the Physical Activity Network of the Americas (RAFA-PANA, 2005) the WHO/PAHO CARMEN initiative (PAHO, 2005) or the International Union for Health Promotion and Education (IUHPE, 2005) and institutions such as the World Bank and CDC. Text of the Workgroups' formal recommendations and resolutions are provided in Appendix A.

Appendix A Rio de Janeiro Recommendations for Physical Activity Evaluation Interventions

On November 17th – 19th, 2003, in Rio de Janeiro, Brazil, an international panel of experts on the design and evaluation of community-based physical activity promotion programmes was convened by the Centers for Disease Control and Prevention (CDC) and the World Health Organization Collaborating Center for Physical Activity and Health Promotion (WHO CC). Additional sponsors included CELAFISCS1, PAHO2, ACSM3, and Agita Mundo. This panel was convened to address the growing public health crisis, including significant increases in morbidity and premature mortality, resulting from inadequate levels of physical activity among populations. For the year 2000, WHO estimated that 1.9 million deaths were attributable to physical inactivity. WHO also reported that 75% of deaths in the Americas during 2000 were due to non-communicable diseases (NCDs), and an even higher percentage (i.e. 87%) of such cases were noted in the developed regions of Europe. During that same time period, Latin America alone had an estimated 119,000 deaths due to physical inactivity. Billions of dollars in additional health care costs in most, if not all, countries of the world are also attributed to health concerns stemming from physical inactivity. Estimates from several countries suggest that physical inactivity is responsible for 2-6% of total health care expenditures; in the United States these costs total as much as $76 billion annually (WHO, 2002; Pratt et al., 2000.)

Assessing the distribution and trends in disease and risk factors is an essential public health function. Inadequate surveillance of the prevalence of physical inactivity among populations and inadequate evaluation of efforts to promote physical activity impede efforts to effectively address the growing worldwide crisis resulting from the lack of proper physical activity. Many countries have limited numbers of people with sufficient training in physical activity evaluation and lack the financial and political support needed for evaluating national, regional, or local efforts. The charge of this expert panel was to accomplish the following:

(1) review and modify the CDC Physical Activity Evaluation Handbook for use in Latin America, including the development of region-specific cases studies; and
(2) provide recommendations on the appropriate use of evaluation as part of the programme planning, assessment, and policymaking process.

The focus of these recommendations is on practical public health programmes to promote physical activity rather than on research on physical activity. Programme experience in developing countries (such as Agita Sao Paulo, Brazil, and Muévete Bogotá, Colombia) and from expert groups (such as the WHO European Working Group on Health Promotion) support the recommendation that at least 10% of total funding should be allocated to evaluation.

The expert panel concluded the following:

- In order for policy makers, practitioners and the public to respond effectively to the growing public health crisis resulting from inadequate levels of physical activity, high-quality evaluations of physical activity initiatives must be conducted and their results disseminated.
- These evaluations must be developed in partnership with stakeholders, be tailored to each intervention, be planned and implemented using an appropriate mix of evaluation methods, and be supported with adequate financial and personnel resources.
- Evaluation results must be shared with policy makers at all levels, other programme stakeholders, participants, practitioners, and the public, and must be used to guide future policy and programme decisions.
- Evaluation training and the use of evaluation data are insufficient in many, if not most countries. Compared with other sectors, such as business, the public health community currently lacks a consensus and culture supportive and appreciative of the critical role of evaluation.

The Expert Panel's findings and recommendations are outlined below.

Members of the "CDC-WHO Workshop on Evaluation of Physical Activity Interventions"

Recognising that:

- physical activity is universally recognized as a necessary component of health and quality of life

and

- physical activity is a critical component of interventions designed to reduce non communicable diseases (NCDs) and promote health

and

- physical and mental health benefits at an appropriate level of physical activity apply to peoples of all races, ages, abilities, and socioeconomic status

and

- inadequate levels of physical activity are prevalent in most countries, across all races and ethnic, social, and economic groups

and

- the health risks associated with inadequate levels of physical activity apply to persons of all races, ages, abilities and socio-economic status

and

- the causes of inadequate levels of physical activity are multifactoral and involve many sectors

and

- the solutions to inadequate levels of physical activity require a multifactoral, multidisciplinary approach including participation from sectors such as health, education, culture, sport, media, environment, urban planning, transportation, federal and local government, business, and financial and economic planning

and

- a wide range of community-based interventions are currently being conducted, and numerous additional programmes are being planned or discussed

and

- high-quality evaluation results are necessary for guiding programmes and establishing or refining policies

and

- most countries have inadequate numbers of personnel trained to use evaluation data effectively as well as inadequate data from surveillance systems to monitor the magnitude of the problem

and

- many, if not most, countries and communities need to strengthen

their policy and programme planning efforts around physical activity and health promotion.

Therefore;

Members of the CDC-WHO Workshop on Evaluation of Physical Activity Interventions adopt the following recommendations for appropriate programme evaluation efforts:

1. All physical activity interventions should have some form of evaluation. When possible, evaluation should begin as part of the programme planning process and continue throughout the life cycle of the programme.
2. Every effort should be made to involve stakeholders in the cycle of physical activity intervention evaluations.
3. Adequate resources should be devoted to evaluation. A goal of 10% of programme funding resources devoted to evaluation is recommended.
4. Physical activity interventions should be evaluated in terms of their processes as well as their outcomes.
5. Evaluations should be tailored to the stakeholders' needs and the characteristics of the initiative:
   a. A blend of qualitative and quantitative strategies is often appropriate.
   b. The questions that an evaluation is designed to answer should be developed and explicitly agreed upon by stakeholders.
6. We endorse the use of a variety of evaluation frameworks. The *CDC Physical Activity Evaluation Handbook* which was reviewed and revised at this workshop is a practical and appropriate model.
7. All evaluations should follow standards of practice and ethical principles as enumerated in the *CDC Physical Activity Evaluation Handbook.*
8. Results of evaluations should be shared with all stakeholders and disseminated to professional and lay audiences:
   a. Community residents and participants in the programme are significant stakeholders and should be included in the evaluation process, including the planning of the programme objectives, development of the programme, the formulation of evaluative judgments and dissemination of results.
9. Evaluation results should be used to adjust ongoing and future programmes and should inform policy.
10. Evaluation research is distinct from normal programme evaluation and is designed to improve the practice of evaluation.
    a. International and national organisations such as WHO, PAHO, IUHPE[4], and CDC should promote the use of evaluation data, support evaluation training, and support practical evaluation research.
11. Training of practitioners in programme evaluation is a mutual and shared responsibility of all stakeholders.
12. Manifest in these recommendations is our resolve to promote effective evaluation of physical activity programmes as part of a larger effort to create interventions that will increase population participation in physical activity.

International organisations, including WHO, are called on to endorse and promote these recommendations in assemblies, meetings, policy making, and grant applications.

February 18, 2004, Rio de Janeiro/Atlanta

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3. American College of Sports Medicine
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Advocacy

Trevor Shilton

Advocacy for physical activity– from evidence to influence

Abstract: Advocacy is an evolving and underdeveloped element of public health practice. Historically, it was used to describe activities undertaken by persons on behalf of the poor, the sick or oppressed. In the seventies, led by tobacco control advocates such as Pertschuk in the United States, Gray in Australia and Daube in the United Kingdom, public health advocacy became more focused on structural and policy change. Since the Ottawa Charter (WHO, 1986), the health promotion movement has embraced a broader view of the role of advocacy. The public health community now see advocacy as social action primarily aimed at effecting changes in legislation, policy and environments that support healthy living. Advocacy is defined by the World Health Organization as *a combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal or programme* (WHO, 1995).

This paper describes a model for understanding and mobilising physical activity advocacy. It outlines a three step process:

1. Gathering and translating the most pertinent physical activity evidence.
   Why advocate for physical activity?
2. Developing from the evidence, a physical activity advocacy agenda and articulating a plan (or plans) of key actions that will increase population levels of physical activity.
   What should be advocated?
3. Implementing a mix of advocacy strategies to influence and mobilise support for the physical activity agenda.
   How should advocacy be implemented?

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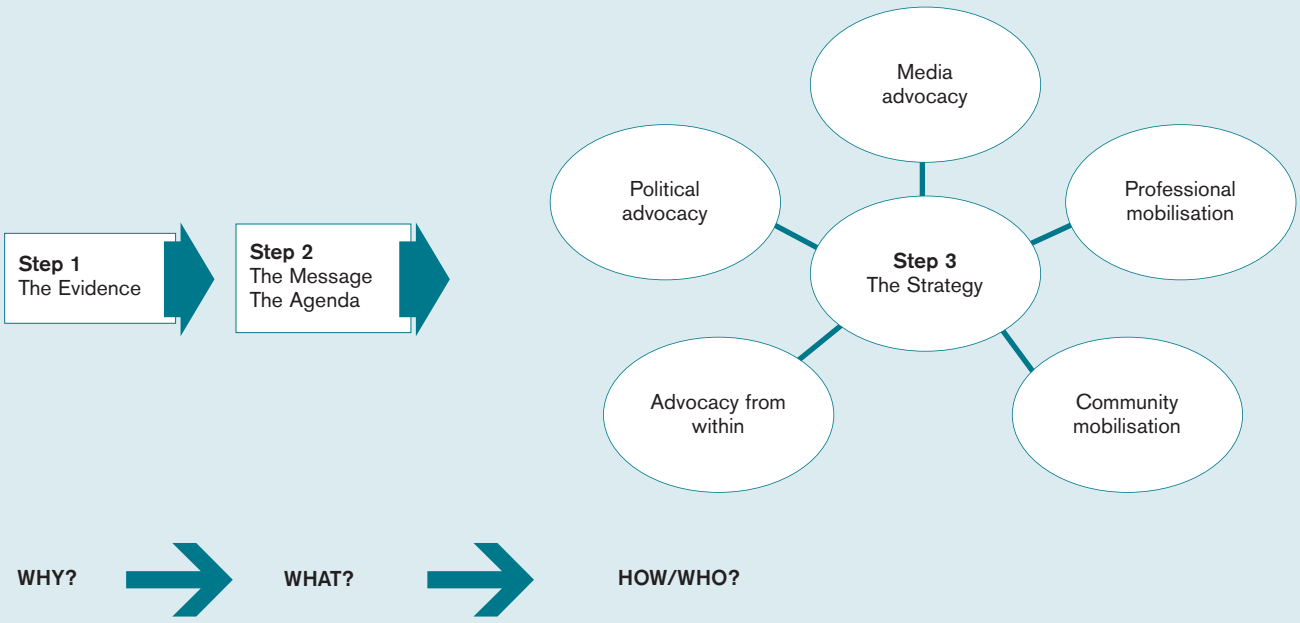
Figure 1 **A three step (Why, What and How) model of advocacy**



social action primarily aimed at effecting changes in legislation, policy and environments that support healthy living. Advocacy is defined by the World Health Organization as *a combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal or programme* (WHO, 1995).

There is a contradiction in that, while advocacy is widely accepted as a priority strategy, it remains an underdeveloped element in the fields of health promotion and public health. Chapman (2004) describes advocacy as a 'neophyte' in public health and points out that few master of public health courses include units on advocacy, and there are no textbooks or journals that formally address health promotion advocacy.

Public health advocacy invariably involves health professionals or other campaigners pitting their skills and arguments against an opponent, because their public health objective is at odds with governments, industry or other stakeholders (Chapman, 2004). The lack of an evident industry adversary in some ways adds to the challenge for physical activity advocates. The physical activity advocate instead battles less evident and more pervasive enemies such as apathy, ignorance, political indifference, addiction to labour-saving devices and a 'couch potato' attitude.

Keywords
- advocacy
- physical activity

While advocates of physical activity may not have an evident enemy, they do have many assets. Principal among these is the mounting evidence of the public health benefits of physical activity. Other assets are the many opportunities physical activity presents for cross-community benefits and partnerships. Policy and practice in education, sport and recreation, and in those professions that plan our built environment can have a profound influence on physical activity. Physical activity advocates can find allies among those that are concerned about the environment, fuel consumption and traffic congestion. Therefore, there can be major physical activity gains in advocacy that is directed at sectors outside health (WHO, 1997).

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In short, this can be referred to as the 'Why, What and How' of physical activity advocacy, as illustrated in Figure 1.

Step 1: gathering and translating physical activity evidence– Why advocate for physical activity?

Evidence that is systematically collected, published and disseminated is crucial for the sound development of policy and effective physical activity interventions and practice. Evidence serves to justify decisions, and provides a basis for justifying a physical activity advocacy platform and key physical activity messages. Advocacy is principally concerned with the application of evidence, or the weighting and prioritisation of evidence into a set of desired physical activity actions (Dobrow *et al.,* 2003.)

Evidence has different meanings across sectors. Even within health, evidence has important specific meanings that differ across disciplines. Evidence can be used to describe the contribution of physical inactivity to the prevalence, causes and prevention of disease. Evidence can also describe the processes and impacts of physical activity interventions, or it can describe expert knowledge. The health literature describes levels of evidence, where the randomised controlled trial (RCT) is described as a high standard (http://www.cebm.net/levels_of_evidence.asp). However, in health promotion, where the discipline is rooted in the relationships between context, behaviour, environment and the need to influence systems and structures, evidence can be gathered to describe any of these processes (Speller *et al.,* 2005). The IUHPE Journal *Promotion & Education*'s first special issue of 2005 focused on the challenge of getting evidence into practice. The concept of evidence was defined broadly by the authors, acknowledging that in health promotion evidence has scientific, professional and community dimensions (Aro *et al.,* 2005), and should report on results, processes and capacity (Saan, 2005.) Getting evidence into practice is a key advocacy challenge.

Evidence takes on different meanings in sectors other than health. Politicians and key decision makers may want health evidence to be complemented by information demonstrating that proposed physical-activity actions are acceptable with their electorate, popular with the media, or will do no harm to their political standing. Arguments that are constructed around a government's existing policy priorities can be persuasive, and this may include a need for economic analyses, policy analyses and linking physical activity evidence to other community concerns such as economic policy, safety or sustainability. These different understandings of evidence need to be understood by physical activity advocates. Evidence, however defined, is a valuable asset for those who seek to construct advocacy arguments.

Health evidence now provides powerful support for physical activity advocacy. In recent decades there has been a profound shift in the balance of the major causes of death and disease in most countries. Deaths from chronic diseases, which include cardiovascular disease (CVD), stroke, type 2 diabetes, cancers and obesity now represent 60% of all deaths and 47% of the global burden of disease, with 66% of these deaths occurring in developing countries (WHO, 2004a). The *World Health Report 2002* describes in some detail how a few major risk factors now account for much of the morbidity and mortality for non-communicable diseases. More recently, the INTERHEART study of potentially modifiable risk factors associated with heart attack in 52 countries found that nine out of ten heart attacks could be predicted on the basis of nine risk factors, which are the same all over the world (Yusuf *et al.,* 2004). This mounting evidence highlights the central importance of prevention and the promotion of healthy lifestyles, policies and environments as the solutions to the world's leading health concerns.

Physical activity is now recognised as a strong independent predictor of mortality and chronic disease. Physically active individuals will gain a typical risk reduction of around 30% for major chronic diseases when compared to the inactive (USDHHS, 1996; WHO, 2002; Lee & Skerrit, 2001). Among non-smoking women, physical inactivity and overweight and obesity together, may account for as much as 31% of all premature deaths and 59% of deaths from CVD (Hu *et al.,* 2004). In addition to its role in preventing disease, physical activity also has a key role in the management of these diseases (Brown, 2004; Bauman, 2004.)

The health impacts of physical inactivity are further exacerbated by its high and increasing prevalence. Levels of physical activity are decreasing in most populations, however, the patterns of inactivity in communities vary, both between countries and across socio-economic strata and across the life-span within countries. This information should influence where intervention investments are made. For example, investment may be prudent in programmes that target lower socio-economic status neighbourhoods where inactivity prevalence is highest. Another sound investment may be in programmes that target age groups where physical activity declines most rapidly, for example, older adults, adolescent females or young adults with families. Data on low and declining levels of activity, rising obesity and rising sedentariness (television watching and recreational electronic media) can also be newsworthy and can complement media advocacy related to the health consequences of inactivity (WHO, 2002.)

The imperatives for promoting physical activity extend well beyond health. Indeed to present the rationale for increased focus on physical activity purely in health terms is to inadequately represent the broad benefits. Physical activity can deliver benefits, such as, contributions to decongested roads, cleaner air, improved social capital, community safety, participation and civic engagement. Physical activity has relevance across government, and has direct relevance to the portfolios of transport, planning, education, sport and recreation, and local government. Indirect links can also be drawn with crime prevention and tourism. A community-wide approach to physical activity opens many doors for the advocate.

The publishing of evidence in relation to health and community issues typically precedes increases in governmental policy and programme commitment to those issues. Unfortunately, and perhaps specifically because of the lack of or inadequate advocacy, the time lapse between evidence and outcomes can be unnecessarily long. For example, in the case of tobacco control there was considerable delay between the first US Surgeon General's Reports on the Health Consequences of Tobacco and the implementation of progressive policy and programmes. Moreover in many countries there have been much longer delays between the evidence and concerted government action on tobacco. When progressive actions do occur, such as the introduction of Quit campaigns, use of price policy, progressive legislation and regulation to curtail the sale, supply and promotion of tobacco, health warnings and action to reduce exposure to second hand smoke and, more recently, the Framework Convention on Tobacco Control (FCTC), these have been implemented variably across the world, if at all (WHO, 2004b.)

Advocacy for an issue should be a priority whenever the volume of

evidence regarding the health and community benefits exceeds the level of funding and policy commitments to that issue. In the case of tobacco, this imbalance persisted for many decades, and still exists across the world. Improved evidence for the health benefits of regular physical activity gathered momentum in the eighties (Paffenbarger *et al.,* 1986; Blair, 1989) and continued in the nineties (Berlin & Colditz, 1990; Bouchard, 1993). The publication of the US Surgeon General's Report on Physical Activity and Health in 1996 (USSG, 1996), and strengthening research evidence since that time, in concert with the emergence of the overweight and obesity epidemic, created the imperative for advocacy to increase focus on physical activity interventions and research. The case to avoid the delays that occurred with tobacco is both compelling and urgent. There have been successes in countries, such as, Finland and Canada from which others can learn. In addition, there has been increased recognition of the importance of physical activity in chronic disease control by national governments and the World Health Organization. Physical activity advocates need to mobilise their efforts to learn from these successes.

Step 2: developing and articulating a physical activity advocacy agenda– What should be advocated?

To successfully advocate for physical activity we need to move from the evidence to formulate:

a. Consensus about agreed messages that detail the amount and type of physical activity, and the benefits it will deliver.
b. An agreed, well-justified and prioritised set of actions– an agenda for success.

Physical activity evidence assists the advocate to formulate the right messages and achieve consensus regarding health messages that describe the amount, type and intensity of physical activity that will deliver health benefits. Governments may be encouraged to invest in the process by funding the generation of physical activity guidelines or recommendations for adults, youth and children, or adopting guidelines that already exist. A recent example of this is recent endorsement by Australian Health Ministers of physical activity recommendations for children and youth. These recommendations state that:

- Children and youth should participate in at least 60 minutes (and up to several hours) of moderate to vigorous-intensity physical activity every day.
- Children and youth should not spend more than 2 hours per day using electronic media for entertainment (e. g. TV, computer games, Internet), particularly during daylight hours (Australian Government, 2005).

In addition to consensus regarding scientifically accurate messages (getting the message right), advocates also need to consider language that is most persuasive in communicating the message (getting the right message). Physical activity messages can be framed positively through incentive appeals that promise benefits, or negatively in ways that threaten consequences. Different appeals will be appropriate for different target markets.

Evidence can also inform consensus about advocacy targets including the policy, legislative and educational actions that will have the most significant impact on physical activity, and will find media and political currency. Perhaps the best example of a health issue where such consensus has been achieved is in global tobacco control, where a well-articulated consensus agenda exists around smoke-free policy, price, sale and supply, public education, treatment, packaging, industry advertising and promotion, and point of sale (Jamrozik, 2004; WHO, 2004b) Similarly, the physical activity advocacy agenda should articulate a mix of initiatives, policy, environmental and educational interventions to be implemented across community settings such as transport, local government, health, education, sport and recreation and the media. Such strategies need to be targeted in order to reach those at greatest need, and should give due consideration of differences across gender, culture and the age-span.

While individual strategies may prove effective, the ten point plan in Table 1, summarises a comprehensive population approach to increasing physical activity. It provides an agenda for physical activity advocates. Due to the complex nature of multi-component health promotion interventions it should be acknowledged that there is a lack of insight into the complexity of the cause and effects of the various elements of a multi-component intervention, and the complex nature of both proximal and distal determinants of physical activity. In fact, dissecting comprehensive programmes to determine the effectiveness of sub-components may be a meaningless task. It remains true that a comprehensive approach, incorporating strategies, such as those listed in Table 1, those recommended by the World Health Organization in relation to physical activity and nutrition (WHO, 2004a) and by others in relation to tobacco (Jamrozik, 2004, WHO 2004b, Yach *et al.,* 2005) have the greatest chance of being effective.

Step 3: implementing a comprehensive mix of advocacy strategies to mobilise support for physical activity– How should advocacy be implemented?

Once the evidence in favour of increased attention to physical activity has been distilled and a clear agenda (or ten point plan) articulated, a combination of strategies is required to shift public and professional opinion and mobilise support and resources for a greater focus on the physical activity actions in the plan. While political and media advocacy tend to dominate the advocacy discourse, a more comprehensive approach is recommended. Such a comprehensive approach includes political and media advocacy, but also professional and community discourse, and organisational change dimensions. These approaches are illustrated in Figure 1.

1. Political advocacy

Political advocacy should be a central element of physical activity advocacy. Political advocacy is designed to win the political commitment required for physical activity policy actions (the platform in Step 2). The mounting evidence for the importance of physical activity in chronic disease prevention and its relationship to overweight and obesity is not well understood in political circles. Advocacy has a key role in raising the awareness of decision makers, including health ministers, regarding their key responsibility to fund comprehensive physical activity campaigns and physical activity monitoring. Advocacy for such approaches is understandably directed

at Ministers of Health. However, the cross community nature of physical activity means that physical activity advocacy will often be appropriately targeted at ministers across portfolios and at heads of government. Cross-government engagement in the physical activity agenda is an important objective as policy makers in education, transport, planning, sport and recreation and local government have important roles to play. A wide range of policy decisions can impact on opportunities for people to be active. If physical activity impact assessments were required on policy decisions, possible consequences for physical activity could be identified. Some examples follow.

Table 1 **A ten point agenda for physical activity**

Action	Rationale
1. Establish a cross-government structure (a taskforce or council) for physical activity to ensure whole-of-community approaches and highest level leadership.	The establishment of a mechanism for cross-portfolio and cross-community engagement in the physical activity agenda can help ensure participation of policy makers in health, education, transport, planning, sport and recreation and local government. Such a taskforce can provide a mechanism for partnership and intersectoral collaborations.
2. Develop and implement a comprehensive physical activity strategy.	A comprehensive approach that incorporates media, community programmes, policy and environment approaches, and engagement across sectors is required to achieve optimal increases in population levels of physical activity. While each of the points in the 10 point plan have merit, the delivery of a comprehensive strategy is recommended.
3. Ensure appropriate investment of new resources and appropriate re-orientation of existing resources.	Achieving improvements in population levels of physical activity will require significant investment. This can be achieved through new funding or by reorienting existing priorities and the focus of existing policy, programmes and expenditure. For example, greater focus on community recreation in sport portfolios, and greater focus on cycling and walking in transport budgets.
4. Support regular population monitoring of physical activity for adults and children.	Population monitoring on a three-yearly basis will enable insights into trends, successes and failures across time and enable better targeting of initiatives to bring about change where it is most needed. Population monitoring will also provide benchmark data against which progress can be assessed. The goal of supporting regular population monitoring is supported by the World Health Organization in its Global Strategy on diet, physical activity and health (WHO, 2004a).
5. Fund and implement communication and mass media campaigns to promote health benefits of physical activity and its cross-community relevance and importance.	Well researched and implemented mass media campaigns can change community consciousness, awareness, knowledge and behaviour. Such campaigns are most effective when implemented as part of a comprehensive strategy, with adequate and sustained funding. Media campaigns require a bringing together of health promotion and social marketing expertise.
6. Support mass participation through programmes with proven effectiveness.	Programmes, tailored to the needs of specific groups, and to appeal to different ages through the life cycle, increase physical activity. Such programmes need to be located in areas of greatest need and should be accessible and affordable to all.
7. Fund 'active transport'initiatives to increase walking and cycling as transport choices.	Walking and cycling are the most prevalent, popular and accessible physical activities. Walking, cycling and public transport are also environmentally friendly and sustainable choices and can be readily incorporated into the core business of departments of transport.
8. Engage in productive partnerships with those who plan the built environment.	Neighbourhood design, school and building design impact on walking and other physical activities. Health professionals need to engage in partnerships with planning, engineering and architecture professionals.
9. Take a life-stage approach with programmes that target children, young women and mid-age adults.	Within a population approach programmes should be tailored to meet the needs of those in the community most at risk of declining physical activity. Periods in the life cycle where sub-populations are at risk of declining participation include childhood and adolescence, young adulthood (especially in women) and mid-age adulthood. *Children:* Evidence suggests children and schools are amenable to change. Children are greatly influenced by the environment and opportunities that are provided for them by adults *Young women:* Specific attention is required to prevent the sharp decline in physical activity typical in adolescence and early adulthood, and to accommodate the needs of women with dependent children. *Mid-age adults:* With the ageing population the major burden of future chronic disease attributable to inactivity will come from those who are currently mid-age and older adults.
10. Require compulsory physical education, with appropriate standards, quality and teacher training in all schools.	Appropriately designed physical education programmes, and well-trained teachers can increase physical activity and enhance skill learning among children.

Policy action	Physical activity consequence
• Investment in public transport ➤	• A plus for walking and cycling
• Introduction of daylight saving ➤	• A plus for afternoon physical activity
• Extended trading hours ➤	• A negative for family, weekend and evening sport and recreation participation and physical activity
• Longer working hours and shifts ➤	• A negative for physical activity, and commitment to regular physical activity.

Examples of political advocacy:
- Produce and release pre-election platforms outlining key government action needed to support increased levels of physical activity;
- Seek meetings and representations from experts (usually non-government organisations and academics) to promote a physical activity platform;
- Write submissions to relevant government enquiries highlighting physical activity perspectives across the fields of health, planning, transport, education, sport and recreation, environment and local government;
- Advocate for a cross-government approach through the establishment of a physical activity taskforce or council;
- Arrange meetings where politicians can meet visiting physical activity experts (e.g. conference keynote speakers);
- Invite politicians to open or speak at conferences;
- Invite politicians to launch and participate in programmes, and to open new facilities;
- Engage politicians in physical activity initiatives within their own electorates;
- Involve the media. Media opinion is a critical driver of political action;
- Conduct and publish public opinion surveys.

Example 1: Advocacy for a cross-government strategy (a Physical Activity Taskforce in Western Australia)

The challenge of increasing population levels of physical activity will be easier where governments adopt a cross-sector approach. In Western Australia from 1997 to 2001, an advocacy strategy was implemented by the National Heart Foundation of Australia with the goal of seeing the establishment of a cross-Government Physical Activity Taskforce. The Heart Foundation coordinated the preparation of a proposal to Government and sought meetings with Ministers to advocate for the Taskforce. Through this process the Minister for Sport and Recreation was identified as a supporter, and subsequent meetings were held with him to discuss an operational model for the Taskforce. Australian National Physical Activity Conferences and National Health Promotion Conferences were held in Western Australia in 1997 and 1999 and the Heart Foundation arranged meetings between conference keynote speakers and relevant ministers and bureaucrats. Press conferences and media advocacy strategies were implemented in parallel with these activities. The Premier's Physical Activity Taskforce was created by the Government of Western Australia, in June 2001, to oversee the development and implementation of a ten-year whole-of-community physical activity strategy for Western Australia (Physical Activity Taskforce, 2005).

2. Media advocacy

Mass media is an important driver of public opinion and sentiment and an important potential ally for advocates. Strategic use of news media to advance the physical activity agenda can achieve increases in awareness and mobilise support for policy changes that will support physical activity. Physical activity advocates have the opportunity to use the heightened media interest in rising overweight and obesity to promote physical activity as a key part of the solution. For example, in Australia, following the establishment of a government Obesity Taskforce, and the presentation of a national action agenda for children, young people and their families to Australian Health Ministers in November 2003, there was widespread coverage in the Australian media of the importance of physical activity, and school physical education (Commonwealth of Australia, 2003). Similarly, a diversity of issues can be used to provide a frame for physical activity media messages. Community concerns such as neighbourhood planning, environmental issues, obesity and community safety can be used as opportunities to advance physical activity arguments in the media.

Examples of media advocacy:
- Media releases linked with new evidence and science regarding physical activity;
- Media releases attaching a physical activity angle to news in areas such as the environment, planning and transport, overweight and obesity, diabetes, heart disease and cancer prevention stories;
- Media events in connection with physical activity conferences;
- Publicity surrounding physical activity events (fun runs, stair climbs, community walks);
- Media launches of programmes and facilities;
- Letters to the editor;

Figure 2 **Five dimensions for comprehensive physical activity advocacy**

- Human interest stories highlighting physical activity achievements;
- Releases that attach a local angle and spokesperson to national or global stories;
- Award schemes to publicise and reward best practice.

3. Professional mobilisation
While physical activity may not have an overt enemy such as the tobacco industry, it has many potential friends. The physical activity workforce is broad, with representatives from health, education, sport and recreation, planning, transport and other disciplines. These professional 'supporters' may not recognise themselves as part of a physical activity workforce, and much work needs to be done to engage and mobilise them to lend their voice to calls for greater focus on physical activity. Of course such mobilisation is easier when the workforce is well informed and communication is fluid. Rapid and efficient means for communicating information are required to ensure the physical activity workforce is equipped with the evidence and the arguments about physical activity and in relation to current issues, new evidence and breaking news. This also assists in ensuring supporters are speaking with one voice about common advocacy goals. A good example of 'information mobilisation' is the tobacco control e-network *Globalink*. It provides daily news updates and bulletins and a forum for exchange of ideas and information, often about advocacy issues.

The cross-community nature of physical activity underscores the potential for formation of coalitions. Such coalitions have been important drivers for change and can mobilise broad support, as well as third party endorsement.

Examples of professional mobilisation:
- Target professional media and provide up to date and timely information to the workforce through newsletters, e-news, journals and websites;
- Encourage a diversity of professionals through regular information and engagement to consider themselves part of a physical activity movement;
- Mobilise letter writing in support of an issue by providing key arguments and evidence;
- Mobilise submission writing to inquiries that impact on physical activity;
- Provide professional education regarding physical activity and its increasing relevance.

Example 2: Mobilising support for the WHO Global Strategy on Diet, Physical Activity and Health

The World Health Organization's Global Strategy on Diet, Physical Activity and Health represents an important opportunity for increased focus on physical activity globally. Through the late 2003 and early 2004 there was considerable food industry pressure to see the strategy weakened, and to see its focus oriented towards individual responsibility and away from regulation of advertising and industry. Health professionals throughout the world mobilised their efforts in support of the strategy by writing submissions to the WHO and making representations to member-state governments. In the lead up to the WHO's 57th World Health Assembly in May 2004 one professional organisation at the forefront of this advocacy was the International Union for Health Promotion and Education (IUHPE). The IUHPE's World Conference on Health Promotion and Education, held in Melbourne in April 2004, provided a forum to bring together the leading authorities to present and discuss the Global Strategy. The IUHPE at its General Assembly on 29th April 2004 passed a resolution to support the Global Strategy. The resolution recognised the growing burden of non-communicable disease and the special role of nutrition and physical activity initiatives. The IUHPE fully supported the Global Strategy and noted that it was important and timely for global public health. The IUHPE urged its full adoption by the 57th World Health Assembly. The Global Strategy on Diet, Physical Activity and Health was adopted on 21st May 2004 (WHO, 2004).

4. Community mobilisation
Many thousands of community members participate in physical activities ranging from traditional sport and recreation to walking and cycling for transport and recreation. The wide participation in physical activity offers a unique opportunity for community mobilisation, to engage the large numbers of supporters across the community for physical activity causes. Through community mobilisation advocates may build a groundswell of support and sentiment.

Examples of community mobilisation:
- Mobilise letter writing to politicians, councillors, the media, or school principals in local communities to argue for improved facilities, programmes and environmental supports;
- Establish a process for path audits providing walkers with a mechanism for providing feedback to Councils on facilities and hazards;
- Arrange public meetings to advocate for improvements in programmes or infrastructure, e.g. Improved walking and cycling access around schools.
- Mobilise allies such as sporting club members and parents from junior sport clubs to engage in local advocacy.

5. Advocacy from within (reorienting) organisations
A frequently overlooked element of advocacy for change is advocacy from within organisations. In order for change to occur in the orientation of organisations, or the priority it affords to physical activity, advocacy may be used to target organisational structures, committee membership, funding priorities, and strategic and operational planning processes. Government employees often feel unable to participate in advocacy processes; however, they are uniquely placed to promote and disseminate new information and lead dialogue within their departments and advocate from within.

Examples of advocacy from within:
- Know your board and committee members and ensure they are well informed on physical activity issues;
- Identify external champions and encourage their invitation to Boards Committees and decision-making structures;
- Identify internal champions and cultivate them;
- Get a spot on the agenda and use it;
- Don't just present issues and reports, win commitment to follow-up actions;
- Mobilise internal supporters;
- Appreciate the power of organisational change;
- Be persistent, change seldom happens at the first attempt.

Reorientation of an organisation's priorities or changing its structures to better address physical activity is an important and sustainable goal of physical activity advocacy. Reorienting

services is a key principle of health promotion articulated in the Ottawa Charter (WHO, 1986). In the health sector such reorientation refers to providing greater focus on primary prevention and health promotion relative to curative services. Reorientation of priorities and services to better support physical activity can also be achieved in other sectors. Examples of this are illustrated in Table 2.

Who should advocate?

Each of the advocacy strategies above can employ a range of participants. Just as the strategy mix is broad, so too advocacy can involve many players in different roles. Some of these are listed in Table 3.

In addition to the above there is a special role for talented, passionate and articulate individuals who make themselves available to lead the charge for physical activity advocacy. Many successes in public health advocacy have been characterised by identifiable key individuals or 'spark plugs' that have played a key role in igniting the passion in others, and sparking change (Pertschuck M., 2001). Physical activity needs such individuals to take international leadership in physical activity advocacy.

This paper has described a model for understanding and mobilising physical activity advocacy. It outlines a three-step process to gather and translate new and compelling evidence, develop from the evidence a physical activity advocacy agenda or plan, and then implement a coherent mix of advocacy strategies to influence and mobilise support for the physical activity agenda. This is a major undertaking.

Advocacy should be a priority strategy for those seeking to advance physical activity globally. Such advocacy will strongly communicate the arguments and convincingly propose solutions. This will require a long-term and sustained effort.

Table 2 **Reorientation of priorities and services to promote community physical activity**

Sector	Reorientation that would promote community physical activity
Sport and recreation	Reorient focus from elite sport to participation in walking and moderate recreational physical activity in neighbourhoods
Health	Reorient focus to prevention and health promotion services and policies
Transport	Prioritise walking, cycling and public transport in transport policy
Planning	Give priority to design codes that promote walkability, community recreation, and enhanced active choices in neighbourhoods, schools and the built environment
Education	Prioritise physical education, sport education, fitness and active-school environments
Local Government	Prioritise physical activity principles in planning and programming in recreation and community development

Table 3 **Who should advocate?**

Stakeholders	Suggested advocacy roles
(a) Non-government organisations	Lead political and media advocacy from outside government. This can be delivered by individual non-government organisations (NGOs) through coalitions of agencies or dedicated small groups established for advocacy purposes. NGOs often engage academics in advocacy.
(b) Academics	Lead the gathering and provision of evidence, and assist with political and media advocacy.
(c) Government employees/public servants	Lead 'advocacy from within' and assist as appropriate with political and media advocacy.
(d) Champions	Community leaders and prominent individuals can be identified and recruited to act as spokespersonsand role models.
(e) Professionals	Physical activity has a broad workforce from across sectors which can be mobilised to engage in physical activity advocacy.
(f) Public	Physical activity can draw on a very broad community supporter base. This includes sporting club members, parents of juniors, rate payers, walking group members. Each of these can be mobilised at the local level to represent physical activity positions through letter writing, attendance at forums, events, etc.

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Fiona C. Bull, Michael Pratt, Roy J. Shepherd and Becky Lankenau

Implementing national population based action on physical activity- challenges for action and opportunities for international collaboration

Abstract: This paper summarises recent past and current international developments on physical activity looking at the challenges and opportunities they pose. Key elements of the WHO's Global Strategy on Diet, Physical Activity and Health (GSDPAH) are summarised, focusing specifically on the physical activity components, and by drawing upon recent fora (Atlanta, October 2002; Miami, December 2004; Cascais, February 2005; Beijing, October 2005; Bogotá, November 2005), we outline the barriers and areas of support required for successful development and implementation of national, population-based action on physical activity. These gatherings focused particularly on the needs of developing countries, where to date little has been done to augment physical activity at a population level. Unless swift action is taken, these countries will soon suffer significantly from an increased prevalence of non communicable diseases (NCD). Existing initiatives and opportunities for national and international action on physical activity are identified. Specific actions are proposed for advocacy, communication and dissemination, networks and partnerships, fundraising, policy development and implementation, programme implementation and evaluation, surveillance and capacity building. The development of the Global Alliance for Physical Activity (GAPA) provides a structure for international collaboration.

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The importance of physical activity (PA) to health

Physical inactivity is one of the leading causes of chronic conditions, including obesity, cardiovascular disease, type 2 diabetes mellitus, and certain types of cancer (USDHHS, 1996; Kesaniemi *et al.,* 2001). Inactivity contributes substantially to the global burden of disease, disability and premature death, with heavy resulting economic costs (Pratt, Macera & Wang 2000; Katzmarzyk & Janssen, 2004; WHO, 2002). Other conditions related to physical inactivity, including osteoporosis and the frailty of old age are widespread causes of morbidity (Shephard, 1997). Regular physical activity is also an important facilitator of good mental health and quality of life (USDHHS, 1996).

Global scope of the problem

Recent estimates suggest that at least 60% of the world's population do not undertake sufficient activity to gain health benefits (WH0, 2002; Bull et al., 2005), and in some regions as many as 90% of the population are inactive (Jacoby, Bull & Neiman, 2003). Globally, patterns of transportation and rapid rates of urbanisation heighten concerns about physical inactivity, particularly in countries experiencing economic growth and associated social change. For example, bicycle use for transportation is rapidly being replaced by car and motorbike use in China and elsewhere in South and East Asia (Bell, Ge & Popkin, 2002).

Recognition of need for action

The need for comprehensive national, regional and international public health policies to enhance physical activity has been recognised for some time (Shephard et al., 2004; WHO, 2004) and emphasised again most recently by the World Health Organization's (WHO) report on Preventing Chronic Disease – a vital investment. (WHO, 2005). Moreover, the tools exist for the introduction of successful, evidence-based physical activity interventions in terms of policies, guidelines, training courses, networks, partnerships, and systems of surveillance and evaluation. Also as a response to rising levels of obesity, physical activity is arguably a less contentious method of enhancing population health than the implementation of dietary restrictions.

Despite the scientific evidence base extending from the 1950s until 1996 only a few developed countries had attempted to influence population levels of physical activity, with some of the earliest work commencing in Canada and Finland (Bailey, Shephard & Mirwald, 1976; Karvonen, Kentala & Mustala, 1957; Shephard & Rode, 1991). The publication of the U.S. Surgeon General's report on 'Physical Activity and Health' (USDHHS, 1996), a synthesis of evidence and call for national action, other countries, both developed and developing, started or increased their efforts to address static or declining levels of activity through national campaigns, cross sector partnerships and other diverse programmes (for example;

Australia, Brazil, New Zealand, U.K. and the U.S.A). These efforts gained momentum and more countries commenced activities in part as a result of the World Health Day focus on physical activity in 2002 and the development of 'Agita Mundo,' the on-going celebration of and advocacy for physical activity taking place annually in May (www.who.int/moveforhealth) (for example: Colombia, Germany, Norway, Pakistan, Singapore and Switzerland).

However, to date the policy response and concomitant population level changes in physical activity, within countries and internationally, has been slow, small scale, usually short term and often piecemeal. With few exceptions (notably Canada and Finland) there is little evidence that efforts have been effective. Indeed, even where the proportion of active individuals has increased, as in Canada and Finland, recent data suggest physical inactivity and obesity are rising (Fogleholm, 2004; Tremblay & Williams, 2000).

Overall, there is a huge disparity between the evidence-base for action to increase population levels of activity and the national and international response (Bouchard, Shephard & Stephens, 1994; Kesaniemi et al., 2001; Kahn et al., 2002). The important question is why? We argue that dominant issues are a lack of capacity to respond within ministries of health, sport, education and relevant non-government organisations (NGO) and, most importantly, the lack of political will to provide the means to do so.

The limited capacity of most countries to deliver a comprehensive population-based (public health) physical activity programme is part of a larger failure to mobilise the capacity needed to address chronic disease prevention in general (WHO, 2005). Sixty percent of all deaths are due to chronic disease yet the investment in preventing chronic disease is modest. Implementing effective public health programmes for physical activity may be a pragmatic means of taking the first step to developing a comprehensive NCD prevention effort.

This paper summarises recent international developments on physical activity looking at the challenges and opportunities they pose. We present a summary of the key elements of the WHO's Global Strategy on Diet, Physical Activity and Health (GSDPAH), focusing specifically on the physical activity components, and by drawing upon recent fora, we outline barriers and areas of support required for successful implementation of the GSDPAH recommendations and more broadly the development of national, population-based action on physical activity in developed and developing countries. Existing initiatives are identified and these present both the opportunity and mechanism for responding to the acknowledged needs. In addition, a set of specific actions is proposed, best effected through international collaboration. The development of the Global Alliance on Physical Activity (GAPA) provides the structure for such collaboration and its work programme is outlined.

The international response

Early initiatives to augment physical activity were mostly national or sub-national in scope. At an international level, concerted action only commenced in recent years, reflecting the growing consensus of evidence that physical inactivity is a major risk factor for non-communicable disease (NCD). Early efforts lacked both visibility and sustainability. In 1997, the WHO initiated an 'Active Living' programme. This was built around an international network and several meetings were held, covering policy, advocacy, and programme adaptation for schools and older persons. An ambitious agenda was planned for 1998/99 but only a few events actually happened and thus after an initial period of momentum, the network was disbanded.

More recently, the WHO has renewed its efforts towards correcting the emerging epidemic of physical inactivity and obesity. The 53rd World Health Assembly (WHA, May 2000) reaffirmed that physical inactivity was a key risk factor in the prevention and control of NCD, and a resolution was adopted encouraging the WHO to provide leadership in combating physical inactivity and associated risk factors. In 2002, the 55th WHA requested the development of the GSDPAH within the framework of the prevention and control of NCD (WHA55.23).

The process undertaken to establish a global strategy has been summarised elsewhere (Bauman & Craig, 2005). However, in brief, it included regional consultations with Member States, organisations of the United Nations system, other intergovernmental bodies, the private sector and civil society. Advice was provided by a reference group of independent international experts. The final strategy was endorsed at the 57th WHA (WHA57.17) in 2004.

The development of the GSDPAH, and the concomitant mandate for WHO to support international action on physical inactivity represents an important new window of opportunity for substantive progress. However, this window is time limited. Other strategies or a new epidemic will quickly supersede the prominence that physical inactivity has within the political agenda. It is therefore critical that the momentum achieved via the consultation process, and the interest and intent generated is translated rapidly into action at global, regional and national levels.

Summary of the WHO Global Strategy on Diet, Physical Activity and Health

The overall goal of GSDPAH is to guide the development of an enabling environment that will sustain actions at individual, community, national, regional and global levels, with a resultant reduction in the morbidity and premature mortality associated with physical inactivity. GSDPAH has four main objectives and outlines a set of principles for action to assist the development of regional and national strategies (see Figures 1 and 2).
The task of changing current patterns of physical activity requires the combined efforts of many, and it is recognised that this effort must be sustained over several decades. GSDPAH therefore outlines roles and responsibilities, providing considerable detail on how to combine sound and effective action at local, regional, national and global levels, with necessary monitoring and evaluation. Key roles are presented for WHO itself, which include: leadership; provision of guidelines, norms, standards and evidence-based recommendations; dissemination of information; strengthening regional and national policies; supporting implementation by member States; and promoting research and evaluation.

Figure 1

Global Strategy on Diet, Physical Activity and Health: Four main objectives

1. To reduce the NCD risk factors that stem from physical inactivity and other adverse lifestyles;
2. To increase overall awareness and understanding of the beneficial influences of physical activity and other aspects of an appropriate personal lifestyle;
3. To encourage the implementation, development, and strengthening of global, regional, national and community policies and action plans that enhance physical activity and other aspects of personal lifestyle in ways that are comprehensive, sustainable, and actively engage civil society, the private sector and the media;
4. To monitor key influences on physical activity and other aspects of personal lifestyle; to support research in a broad spectrum of relevant areas, including the evaluation of interventions; and to strengthen the human resources needed in this domain.

Key roles for national governments are stated as stewardship in initiating, developing, implementing and monitoring physical activity promotional strategy, using existing structures and processes where appropriate. A central component is the development of appropriate national policies, with concomitant strategies and action plans and measurable goals and objectives over a defined timeframe. Health ministries are identified as taking specific responsibility for coordinating and facilitating contributions from other ministries and government agencies, and forming appropriate partnerships with NGOs, and other public and private stakeholders. In part, because the solutions (or actions) required are often in sectors outside of health, for example education, transport, local government and planning. Although experience shows that this role may be fulfilled by others. For example, current national efforts are led by the sport and recreation sector in New Zealand and the non-government sector in Pakistan (Sport and Recreation New Zealand, 2004; Nishta, 2004).

Figure 2

Global Strategy on Diet, Physical Activity and Health: Principles for the development of regional and national strategies

- Use of the best available research evidence;
- Comprehensive approach, incorporating policies and action that address physical inactivity in conjunction with other major causes of NCD;
- Multi-sectorial;
- Multi-disciplinary, participatory and consistent with the principles contained in the Ottawa Charter for Health Promotion and confirmed in subsequent conferences on health promotion (www.who.int/healthpromotion);
- Based on a life-course perspective, encouraging regular physical activity from youth into old age and including efforts to reach children in schools, adults in worksites and other settings, and the elderly;
- Form part of broader, comprehensive and coordinated public health efforts.

Drawing on international experience, specific guidance is provided on the components of a national action plan and suggested elements include: national guidelines, clear public health messages; an optimal mix of strategies; policy efforts in multiple sectors. Creating enabling environments that support access to, and use of suitable facilities is recommended along with community involvement and mobilisation in the development and implementation of programmes. The GSDPAH also encourages low and middle income countries to link action on physical activity with the United Nations Millennium Declaration and related national development plans.
In total, the recommendations within the GSDPAH for member states are comprehensive and inclusive. At present, no country is exempt from needing to progress in at least one of the proposed areas. However, the majority of low and middle income member states are starting from a very fragile base and the magnitude of the task of implementing actions on physical activity is seen most sharply from this perspective. Neither the WHO nor national governments can accomplish the task alone. The GSDPAH therefore outlines roles for international partners, civil society and the private sector.

Roles of international partners, non-governmental agencies, civil society, and the private sector

International partners have a key role in supporting national responses and actions on physical activity. Coordinated work and integrated policies are needed among United Nations organisations (such as FAO, UNICEF, ILO, IMF, UNDP, UNESCO, WTO), inter-governmental bodies, non-governmental organisations, professional associations, research institutions and private sector entities. These partners can play an important role, with strengths in areas such as advocacy, resource mobilisation, capacity building, collaborative research and the development of comprehensive inter-sectoral strategies.

The role of civil society and NGOs is particularly important in influencing the behaviour of individuals, organisations and institutions. For example, potential roles include consumer involvement, leading grass-roots mobilisation, advocacy, organising networks and action groups, campaigns and events, as well as monitoring governmental action.

The private sector is recognised as a potential partner in the promotion of physical activity and because many companies operate globally, international collaboration is crucial. Retailers, sporting-goods manufacturers, advertising and recreation businesses, insurance, banking and pharmaceutical companies as well as the media all have influential roles as responsible employers and advocates of healthy lifestyles. Contributions can be through partnership with governments, NGOs and civil society helping in the implementation of programmes, use of consistent and positive messages and the promotion of physical activity in accordance with national and international standards.

Barriers, needs and opportunities

At recent discussion fora[1] key issues and challenges facing developed and developing countries in implementing the physical activity-related components of GSDPAH were reviewed. Several common themes emerged. Seven of the key barriers are summarised below:

1. **Lack of governmental support,** particularly at the ministerial level, is a critical barrier in most regions and countries.

Atlanta, October 2002; Miami, December 2004; Cascais, February 2005; Beijing, October 2005; Bogotá, November 2005.

2. **The low profile of physical activity and a poor understanding of its impact** often underlie the lack of support. Effectively defining physical activity and packaging and communicating clearly to decision-makers the strong evidence linking physical activity to health, well being, and prevention of NCDs is key to effective co-operation and policy development.
3. **A lack of infrastructure** in existing health promotion policy and monitoring of risk factors result in a lack of data to 'make the case' for action and low resource allocation to initiate and sustain a response.
4. A lack of **leadership** and concern over which government department should take responsibility for physical activity initiatives can thwart action.
5. **Inexperience in partnerships** and the absence of incentives (and mechanisms) to work collaboratively, and/or lack of support from other sectors are major obstacles, although the need for multi-sector collaboration is firmly acknowledged.
6. **Competing demands** from malnutrition and communicable disease often dominate the agendas of both governments and international donors in developing countries and limit attention on physical activity. Furthermore, concerns about personal safety, road safety and the prevalence of urban violence complicate and potentially conflict with strategies aimed at augmenting physical activity within the community.
7. **Lack of resources and funding** were identified as barriers. Given the limited resources available for public health in most countries, re-allocating existing resources from both health and non-health ministries, such as transport, local government and education may be a more successful tactic than demanding new funding.
8. **Need for training, guidelines, and programme examples** or case studies of what works, and flexible and modifiable public education materials were some of the immediate and practical barriers to progress. This was true not only for regions such as Africa, Asia and the Eastern Mediterranean, but also for Europe, particularly in the newer European countries.

The challenge to develop and implement the recommendations in GSDPAH may be greatest in countries where all of these issues are present, but almost all countries share at least one of the barriers identified above. Solutions may be complex, but the lessons learned from recent experiences in various countries allows the identification of common needs and tangible actions that will assist many countries in taking appropriate action.

Needs identified

Many countries identify the need for technical assistance and support in order to build infrastructure and make progress on implementation of the GSDPAH. Frequently cited needs include: advocacy skills; 'making the case' for involvement to non-health partners; effective use of the media; and building high level political commitment. Guidelines and 'tool kits' on how to adapt and implement effective interventions were seen as potentially useful.

The need for training is an oft repeated theme. Requests for support include the training of health care workers, training related to the delivery of physical activity programmes, training for evaluation and surveillance of outcomes, and training in advocacy and partnership development. There is also a strong interest in learning from the experience of others, and a call for a mechanism by which to do so.

Opportunities

Along with challenges, opportunities were identified which could help to develop action to support increased levels of physical activity. Specifically, the success of World Health Day events in several regions should be reinforced and exploited in future years. (Matsudo, 2006) Moreover, the opportunity to link physical inactivity with other current agendas, such as urban planning, transportation, sustainable development, inequalities, social justice, and air pollution should be seised. In the developing world, linkages with the World Bank Millennium Declaration and Millennium Goals (particularly Goals 1 and 6) and urban development and renewal programmes should be explored.

To address the need for training, an existing physical activity and public health course initiated in collaboration between the Centers for Disease Control and Prevention (CDC) and International Union for Health Promotion and Education (IUHPE) can be expanded. The course has been held in four Latin American countries and is based on a successful model targeting researchers and practitioners from the United States. (Brown et al., 2001).

The low profile of physical activity and traditional views of sport (competitive, highly selective and costly) can inhibit promotion of physical activity in the general population. Messages and images that reflect physical activity and the newer forms of sport that are participatory, inclusive, encourage social interactions and enjoyment, that require only limited skills, involve the entire group and exploit local cultural traditions are encouraged. Specific initiatives include the World Walking Day, jogging/walking groups, Games Festivals held in New Zealand, Republic of Korea and South Africa, the World Festival of Traditional Games, and ParticipACTION's "World Challenge Day" of moderate-intensity and low impact activities.

Addressing the low profile of physical activity and a lack of understanding of the issues may require different responses to match local conditions. However, there is potential for shared or common messages that countries can adapt. A template or consensus on physical activity guidelines might avoid further duplication of effort to create national recommendations from a common evidence base.

These existing opportunities are examples of the way developing and developed countries can respond in the short and mid-term to develop national policy and programmes for physical activity. Several countries have or are in the process of integrating their response to the GSDPAH and action on physical activity into existing NCD regional and country-level plans. These are significant steps reflecting the momentum around the global strategy process. Nonetheless, current interest must be translated into lasting commitment before the window of opportunity closes.

The Global Alliance for Physical Activity (GAPA)

There is a need for a response drawing on synergies and existing institutions and programmes whenever possible. Recent

Figure 3

Global Alliance for Physical Activity (GAPA):

Programme areas of work

1. Advocacy - using evidence to 'make the case', communications to decision makers, tools for influencing public policy;
2. Communication and dissemination – facilitate flow of information and resources;
3. Networks and partnerships – sharing experience and tools for developing inter-sector commitment and engagement;
4. Fundraising – seek funding support for above actions, resources and communication strategies.
5. Policy development and implementation – guidance and evidence on national policy development and implementation;
6. Programme implementation and evaluation – summary evidence on programmes and interventions, development of case studies;
7. Surveillance – communication on the monitoring of physical activity, the value and use of such data, assistance with tools and approaches;
8. Capacity building – development of leadership and training, including technical assistance and capacity building;

consultation with international NGOs, leading research groups, centres for the study of physical activity and commercial enterprises has revealed willingness and readiness to take action.

A first step has been the development of the Global Alliance for Physical Activity (GAPA). GAPA has been established to provide strategic coordination and stimulation to the actions developed by international and national NGOs to help countries commence or increase their efforts to address physical activity within the broad agenda of non-communicable disease prevention and health promotion.

GAPA will provide access to the best information on what to do and how to do it across as many of the GSDPAH recommendations as possible. The areas identified in Figure 3 were distilled from discussion with organizations/countries/regions addressing physical activity promotion and disease prevention in their specific contexts. A central coordinating group will seek financial support and partners, coordinate the working groups, establish long-term goals, and undertake advocacy for the physical activity agenda .

Overall it is envisaged that GAPA will provide a unified, strong global voice for physical activity. The products of the working groups will be made widely available to facilitate action. Within the current window of opportunity opened by the WHO GSDPAH. The first author (F. B.) should be contacted for further information on the progress of this work.

Conclusion

Morbidity, disability and premature mortality attributable to chronic disease currently accounts for approximately 60% of all deaths (of which 80 % occurs in developing countries) and 48% of the global burden of disease of which approximately 85% occurs in low and middle income countries) These figures are projected to rise to 70% of all deaths by the year 2030, emphasising the need for urgent corrective action (WHO, 2005).

Overall, the concerns and requests heard in the recent fora echo previous reports and are consistent with those expressed in other WHO consultations during the development phase of GSDPAH. The needs are many, and the time is short. Most importantly, new resources to support actions in regions and within countries are limited.

The GSDPAH and the WHO 'Preventing Chronic Disease – a vital investment' are the latest in a series of policy documents that clearly make the case that physical inactivity is a major public issue around the world. Developing countries face an especially challenging situation as physical inactivity, obesity, and NCDs are added to unresolved issues around communicable diseases and environmental health. Despite the large health and economic burden attributable to inactivity and a clear recognition of the importance of the issue, few countries have implemented comprehensive national public health programmes to promote physical activity. This contradiction reflects the limited capacity found within most ministries of health to address physical inactivity, NCDs, and health promotion. However, a window of opportunity is open to address this gap. The GSDPAH is both a stimulus to and a guide for developing national policy and plans for physical activity. The evidence base for interventions to promote physical activity, tools, and nascent regional networks exist to support effective national programmes. Multi-sectoral approaches may bring new partners and resources from fields such as transportation, environment, and social and economic development to act synergistically with public health.

Public health has a history of identifying, committing to, mobilising for, and successfully resolving health crises from smallpox to polio to tobacco to SARS. The same resolve, strategies, and resources must now be applied to address physical inactivity and NCDs. Credibility, guidance, and tools are provided by the WHO, CDC, key international NGOs and GAPA. The WHO Regional Offices and regional physical activity networks can translate global strategies to regional realities and facilitate development of national plans and programmes. NGOs are critical for global advocacy and for supporting plans and programmes in developing countries where government resources are already stretched thin. A road map exists for public health to respond to the challenge of physical inactivity by adapting and re-orienting existing capacity, developing creative new strategies, and capitalising on new and existing partnerships and networks.

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Sandra Mahecha Matsudo and Victor Rodrigues Matsudo

Coalitions and networks: facilitating global physical activity promotion

Abstract: This article aims to synthesise the experience of coalitions and networks working for physical activity promotion. By introducing the concept of partnerships, especially within the Brazilian context, the authors outline the factors that comprise a successful partnership, describing key elements, such as, financing, membership and methods of empowerment. *Agita São Paulo,* the Physical Activity Network of the Americas-RAFA-PANA and *Agita Mundo* are used as examples. The article shows that local, national and global programmes, partnerships and networks at all levels are essential to guarantee the success of physical activity promotion as a public health strategy.

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- health promotion
- physical activity
- networks

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Physical activity practice is both essential and complex. Although it is relatively easy to disseminate information on the benefits of regular physical activity, getting the population active is more complicated. This may be the cause of the current paradox, which involves, on the one hand, the existence of more scientific knowledge on the benefits of physical activity than ever before, and, on the other hand, the increase in sedentary behaviours to about 60 to 70 percent of the population worldwide (Caspersen, 1997; Rego *et al*, 1990, Vuori, 2001.) Sedentary people are those who do not accumulate enough physical activity to obtain health benefits.

This article documents and examines the most interesting experiences in the Latin American Region in relation to building and maintaining a cross-cutting health coalition: *Agita São Paulo*. This programme merges governmental, non-governmental and private sector entities around the State initiative to promote physical activity and health among the population (Matsudo V, 1997; Matsudo S *et al.,* 2002; Secretaria Estadual de Saúde de São Paulo, 2002.) For the purpose of this article, the authors have collated existing scientific literature on physical activity and health, on networks and coalitions, and the documented experiences from *Agita São Paulo* partner organisations in 1999 (Meresman *et al.*, 2000), which were later included as part of the Health Coalition Manual published by the Pan-American Health Organization (PAHO, 2002.)

According to Meresman and colleagues' study in 2000, the word coalition comes from the Latin words *coalescere* (to age) and *coalitio* (union), indicating the "conjunction of producers from the same category who share objectives or common gains or seek to protect each other from disloyal competition." Coalitions distinguish themselves from networks and associations in the formality and delimitation of their structure (Meresman *et al.*, 2000.)

A coalition can be defined as "an organisation of individuals that represent diverse organisations or constituencies that agree to work together for a common objective" (Feighery & Rogers, 1990; Butterfoss, Goodman & Wandersman, 1993) or "an organisation of different interest groups which combine their human and material resources to achieve a specific change that could not be accomplished otherwise independently" (Butterfoss, Goodman & Rogers, 1993.)

In Brazil, in accordance with Meresman *et al.*, the word *parceria* is used which refers to "to look alike", "similar" and "partner" in English. The Portuguese dictionary defines the word *parceria* as "Society, company. Union of individuals for a certain goal or common interest." Additionally, the word also alludes to a Brazilian agricultural work mode by which the farmer (*parcero*) gives part of his crop to the land owner as payment for the use to cultivate.

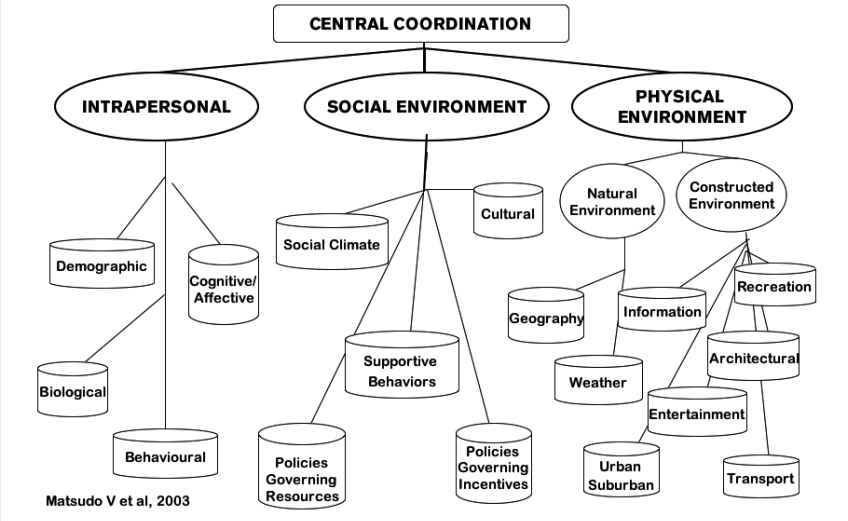
Collaborative work has a long tradition, especially in Latin America, where numerous popular expressions make reference to this type of support, for instance, 'in unity there is strength.' This popular wisdom provides a profound significance to the term "collaboration" and emphasises a perspective of social participation by which 'the whole is greater than the sum of its parts.' As a public policy development strategy, partnership building for social mobilisation has been analysed both as a *means* and an *end in and of itself* (Meresman, 1995.)

Nevertheless, the motivating agent for partnership building seems to be the lack of resources, not only in public institutions, but also in the majority of private ones, especially for prevention programmes (Merrill-Sands & Sheridan, 1996.)

Objectives

The article analyses the essential elements of contemporary physical activity promotion programmes and networks, such as, *Agita São Paulo*, the Physical Activity Network of the Americas (RAFA-PANA) and Agita Mundo. We will focus on the *Agita São*

Figure 1 Mobile management – Ecological model



Paulo experience bringing together government, non-governmental organisations (NGO) and the private sector interested in the promotion of physical activity. The study and dissemination of the work done by the aforementioned networks on health initiatives supports the interest of the International Union for Health Promotion and Education (IUHPE) to encourage the creation of a conceptual and operational framework which will contribute to the development of similar processes in other countries of the world based on the lessons learned.

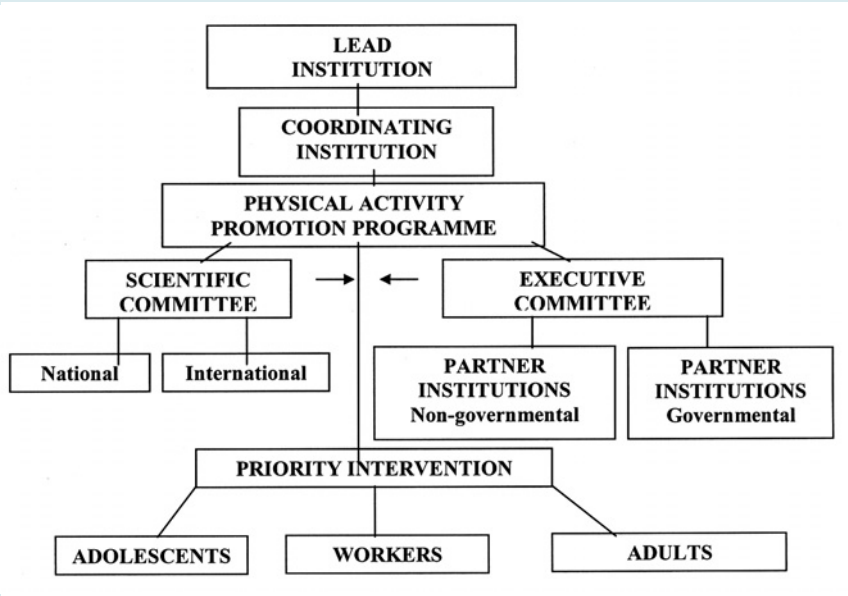
Mobile management of the ecological model

The ecological approach to health promotion has proven to be effective, especially applied to physical activity as documented by Sallis & Owen (1997.) However, it has diverse components, such as intrapersonal factors and the social, physical and built environments, which make it difficult to implement or manage as part of a programme. The "Mobile Management" recently proposed by Matsudo *et al.* (Matsudo,V. *et al.*, 2004, Matsudo, S. *et al*, 2004) tries to link and effectively put into practice these components through institutional partnerships (see Figure 1).

Finding strategic alliances with institutions in relation to the Ecological Model's components is essential for the programme's success. The efforts to mobilise community resources for health promotion are fundamentally dependant of interpersonal and organisational strategies, such as, technical assistance, professional development and knowledge exchange among experts and the local population. Mobile Management stimulates health promotion groups to obtain greater collaboration and partnership development with existing organisations in the community (including private and public sector and the NGOs.)

Working with the different components of the Ecological Model at the same time is hard and complex. Mobile Management has played a key role and has been the best approach, as it tries to synchronise the different factors that constitute the ecological model.

Figure 2 Organisational structure of scientific and executive partnerships



Partnership starts with a name

Beginning with the choice of name, *Agita São Paulo* shows the importance this initiative gives to social marketing aspects, which have proven to be essential for its development. The choice of this name was a result of a partnership with a communications agency that studied the best name options which expressed the programme's objective. The word *agita* from the infinitive form *agitar* translates literally into 'to agitate' or 'to stir-up', but is used in this context as 'to move'. In addition to the movement related to physical activity, the term also conveys other meanings related to social practice and collective participation, i.e. activism and advocacy. *Agita* thus refers to physical, mental and social movement towards an active citizenship.

The value of intellectual partnerships

Independent of the background and expertise of the driving institution, a programme's framework is most effective if built in partnership with other institutions which bring in different competencies. Intellectual partenerships serve to overcome natural or potential obstacles in the academic realm. In the

case of both *Agita São Paulo* and *Muévete Bogotá*, national and international experts came together in the Scientific Committee. International institutions, such as the U.S. Centers for Disease Control and Prevention (CDC), the International Union for Health Promotion and Education (IUHPE), the Dallas Aerobic Institute and the World Health Organisation (WHO) provided important scientific, logistic, political and administrative input.

Membership

Programmes and networks, such as *Agita Mundo, Agita São Paulo* or *REDCOLAF* (Colombian Physical Activity Network) are open to membership and any organisation interested can join at any time. This highlights the inclusion principle of partnership strategies, as well as the openness to collaboration: "*Agita São Paulo* is a dynamic structure, in constant search. Coherence in this sense implies openness to newcomers and changes" (Meresman, 2000.)

Agita São Paulo, which inspired the national (RAFA-PANA) and international (*Agita Mundo*) networks, developed a membership rule: minimum formality/maximum flexibility. The network decided to minimise the formalities to become a member and provides interested parties with a simple "Letter of Intention" which expresses their "intention to contribute to the realisation of the programme's objectives."

Signing the letter has important symbolic value, even though it does not involve contractual obligations or strict regulations regarding rights and/or duties. The partnership functions as a reciprocal relationship in which, on the one hand, the joining institution complies with the programme's vision and objectives; and, on the other hand, it is a symbolic recognition of belonging to a multi-sectoral alliance.

Financing networks and programmes

Networks and programmes today, in general, count on three sources for income:

1. *Governments* can provide for salaries of professionals involved in the programme and with promotional and educational material, which are used to support partner institution's events.
2. *Partnering agencies* can provide indirect resources (to previously established programmes or actions) or direct resources (for programme or action development).
3. *Commercial enterprises* (which should be considered as sponsors, not partners) can provide financial resources for production of promotional or educational material.

Partnership building determinants

There is a series of elements that contribute to partnership building and whose real or symbolic value mobilises participants to join, including:

- Previous affinity
- Prestige
- Proposal simplicity
- Integration of socially diverse actors and settings
- Innovation opportunities
- Access to technical cooperation

Inter-sectoral and intra-sectoral partnerships

It is commonly believed that, in the long-run, inter-sectoral partnerships are better. *Agita São Paulo* has been able to demonstrate the effectiveness of intra-sectoral partnerships, in which the incentive is to get more than one social sector involved. For instance, philanthropic clubs do not limit themselves to support from the Lions Club, they also seek support from the Rotary Club. In this same vein is the development of private schools to balance with the public ones and so on. The strategy is thus to create healthy competition among institutions in the same sector, which will increase the programme's benefits.

Inclusion principle

The openness and inclusiveness that programmes like *Agita São Paulo* promote has increased the credibility and strength of its partnerships. Inclusiveness, however, must be present, not only as the principal value of the institution, but also in the programme's actions, messages and materials. Pro-active inclusion is the ethical principle of partnership work. As one colleague puts it, the ethic of inclusion "is inherent in every partnership" (Meresman, 2000.)

Complementary selection and eligibility criteria

Agita São Paulo's strategy of inclusion and constant growth is hindered by having the task of preserving the partnership's ideologic principles and fundamental objectives. This is the case when approaching commercial enterprises. These may have important financial and commercial power which could exercise too much influence on the programme, distort its objectives or determine actions against other partner's interests.

Non-voluntary focus of a partnership

Frequently, inter-sectoral partnerships make voluntary and idealistic approaches with regard to social participation. *Agita São Paulo* has avoided this approach by giving increased importance to the existence of incentives that will motivate and sustain participation. In addition, it highlights results and achievements of each individual partner as well as the partnership as a whole.

Leadership

Trustworthy leadership increases partnership building and sustainability. Some examples are CELAFISCS in *Agita São Paulo*, District Institute for Sports and Recreation (IDRD) in *Muévete Bogotá* or CDC in RAFA-PANA by which the former are well established in the field and help overcome scepticism or lack of trust when carrying out partnership actions.

Multi-sectoral partnership building

Agita São Paulo's experience makes the case for the hypothesis which is only hinted at in the literature about public health partnerships, that is, that the driving force of the partnership is not the leading health institution (mostly Ministries of Health), instead, it has been developed transversally with all the major actors in different settings. Consequently, the role of the Health Secretariat of the State of São Paulo was to call upon the creation of the initiative and it supervised the development. This legitimised and facilitated the mandate's openness to partnerships so it would become autonomous and develop its own dynamic (Meresman, 2000.)

Empowerment

Instead of imposing a programme on each collaborating institution, this form of partnership advocates for each to adopt the programme's concept and actions according to the purpose of the intervention, that is, adopting empowerment techniques. In simple terms "they all carry the programme's flag, but respect each institution's traditions and values" (Meresman, 2000.)

"Two hat" approach

There are many occasions, especially in developing countries, where the government is conceived as the principal actor to articulate a programme. However, in order to avoid the political and administrative hurdles imposed by party politics, the «two hat» approach proposed by *Agita São Paulo* has proven to be successful. This means choosing to work either with government or civil society depending on which provides the best potential for success.

Belonging

An important component of partnerships is the development and maintenance of the feeling of belonging. Networks like *Agita São Paulo*, RAFA-PANA or *REDCOLAF* stimulate this feeling, for example, by providing space for logos or other forms of recognition in promotional materials, publications and media releases.

Sustainability mechanisms

Some of the mechanisms that have proven to be effective in sustaining partnerships are:

-involving partnering institutions in the Executive Committee;
-frequent, ideally monthly, Executive Committee meetings;
-access to up to date information;
-participation in capacity building and knowledge development activities;
-development of an effective internal communication strategy (newsletters or teleconferencing.)

The media doesn't pay –"Midia no paga"

Finding resources for health promotion programmes is a constant challenge.

Table 1 **Physical activity promotion lessons learned from the Physical Activity Network of the Americas (RAFA-PANA)**

1. Promotion depends to a large extent on the programme manager's will, constant participation and creativity.	6. There is dependence on financial support in the majority of programmes.
2. There is lack of political will and support for physical activity programmes.	7. There are few professionals trained and up to date on today's physical activity strategies and paradigms.
3. There is a need to overcome poverty, and lack of resources and political support for physical activity promotion.	8. There is a need to implement evaluation measures for physical activity impact and processes.
4. Support from international and well-recognised institutions (CDC, WHO, PANA, PAHO and CELAFISCS for instance) is crucial.	9. There is a need to increase scientific evidence in the field of physical activity.
5. There is a need to implement local, regional and national policies which guarantee physical activity strategies independent of political leaders in power.	10. The majority of programmes have evidenced effectiveness in their actions without using media campaigns, television, radio or printed press.

Consequently, investing resources on media, in particular television, is a not the best strategy because, despite the visibility, the amounts are so high it would use up too many resources. In addition, the visibility factor tends to be only valid on the short-term, which creates a long-term resource anticipation that is not sustainable. The *Agita São Paulo* experience defends the idea that "the media doesn't pay." Hence they made television, radio and printed press partners in the initiative to get the coverage without investing resources. As a result, the programme's name is known to about 50 to 70% of all social classes.

RAFA-PANA

The Physical Activity Network of the Americas (RAFA-PANA) is an exemplary successful partnership promoting physical activity in Latin America. RAFA is a network whose objective is to promote physical activity with a minimum bureaucratic structure: action, inclusion, simplicity and flexibility.
The strategic directions include:

1. It's an inclusive network made up of public and private, national and international institutions;
2. It centres on population and community based public health research and programmes;
3. It promotes experience and knowledge exchange;
4. It facilitates professional development.

The Network unites experiences from national physical activity promotion programmes. The national movements have followed the *Agita São Paulo* model in Brazil and include:

- Argentina: *A Moverse Argentina, Argentina en Movimiento, Salí a Moverte, Sacúdete*;
- Bolivia: *Muévete Bolivia*
- Colombia: *Red Colombiana de Actividad Física, Muévase Pues, Muévete Bogotá, Risaralda Activa, Activate en Pereira, Buga en Movimiento, Guajira Activa, Madrúgale a la Salud, Palpita/Vibra Quindío, Cauca Activa, Cundinamarca Activa y Positiva, Boyacá Activa, Colombia Activa y Saludable, Cali en Movimiento, Bucaramanga: A Moverse Digame, Huila Activo y Saludable, Putumayo Saludable en Movimiento*;
- Costa Rica: *Movámonos Costa Rica*;
- Ecuador: *A Moverse Ecuador;*
- Mexico: *Programa Nacional de Activación Física, PROESA*;
- Panamá: *Muévete Panamá*;
- Peru: *Muévete Perú*;
- Venezuela: *Venezuela en Movimiento*, *Red Venezolana de Vida Activa*.

These different national networks have come together to share their experiences and lessons learned in order to develop the most effective programmes. The shared beliefs are included in Table 1.

Agita Mundo

Agita Mundo's global network objective is to promote physical activity as a healthy behaviour among people of all ages, nations and characteristics. Since its inception in 2002, the network stimulates research, information dissemination on

Table 2 **Key outcomes of the Physical Activity Network of the Americas (RAFA-PANA) and Agita Mundo since their inception**

Characteristics	RAFA-PANA	Agita Mundo
Member institutions	151	236
Member countries	17	58
Scientific events	- 3 International forums on Physical Activity and Health - 6 International courses on Physical Activity and Public Health (2004-2006) - Annual Forum and Courses	
Mobilisation events	Each country organises mobilisation mega-events and activities with workers, students and adults during specific dates.	World Physical Activity Day – Agita Mundo celebrated on April 6th: 2002: 1645 events,127 countries 2003: 1987 events, 148 countries 2004: 6745 events, 23 countries, 988 cities 2005: 2254 events, 29 countries 2006: 1700 events, 195 cities
Coordinating institutions	CDC & CELAFISCS	CELAFISCS
Annual meetings	1 Annual Executive Committee meeting in a different country each year. 1 scientific meeting in October during the CELAFISCS' International Symposium in Brazil.	1 Annual Executive and scientific meeting in October during the CELAFISCS' International Symposium in Brazil.
Dissemination material	1 leaflet in English, Spanish and Portuguese.	1 leaflet in English, Spanish and Portuguese.
Manifests and Declarations	1 São Paulo Manifest for Physical Activity Promotion in the Americas	1 São Paulo Declaration for Physical Activity Promotion Globally
Website	www.rafapana.org	www.agitasp.org.br
Email	Spanish/Portuguese: rafa@rafapana.org English: pana@rafapana.org	agitamundo@rafapana.org

the benefits of physical activity and strategies to increase physical activity, advocates for physical activity and health and supports the creation of local and national networks and programmes for physical activity promotion.

The last meeting of the Agita Mundo network in Brazil in October 2004 proposed mapping physical activity promotion programmes across the world, including:

- List of intervention programmes
- List of web based resources
- List of relevant journals and publications
- List of the network's members
- Sedentary prevalence across the world
- Reference centres for physical activity

Some of the principal findings are included in Table 2.

Conclusion

The more than 350 institutions that are partners in the *Agita São Paulo* programme are the principal factor in the successful promotion of physical activity in such a large population. In the same vein, RAFA-PANA and Agita Mundo are able to push for regional and international physical activity agendas based on cooperation and synergy with sister organisations.

Increasing the level of physical activity practice is an important challenge. Strategic partnerships which allow articulating the ecological model in a synergistic way have evidenced effectiveness for physical activity promotion.

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Rocío Gámez, Diana Parra, Michael Pratt and Thomas L. Schmid

Muévete Bogotá: promoting physical activity with a network of partner companies

Abstract: In 1998 the mayor's office and the District Institute for Sports and Recreation created Muévete Bogotá, a physical activity and health promotion programme for the capital city of Colombia. Muévete means to move or to be active, and this campaign to promote physical activity was designed to improve the health and quality of life of the citizens of Bogotá through regular physical activity. The programme is based on the 1995 recommendations on physical activity of the U.S. Centers for Disease Control and Prevention and the American College of Sports Medicine (Pate *el al.,* 1995), and was developed in close consultation with the Agita São Paulo programme in Brazil (Matsudo *el al.,* 2003). Muévete Bogotá couples a mass media campaign with programmes targeted to change physical activity behaviour. The interventions, which are conducted at work sites, schools, health care centers and in community settings rely on partnerships created among professionals in areas of education and health, business officials and personnel, and community members, to deliver the programmes in each of these settings and populations.

Like many developing countries, Colombia suffers from a growing epidemic of chronic diseases. In 1993 35.7% of total mortality in the city of Bogotá was due to chronic diseases (Espinosa, 1993). In 2002 cardiovascular diseases accounted for 40.3% of mortality among the population aged 60 years or older and 26.8% for persons 45 to 59 years of age. (Cardona, 2002)

Bogotá has implemented extensive physical and social environmental changes over the last decade, which has increased opportunities for physical activity, but sedentary lifestyle continues to be a significant public health problem in the city. Programmes such as Muévete Bogotá that educate and motivate the population to become more physically active appear to be needed to complement the underlying environmental and policy changes. Muévete Bogotá provides an example of successful implementation of a comprehensive multi-sectoral approach to physical activity promotion in a large metropolitan area. This model may be used as an exemplary effort elsewhere in Latin America and in urban areas in developing countries around the world.

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Physical inactivity is widely recognised as a major public health problem in both developed and developing countries. However, relatively few developing countries have planned and implemented major public programmes to address physical inactivity and fewer still have carefully evaluated these programmes and reported on their experiences (Pratt *et al.*, 2004). This report describes the development and implementation of a comprehensive multi-sectoral approach to promotion of physical activity in Bogotá, Colombia.

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Origin of programme

Bogotá, the capital of Colombia, is located at an elevation of about 2,650 m. / 8,660 ft. on a mountain plateau high in the eastern portion of the Andes Mountain Range. With a population of more than 7 million inhabitants it is considered a young city, most of the population (60%) are between the ages of 20 to 50 years old (National statistics department, 2003). Bogotá has experienced significant changes in its physical and social environments, making it one of the leaders in public and alternative transportation systems motorised and non-motorised in Latin America (Pizano, 2003)

In 1998 the District Institute for Sports and Recreation of Bogotá (IDRD), a decentralised unit of the mayor's office defined its mission to include the "promotion of sports, recreation, productive use of leisure time, and use of parks, among all the citizens of Bogotá, prioritising vulnerable populations to have better citizens, with values of healthy competition and improving quality of life in harmony with the environment." This mission enhanced the focus of IDRD's programmes on changing behaviours to increase regular physical activity in the population.

Driven by the new mission and based on international experience, Múevete Bogotá was launched by IDRD in November 1998. Muévete means to move or to be active, and this campaign to promote physical activity was designed to improve the health and quality of life of the citizens of Bogotá through regular physical activity. The programme is based on the 1995 recommendations on physical activity of the U.S. Centers for Disease Control and Prevention (CDC) and the American College of Sports Medicine (Pate *el al.,* 1995), and was developed in close consultation with the Agita São Paulo programme in Brazil (Matsudo *et al.*, 2003.)

The initial goals were to inform and increase awareness of the public about the health benefits of physical activity and to support sectors such as education and business to deliver programmes promoting physical activity. Partner companies were recruited, enrolled in Múevete Bogotá, trained and supported in providing opportunities for physical activity to their populations.

Muévete Bogotá couples a mass media campaign with programmes targeted to change physical activity behaviour. The interventions, which are conducted at work sites, schools, health care centres and in community settings rely on partnerships created among professionals in areas of education and health, business officials and personnel, and community members, to deliver the programmes in each of these settings and populations.

Assesment of the problem

In 1999, IDRD and the District Institute for Culture and Tourism, carried out a survey (Ardila & Gamez, 1999) of knowledge, perceptions, and levels of physical activity among citizens of Bogotá aged 18 years or older. 84% reported that they did not engage in levels of physical activity recommended for health benefits (at least 30 min/day, most days of the week) and 39% reported being completely sedentary during leisure time. Persons aged 30 years or older were more likely to be sedentary in leisure time and for transportation. The prevalence of physical inactivity at the workplace was high (47%) (Gomez *et al*, 2005). Readiness to make behavioural changes related to physical activity was also assessed: 7% of adults were not considering changes in physical activity, 49% were considering such changes and 43% were physically active (Calfas *et al.*, 2002). This survey confirmed that physical inactivity was a major problem in Bogotá. The data were used as a baseline to establish goals for the new programme.

Implementation

Muévete Bogotá is implemented by the Division of Sports Promotion, Sports and Recreation Institute. The programme has a full-time coordinator who receives direction and advice from a scientific committee and support from other programmes within IDRD. Four staff facilitators recruit and train companies to implement the programme at work sites.

Keywords

- physical activity
- partner companies
- Bogotá
- health promotion

The programme coordinator designs the implementation plan and IDRD approves it and allocates a budget for the programme. Since its inception, annual evaluations have been conducted with input from representatives of the partner companies, the scientific committee, and the director and support personnel from IDRD. These evaluations are conducted two to three times a year.

Programme structure

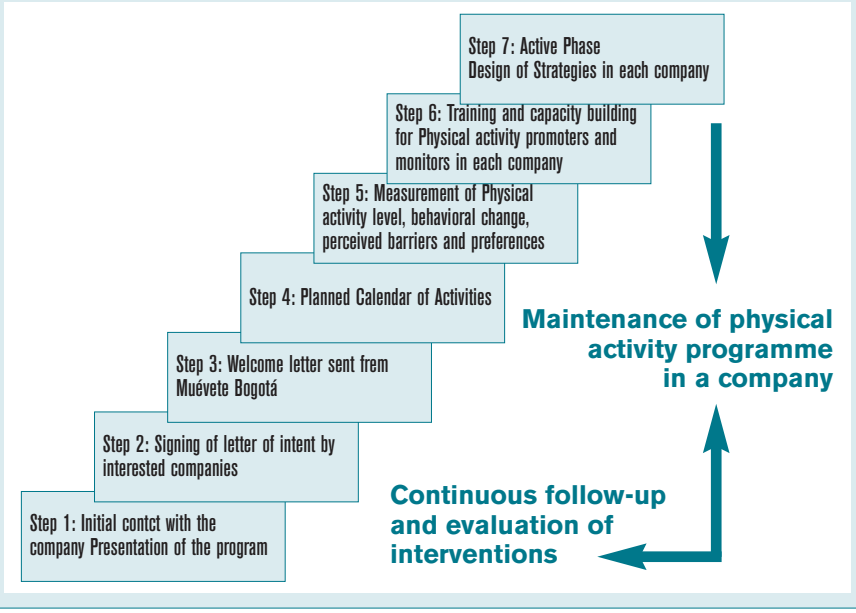
The partner companies include institutions, associations, and employee groups from the sectors of education (public and private schools and universities), business (government and non government), and health, as well as communities and neighborhood groups having the goal to develop physical activity programmes for their community with help from Muévete Bogotá.
The programme was structured in seven steps for each partner company, from the initial affiliation with the programme to the active phase (Figure 1.)

Muévete Bogotá used three strategies with the partner companies:
1) building programme awareness and recruiting partners;
2) education and training of programme implementers; and
3) delivering interventions on-site.
These strategies were developed on the basis of systematic reviews of the literature and practical lessons learned from successes and failures of other health promotion programmes. (CDC, 2002; Kahn *et al.,* 2001; Kahn *et al.,* 2002.)

Activities developed by the programme during the interventions phase included:
1) Bogotá "healthy and active" stations
2) capacity building
3) "Healthy and active" meetings
4) "Active students week"
5) "Active workers week"
6) "Move for Health Day"

"Healthy and Active" stations were a strategy based on recommendations from the *CDC Physical Activity Evaluation Handbook* (2002) and carried out by the facilitators of Muévete Bogotá. These stations for measurement of physical fitness were installed at parks, at the sites of "recreovia" and "ciclovia", and at work sites of some partner companies. Recreovia are aerobics classes guided by professionals that are staged at 19 points in the city along the ciclovia route and in local parks on Sundays and holidays from 7 to 11 in the morning. The ciclovia route, which extends along 128 kilometers of the city's main streets, is open exclusively for recreational and sports activities on Sundays and holidays from 7 in the morning to 2 in the evenig. Persons aged 18 to 60 years with no medical contraindications, were evaluated by use of tests including body mass index (BMI), cardiovascular fitness, abdominal and leg strength, and flexibility. Individuals were counseled on the test results and were advised to start performing regular physical activity.

Figure 1 Programme structure



Healthy and active stations have operated at 15 locations throughout the city, and 2,800 people have participated in the fitness testing. The data obtained were used to provide baseline estimates for the physical fitness of Bogotá residents.

Capacity building, especially training of leaders and promoters, is one of the most important and fundamental tools for the promotion and adoption of a healthy lifestyle. Muévete Bogotá, with its group of facilitators and scientific committee, conducts two sessions on capacity building per year that include theoretical and practice material tailored to the needs of the group being trained. Special emphasis is placed on training students and professionals who work in specialties related to physical activity, occupational health and wellness at the partner companies because of their important potential influence on the behaviors of patients (Frank *et al.*, 2000). Community leaders, students, and teachers are also trained to promote physical activity.

Healthy and Active meetings, was an approach designed to stimulate participation by employees through competitions in physical activity and health among the partner companies. Each company participated with a team of 10 people who took part in individual and group competitions involving fitness, BMI, waist circumference, dance, walking, leg strength, abdominal strength, flexibility, and knowledge of healthy eating and recommendations for physical activity. Data were summarised and scored for each team and the healthiest team received a prize, rewarding the winners and encouraging the other companies to win in the next year. Three "Healthy and Active" meetings have been conducted and 650 people have participated.

"Active students week" is a world wide initiative that brings the education community together around the importance of physical activity. This effort encourages educators to promote the benefits of physical activity and students to lead an active lifestyle (Matsudo *et al.*, 2003). This strategy started in 2002, with the slogan "For a healthy future, an active present". The purpose of the programme is to promote knowledge among parents, students, teachers, and administrative personnel

and to stimulate positive attitudes toward physical activity. Educational and practical activities occur throughout the week and at many times during the school day. Facilitators go to the institutions to observe, photograph, and evaluate the activities to identify and reward the best initiatives. From 2002 to 2004, 58 schools participated in "Active students week" with an average of 80,000 peopl involved, including students, teachers, and administrative personnel. In 2004 students averaged 102 minutes per day of physical activity during this week, based on the registration and physical activity sheets that the teachers had to complete for each student. The participation easily surpassed the recommended number of hours per day of physical activity for children and youth (Minister of Works of Canada, 20000).

"Active workers week" was started in Bogotá in 2004, it was first celebrated in Canada in collaboration with the Public Health Services Department (Hamilton´s Healthy Workplace Week.) The programme includes multiple types of promotion of physical activity at the work site and the focus is on integration with the environment. This annual effort is coordinated with the celebration of "World Labor Day". According to the database and the registration forms. In 2004, 13 companies and 2,962 workers participated. Workers averaged 96.4 minutes of additional physical activity per person for the week.

IDRD and Muévete Bogotá are members of the Physical Activity Network of the Americas (RAFA-PANA) and since 2002 have been part of the network's celebration of **"Move for Health Day"** (a World Health Organization initiative). On the global "Move for Health Day" in April a walking parade of 3.8 km organised by Muévete Bogotá takes place. It starts at the Maloka Museum (Interactive Centers for Science and Technology of Bogotá) and ends at Simón Bolivar Park, one of the largest city parks. The participation of many partner companies has helped to make this event a success. In 2002, 6,200 people started the walk and 15,000 reached Simón Bolívar Park for 2 hours of aerobics and traditional Colombian dance. Participants in the parade include members of communities, scientific societies, and residential organisations and employees and staff from other IDRD programmes, health promotion entities, schools, hospitals, commercial centers, and non-governmental organisations.

Programme evaluation

Extensive data was collected on many aspects of Muévete Bogotá and some data were used for both informal and formal evaluation of the programme. Evaluation efforts focused on refining, targeting and improving programmatic efforts. Scientific research and publication were lower priorities. Initially, evaluation was not guided by a formal framework, but the evaluation is now guided by the CDC community evaluation model (CDC, 2002.)

In 2004 an evaluation was carried out to assess the strategy of Muévete Bogotá in recruiting, enrolling, and intervening with partner companies in the business sector and the effectiveness of these companies in initiating and maintaining programmes to promote physical activity. Evaluation focused on whether performance indicators were being met within Muévete Bogotá and in the partner companies. Results from this evaluation are also being used to make decisions about the future direction of the programme and to address the need for additional intervention tools to improve outcomes.

The performance indicators for the Muevete Bogotá programme primarily focused on process measures in IDRD and the partner companies including the following key indicators:

- 12,136 promoters of physical activity, 31.3% from business sector, were trained;
- 9 workshops on capacity building took place in 5 years, just short of the 2 workshop per year goal;
- 163 companies, including 76 (47%) from business sector, exceeding the 40% objective;
- 82% of companies implemented intervention, short of the 100% goal;
- 27% of companies created their own programme and logo and message on physical activity, exceeding the 20% objective;
- 15% of companies completed collection of adequate baseline data, short of the 20% goal; and
- 59.2% of partner companies participated regularly in community-wide activities of the programme short of the 100% goal.

In addition to these process measures to guide programme delivery, Muévete Bogotá collaborated with research institutions to collect survey data from the population and from partner companies to assess short-term and long-term effects of the programme on physical activity in the population. Preliminary analyses of the data from 2003 have been completed. The results from 2003 suggest improvement in physical activity participation in Bogotá. In 1999, 84% of adults surveyed reported insufficient levels of physical activity.

Dissemination results

Muévete Bogotá has worked systematically to disseminate programme results and methods. Dissemination has focused on providing feedback to primary stakeholders (partner companies and government policy makers), sharing lessons learned with other communities in Colombia interested in starting similar programmes, and communicating with regional and international health promoters.

Local

Physical activity and the Muévete "brand" have been incorporated into the mission and goals of many partner companies. These successes are considered to be important because of their multiplicative effects on work site policy and promotion of physical activity. Examples include the efforts of three partner companies:
"Muévete Alqueria": Alqueria is the name of a dairy products company. This company dedicated funds to a physical activity programme and instituted breaks from work for physical activity.
"Muévete Levapan": Levapan is the name of a bakery products company. This company dedicates 10 minutes of the workday to perform stretching and calisthenics exercises five times a week. The company also started a promotional campaign to increase the use of bicycles for commuting to work and now 55% of the employee's cycle to work. Travel times ranged from 10 to 45 minutes.
"Camina Policía", (police walk): The police department of Bogotá committed staff and budget to support physical activity programmes including mass

media campaigns and contests. The programmes have been expanded nationally to reach approximately 150,000 police employees and their family members.

National
Muévete Bogotá has contributed to development and implementation of physical activity and health promotion programmes, such as the Pan-American Health Organization (PAHO) initiative CARMEN (Actions to Reduce Non-communicable Diseases) in Bogotá and Bucaramanga Colombia. The programme is working with the Municipal Secretary of Health in a project to promote physical activity and reduce behavioral risk factors in a Bogotá neighborhood. The National Ministry of Social Protection and "Coldeportes Nacional" created the national programme *"Colombia Activa Y Saludable" (*Active and Healthy Colombia). The programme was launched on Move for Health Day in 2003. This programme is modeled on the structure and experience of Muévete Bogotá.

Since 2001 Muévete Bogotá has consulted with programmes from different municipalities across Colombia such as *Active Risaralda, Always active Cundinamarca, Active Cauca, Tell me to move in Bucaramanga, Active Caqueta* and *Healthy and active Boyaca.* In 2002, the *Red Colombiana de Actividad Fisica, REDCOLAF* (Colombian Network of Physical Activity) was created with strong participation and support from Muévete Bogotá.

International
Consultation was provided to programmes in other countries from Latin America, including *Movamonos Costa Rica* (Lets move Costa Rica), *Venezuela en Movimiento* (Venezuela on the Move), and in Guatemala through the regional office of the PAHO.

As well as being an active partner in the Physical Activity Network of the Americas (RAFA-PANA) and Agita Mundo (Matsudo *et al*., 2003) Muévete Bogotá has played an important role in organising scientific and academic events in the city such as The First International Forum of Physical Activity in 2003 and the First International Seminar on Healthy Lifestyles in collaboration with the north Andean branch of the International Life Sciences Institute, ILSI.

Conclusions

Muévete Bogotá is a large complex, wide ranging but relatively young programme that has clear strengths which include:

- comprehensive multi-component programme involving the use of a variety of tools and intervention strategies;
- well-organised and successful partly due to the clear definition and distribution of roles and tasks among staff;
- based on scientific evidence and successful experiences from other programmes that were adapted and applied according to the local context of Bogotá;
- regular feedback from partners and detailed programme evaluation has been effectively used to revise, target, and focus intervention at the work site, and improve its delivery;
- consistent institutional and financial support from IDRD directors, partly due to highly visible local and national dissemination of the programme;
- growth of programme's annual budget facilitating programme and evolution and hiring and training of more staff;
- creation of new health promotion strategies in the partner companies which was spawned by enthusiastic public support.

Health promotion and education messages coupled with the physical and environmental changes in Bogotá over the last 10 years (construction and recovery of public spaces, such as parks, bicycle paths, sidewalks, and green zones) have allowed Muévete Bogotá to encourage and provide opportunities for people to adopt a more active lifestyle.

Successful physical activity promotion via parter companies is a useful strategy to complement existing government programmes and broaden their reach in megacities in the developing world, such as Bogotá.

Although on-going evaluation showed that the programme has been generally successful, several operational weaknesses were noted. More funding and human resources are needed to improve and increase interventions in the partner companies. More efficient and aggressive strategies are needed to promote leadership among the employees and to strengthen the partnerships and networks with occupational health insurance companies.

The reach of Muévete Bogotá and its effectiveness in promoting physical activity remains limited as long as the programme is primarily focused on the recreation and sport sector. Muévete Bogotá has a broader reach than the vast majority of health promotion programmes, however, it could increase its benefits by interacting with other sectors, such as education, health, public space, urban development, and transportation, to work collaboratively for a healthier and more active population in Bogotá.

Muévete Bogotá is an example of a programme that gathers more data than can feasibly be analysed. Shortage of trained analytic staff and lack of time to carry out data analysis reduce the ability to apply application of carefully collected data to programme evaluation. Addressing this weakness will require new partnerships and training and the allocation of staff to programme evaluation. Setting aside time to analyse data and for evaluation is difficult in a dynamic and growing programme like Muévete Bogotá.

Muévete Bogotá provides an example of successful implementation of evidence-based interventions to promote physical activity adapted to local context and culture. The programme has grown and evolved because of effective management, well-versed and trained staff in physical activity promotion and practical programme evaluation. Better outcome evaluation will be required to document population level changes in physical activity, but the existing evaluation process clearly demonstrates the feasibility of delivering a comprehensive programme for physical activity promotion in a large metropolitan area despite complex economic, political and social constraints.

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Physical activity upcoming events

11th World Congres on Public Health
August 21st to 25th, 2006
Rio de Janeiro, Brazil
Website: www.saudecoletiva2006.com.br

4th Physical Activity and Obesity Congress
August 31st to September 2nd, 2006
Brisbane, Australia
Website:
http://www.obesitysatellitebrisbane2006.qut.edu.au

Aging and Physical Activity- Application to Fitness, Sport and Health
September 15th to 17th, 2006
Rydzyna, Poland
E-mail: osinski@awf.poznan.pl

29th International Symposium on Sport Science
October 5th to 7th, 2006
São Paulo, Brazil
E-mail: simpósio@celafiscs.org.br
Website: www.celafiscs.org.br

6th International Course on Physical Activity and Public Health- Agita Mundo
October 17th to 21st, 2006
Viña del Mar, Chile
E-mail: rafa@rafapana.org
Website: www.rafapana.org

7th IUHPE European Conference on Health Promotion and Health Education
October 18th to 21st, 2006
Budapest, Hungary
Website: www.equityinhealth2006.hu

American Public Health Association 134th Annual Meeting
Nov 4th to 8th, 2006
Boston, MA, US
Website: www.apha.org/meetings

14th Latinamerican Congress on Nutrition
November 12th to 16th, 2006
Florianópolis – Brasil
E-mail: slan@slanbrasil.org
Website: www.slanbrasil.org

4th Annual International Council on Active Ageing Conference: Active Ageing 2006
November 15th to 17th, 2006
Las Vegas, NV, US
Website: www.icaa.cc/convention.htm

CDC/WHO Collaborating Center Workshop on Global Advocacy for National Physical Activity Plans
December 10th to 12th, 2006
San Diego - California

4th Annual Conference of Active Living Research
February 22nd to 24th, 2007
Coranads, CA, US
Website: www.activelivingresearch.org

54th Annual Meeting of the Amercian College of Sports Medicine
May 30th to Jun 2nd 2007
New Orleans, LA, US
Website: www.acsm.org

19th IUHPE World Conference on Health Promotion and Health Education
June 10th to 15th, 2007
Vancouver – Canada
Website: www.iuhpeconference.org

International Conference on Physical Activity and Obesity in Children
June 24th to 27th, 2007
Toronto, Canada
Website: www.obesityconference.ca

"Agita Melbourne" physical activity promotion event at the 18th IUHPE World Conference on Health Promotion and Health Education, April 2004, Melbourne, Australia

VANCOUVER, JUNE 11 - 15, 2007

The 19th IUHPE World Conference on Health Promotion & Health Education
CANADA 2007

See you in June 2007 for Agita Vancouver!
www.iuhpeconference.org

Marie-Claude Lamarre et Michael Pratt

Activité physique et promotion de la santé

Les opinions exprimées dans cet article sont celles des auteurs et ne sont pas nécessairement celles des Centres américains de Contrôle et de Prévention des Maladies (CDC) et de l'Union internationale de Promotion de la Santé et d'Education pour la Santé (UIPES.)

« Mens sana in corpore sano »... L'adage n'est certes pas nouveau. Attribué à Montaigne écrivain français du XVI[e] siècle, il a des racines beaucoup plus anciennes dans la Grèce antique qui n'a eu de cesse de promouvoir l'activité physique et le sport comme un instrument du développement humain. A cette époque déjà la santé se concevait comme une façon de vivre, un effort positif, une tension permanente et maîtrisée vers l'harmonie de chaque individu avec lui-même et son milieu. Le renouveau des Jeux Olympiques à la fin du XIX[e] siècle participait du même esprit ; utiliser le sport comme véhicule, symbole et instrument du développement physique, intellectuel et spirituel des participants en encourageant l'amitié, la paix et la compréhension entre les peuples de toutes les nations.

La conception moderne de l'activité physique sous toutes ses formes intègre elle aussi ces valeurs et ne peut être vraiment comprise que si on la replace dans le contexte de développements plus larges en promotion de la santé, qui font appel à des stratégies de mobilisation de différents secteurs et de différents acteurs pour créer des environnements favorables à l'activité physique, à la santé et au bien-être. Certes, l'activité physique est un déterminant clé de la dépense d'énergie et est de ce fait indispensable à l'équilibre et au contrôle du poids. L'activité physique réduit aussi les risques de maladies cardiovasculaires, de cancers du sein et du colon et de diabète et elle apporte des bienfaits substantiels à de nombreuses conditions qui ne sont pas uniquement celles associées à l'obésité (WHO, 2002). Mais son influence sur la santé et le bien-être va bien au-delà. On sait que l'activité physique est un déterminant essentiel de la santé mentale, sociale et environnementale. On sait aussi que les relations avec la famille, les amis et les paires, la communauté au sein de laquelle ces relations se développent, l'école, le lieu de travail, le quartier sont autant de facteurs individuels et collectifs qui vont déterminer la capacité d'une personne ou d'un groupe de s'engager ou non dans une activité physique régulière. Les normes sociales et culturelles, l'accessibilité des infrastructures et la sécurité de l'environnement physique vont elles aussi influencer l'activité. On doit considérer l'activité physique comme un bien public qui ne fait pas d'exclus, qui a des avantages non négligeables et qui dépasse les frontières, les générations et les peuples (Kaul *et al.,* 1999). Lorsqu'une communauté manque d'infrastructure capable de soutenir et d'affirmer ses membres, les personnes qui en font partie ne peuvent souvent développer leur plein potentiel individuel (Baum, 1999 ; Marshall *et al.,* 2005).

On comprend alors d'autant plus mal le fossé important qui existe entre les connaissances établies des contributions de l'inactivité physique à la maladie et au mal être et le faible niveau d'investissement que l'on observe pour réduire de manière durable ces niveaux d'inactivité (WHO, 2002 ; WHO, 2005).

Depuis 2002, l'Union internationale de Promotion de la Santé et d'Education pour la Santé a passé un accord avec les Centres américains de Contrôle et de Prévention des Maladies (CDC) qui comprend un volet important sur l'activité physique et la santé. Ce programme de collaboration associe des activités de recherche, de développement des compétences, de plaidoyer, et des travaux en réseau, en lien avec d'autres projets sur le développement urbain et la santé. L'UIPES et les CDC ont choisi d'aborder la question de l'activité physique et de son influence sur la santé en récoltant les preuves de son efficacité et en développant des stratégies d'action de promotion de la santé et de prévention des maladies chroniques.

Plusieurs rencontres scientifiques et consultations d'experts récentes organisées par l'OMS et les CDC auxquelles a participé l'UIPES ont permis d'examiner en détail la Stratégie mondiale de l'OMS sur la Nutrition, l'Activité Physique et la Santé et au-delà le développement d'actions de santé publique pour l'activité physique (Bull *et al.,* 2006). Ces discussions ont éclairé le rôle des Organisations non gouvernementales (ONGs) dans leur engagement en faveur de l'activité physique, les défis qui se posent aux pays développés et en voie de développement dans leurs efforts de promotion de l'activité physique et les obstacles à l'action que rencontrent des pays et des régions à différents stades de leur développement économique.

De ces consultations, est née tout naturellement une Alliance mondiale pour l'Activité physique (appelée GAPA de par son sigle en anglais). Elle est composée de différentes organisations, certaines d'entre elles déjà fortement mobilisées et actives dans le domaine de la promotion de l'activité physique et d'autres jusqu'alors moins impliquées mais pouvant avoir un impact important à l'échelle mondiale en prenant part à cette initiative. GAPA va être l'articulation, la voix unifiée de l'activité physique et le catalyseur des activités de toutes les organisations nationales et internationales qui la composent de même que de la société civile pour aider les pays à démarrer, poursuivre, et accroître leurs efforts pour intégrer

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l'activité physique à l'ordre du jour de la promotion de la santé et de la prévention des maladies non transmissibles.

L'UIPES et les CDC, dans le cadre de leur collaboration, ont choisi d'aborder la promotion de l'activité physique en se fondant sur les preuves existantes et en l'intégrant dans une vision large de promotion de la santé et de prévention des maladies. C'est cette approche qui est reflétée dans ce numéro spécial de *Promotion & Education*. Les interventions efficaces en promotion de la santé et les stratégies de santé publique pour le développement de l'activité physique partagent une même philosophie, des outils et des méthodes : un cadre politique, le plaidoyer, la surveillance, des interventions fondées sur les preuves, l'évaluation des actions, la formation de partenariats et de réseaux pour faciliter la communication et la mise en œuvre de programmes. La promotion de la santé physique peut être un bon point d'entrée pour de nombreux organismes de santé publique pour développer un programme global de promotion de la santé et de prévention des maladies non transmissibles. En plus des bénéfices bien établis de l'activité physique, ce numéro met en lumière la faisabilité et l'attrait de trois éléments pouvant facilement s'intégrer dans un programme de santé publique. 1) La clarté, la simplicité et le consensus autour de la recommandation de santé publique de pratiquer 30 minutes d'activité physique modérée la plus part des jours de la semaine, facilitent beaucoup la communication (Pate *et al.*, 1995). 2) Il existe des outils pour délivrer de bons programmes de santé publique pour développer l'activité physique : mesures de surveillance, interventions efficaces et méthodes d'évaluation spécifiques. 3) Finalement, les réseaux et les partenariats multisectoriels qui abordent la promotion de l'activité physique sous des perspectives différentes offrent un grand potentiel de synergie. L'inactivité physique est un problème de santé publique à l'échelle planétaire et dans ce numéro spécial de *Promotion & Education*, nous présentons un éventail de réponses offertes par des professionnels de la promotion de la santé de toutes les parties du monde.

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Wolf Kirsten, Adrian Bauman et Michael Pratt

Promouvoir l'activité physique à l'échelle mondiale pour la santé des populations

Les opinions exprimées dans cet article sont celles des auteurs et ne sont pas nécessairement celles de l'Organisation mondiale de la Santé (OMS), des Centres américains de Contrôle de la Prévention des Maladies (CDC) et de l'Union internationale de Promotion de la Santé et d'Education pour la Santé (UIPES.)

L'augmentation dans le monde des maladies chroniques (non transmissibles) (MNJ) a été décrite par l'Organisation mondiale de la Santé (OMS) en termes d'épidémie (WHO, 2005). L'inactivité physique est aujourd'hui reconnue comme l'un des principaux facteurs de risque des MNT, et en particulier des maladies cardiovasculaires et des diabètes de type 2. L'inactivité physique contribue à 2-3 % du fardeau mondial des maladies (WHO, 2002). Par ailleurs, l'inactivité entraîne des coûts économiques directs majeurs, ainsi que des coûts indirects dus à la morbidité et à la perte de productivité.

Au cours des deux dernières décennies, des données épidémiologiques ont permis de mettre de mieux en mieux en évidence de nombreux avantages sociaux et sanitaires chez les populations physiquement actives. Cependant, l'inactivité physique augmente dans de nombreuses nations du monde, en particulier dans les pays qui connaissent un développement rapide (WHO, 2002). Ce paradoxe a amené de nombreux experts dans ce domaine à penser que nous ne sommes pas assez efficaces dans la communication des bénéfices positifs de l'exercice physique, ni pour convaincre les décideurs d'investir davantage dans la promotion d'une activité physique favorable à la santé. Le besoin d'agir a été reconnu, et renforcé par les orientations politiques suggérées par la Stratégie mondiale de l'OMS sur l'Alimentation, l'Activité physique et la Santé (WHO, 2004). Ce domaine a besoin de parler de façon cohésive, d'une seule voix, et de plaider fortement en faveur d'une approche de l'activité physique en termes de santé publique, tout comme cela a été fait précédemment pour une alimentation saine et un environnement sans tabac.

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De nouvelles perspectives

De nombreuses organisations et acteurs différents pourraient tout à fait s'impliquer dans le domaine de l'activité physique, certains directement – avec pour mission de promouvoir l'activité physique, des trajets quotidiens actifs ou du sport pour tous – et d'autres indirectement – comme certaines organisations liées à la santé, ayant comme priorité une maladie spécifique ou une fonction particulière. Le secteur non gouvernemental et non lucratif joue à ce niveau un rôle potentiel tout particulier, par exemple, dans les clubs sportifs dans divers pays européens. Le secteur du sport est un partenaire potentiel pour faire progresser l'activité physique au bénéfice de la santé dans la mesure où, dans certains pays, les orientations politiques sont passées d'une préoccupation essentiellement liée à la performance à la participation de l'ensemble d'une population.
Mieux profiter de l'expertise et des réseaux d'organisations nationales et internationales, et les faire travailler en partenariat afin de promouvoir l'activité physique reste un objectif majeur de la promotion de la santé. Ce souci de coordination est au centre de l'Alliance mondiale pour l'Activité physique (GAPA), formée sous la direction de l'Union internationale de Promotion de la Santé et d'Education pour la Santé (UIPES) et des Centres américains de Contrôle et de Prévention des Maladies (CDC). La GAPA assurera une coordination et une communication stratégiques de manière à faire converger les activités et les efforts en faveur de la promotion de l'activité physique développés par les organisations non gouvernementales (ONGs) nationales et internationales, la société civile, et les gouvernements et de créer des synergies entre eux. L'objectif de l'Alliance est de faciliter la promotion de l'activité physique dans le monde dans un cadre de promotion de la santé, et de coordonner les efforts dans ce sens. Elle n'a pas en revanche l'intention ni pour objet de réaliser des programmes ni d'apporter directement une assistance technique. L'UIPES jouera un rôle clé dans cette entreprise à travers son large réseau international d'organisations et de professionnels de la promotion de la santé. Une priorité pour l'UIPES est de créer des synergies et des partenariats à travers des interactions avec d'autres projets de promotion de la santé en cours.

L'Alliance mondiale pour l'Activité physique (GAPA)

La formation d'une Alliance mondiale survient au bon moment, alors même que l'Organisation mondiale de la Santé (l'OMS) vient de développer et d'adopter la Stratégie mondiale sur l'Alimentation, l'Activité physique et la Santé (GSDPAH) (WHO, 2004). Celle-ci expose un plan d'ensemble et des directives qui font suite à un processus de consultation internationale qui a suscité un intérêt considérable. (Bauman & Craig, 2005, IJBNPA). Cette d'opportunité pourrait rapidement se refermer parce que d'autres intérêts peuvent surgir et entrer en compétition ; il faut donc agir vite. La GSDPAH met l'accent sur la nécessité d'une approche multisectorielle et multidisciplinaire basée sur les principes de la Charte d'Ottawa pour la Promotion de la Santé. Une telle approche est essentielle pour le secteur de l'activité physique s'il s'agit de plaider non plus seulement en faveur de styles de vie plus actifs mais également pour des

environnements et des politiques qui favorisent ces modes de vie. (Bauman & Bellew, 1999). Par exemple, des alliances passées avec les secteurs des transports publics et du développement urbain peuvent avoir des résultats énormes. Combien de villes ou de régions peuvent prétendre que leur infrastructure et leur système de transports favorisent l'activité physique ? Cette tendance est particulièrement évidente dans les villes des pays en développement rapide où l'on observe un nombre croissant de véhicules motorisés, moins de personnes qui roulent à bicyclette ou qui marchent à pied, des infrastructures limitées, comme les trottoirs, et moins d'espaces verts.

Il est également recommandé de développer des stratégies au sein des milieux de vie. Le lieu de travail à lui seul – où une majorité des adultes évoluent – fournit une opportunité considérable de sensibiliser et d'influencer les individus, et de créer des environnements favorables.

Le fardeau qui pèse sur les pays en développement

Les décideurs et la communauté en général, en particulier dans les pays en phase d'industrialisation rapide, peuvent ne pas reconnaître le fardeau énorme que constituera une augmentation des MNT. La part croissante des MNT dans le fardeau des maladies dépasse déjà la part attribuée aux maladies transmissibles et au manque d'attention portée à l'environnement (WHO, 2005). L'activité physique décline en raison du développement rapide et de l'automatisation. Par exemple, les pays d'Amérique latine ont atteint des niveaux d'inactivité similaires à ceux que l'on trouve en Europe et en Amérique du Nord (Pratt, Jacoby & Neiman, 2004). Il est donc nécessaire de mettre en place rapidement, dans de nombreux pays en voie de développement, des stratégies et des programmes réalisables et spécifiques à chaque pays. Les obstacles restent nombreux dans la mesure où le soutien des gouvernements, le leadership, les infrastructures et les ressources font défaut, et que peu de choses ont été faites au niveau des populations. Cependant, les succès d'Agita São Paulo et de Muevete Bogotá montrent, données probantes à l'appui, qu'il est possible de mettre en place des programmes destinés à augmenter l'activité physique dans les milieux de vie des pays en voie de développement. Agita a débuté comme un simple programme régional dans l'état de São Paulo et a évolué en un programme d'ampleur et d'importance nationales et internationales, qui a conduit à la constitution d'Agita Mundo, un réseau mondial pour promouvoir l'activité physique et sensibiliser à son importance. Muevete Bogotá fait partie d'un réseau national dynamique de promotion de l'activité physique en Colombie, largement soutenu par les pouvoirs publics locaux.

Dans ce numéro spécial…

Ce numéro spécial présente l'état des lieux de l'activité physique dans le monde, structuré autour des priorités stratégiques de l'UIPES : développement des connaissances, plaidoyer et travail en réseau. Cavill, Foster, Oja & Martin examinent de façon systématique des approches de santé publique, basées sur des données probantes, de la promotion de l'activité physique en Europe et montrent à quel point de telles approches peuvent varier d'un pays à l'autre. Bauman, Phongsavan, Schoppe & Owen soulignent l'importance de mesurer l'activité physique et fournissent un inventaire de mesures établies que l'on peut utiliser en promotion de la santé, tant au niveau national que local. Trevor Shilton donne de solides arguments pour plaider plus activement en faveur de l'activité physique, en présentant un modèle qui tente de répondre aux questions « Pourquoi ? », « Quoi ? » et « Comment ? » faire. Le plaidoyer est une priorité de l'Alliance mondiale pour l'Activité physique en particulier pour ce qui est de développer des politiques et des plans d'action nationaux, qui se fondent sur la population. Très peu de pays ont mis en œuvre, à l'échelle nationale, des programmes de santé publique globaux pour promouvoir l'activité physique – ce manque est mis en évidence par Bull, Shepard, Pratt & Lankenau. Ils soulignent également le rôle décisif joué par les ONGs pour plaider en faveur du développement de l'activité physique partout dans le monde, et présentent l'initiative de GAPA.
Ce numéro spécial thématique comporte également des articles centrés spécifiquement sur certaines réussites sudaméricaines. Schmid, Librett, Neiman, Pratt & Salmon décrivent un cadre d'évaluation de programmes communautaires de promotion de l'activité physique en Amérique latine. Les deux derniers articles encouragent l'établissement de partenariats efficaces pour promouvoir l'activité physique et la santé. Muevete Bogotá est une approche multisectorielle unique pour promouvoir l'activité physique en milieu urbain. Son modèle est expliqué pour qu'il puisse servir de référence stratégique à d'autres zones urbaines dans le monde. La contribution de collègues brésiliens, Sandra Matsudo et Victor Matsudo, met en avant les éléments nécessaires pour développer avec succès des réseaux et former des coalitions en faveur de la promotion de l'activité physique, en utilisant les exemples d'Agita São Paulo, du Réseau d'Activité physique des Amériques (RAFA-PANA), et d'Agita Mundo.

Perspective

L'opportunité unique que constitue la Stratégie mondiale sur l'Alimentation, l'Activité Physique et la Santé, avec les différentes consultations et discussions internationales qui lui sont liées, doit être saisie en renforçant la collaboration internationale et en impliquant autant d'organisations actives que possible. Les ONGs ont un rôle majeur à jouer dans la promotion et le plaidoyer pour une activité physique favorable à la santé, ainsi que en intégrant l'activité physique aux efforts de promotion de la santé et de prévention des maladies à l'échelle mondiale.

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Mesurer l'activité physique – une référence pour la promotion de la santé

A. Bauman et al., p. 92

La promotion de la santé reconnaît de plus en plus l'importance de l'activité physique, et pouvoir mesurer cette dernière apparaît comme un défi majeur pour la recherche et la pratique. Mesurer l'activité physique est important pour les décideurs qui s'intéressent à la surveillance des populations ainsi que pour les praticiens qui eux s'intéressent plus particulièrement à l'évaluation des programmes et à la recherche. Cet article décrit les « pratiques exemplaires » en termes de mesures de l'activité physique et dresse l'inventaire des mesures avérées de, ou liées à l'activité physique, mesures qui peuvent être utilisées en promotion de la santé tant au niveau national que local.

Une approche basée sur les données probantes pour promouvoir l'activité physique et développer des politiques en Europe : des études de cas contrastées

N. Cavill et al, p. 104

La santé publique fondée sur les preuves emprunte en grande partie les principes de la médecine fondée elle-aussi sur les preuves qu'elle applique à la santé publique. Il s'agit cependant d'une discipline relativement jeune qui ne s'applique pas de façon universelle à toutes les questions de santé publique – en particulier lorsqu'il s'agit de sujets aussi multidisciplinaires que l'activité physique. Cet article se propose de nous éclairer sur cette question, en déterminant quatre « tâches clés » à accomplir qui formeraient la base d'une approche systématique et fondée sur les données probantes de la promotion de l'activité physique. Ces tâches sont partiellement basées sur le modèle de promotion de l'activité physique (Brownson *et al,* 1999) et sont illustrées par des exemples tirés de trois pays européens différents : la Finlande, la Grande-Bretagne et la Suisse.

La « tâche n°1 » consiste à utiliser les données probantes disponibles sur les bénéfices de l'activité physique en termes de santé pour pouvoir plaider auprès des décideurs et les encourager à agir davantage. À ce niveau, les trois pays ont opté pour une approche similaire, en procédant à des revues académiques pour rassembler les données probantes existantes sur les bienfaits de l'activité physique pour la santé.

La « tâche n°2 » consiste à surveiller ce qui se pratique afin de recueillir des données probantes sur la fréquence de l'activité physique. Ici, la Finlande et la Suisse ont pris soin de rassembler les données les plus récentes et de les utiliser pour plaider en faveur de l'activité physique, tandis qu'en Grande-Bretagne, les changements récurrents dans les questionnaires et les méthodologies utilisés ont abouti à une carence de données récentes.

La « tâche n°3 » consiste à examiner les données probantes disponibles sur « ce qui marche » pour augmenter l'activité physique de manière à influencer les pratiques. On constate ici que la Grande-Bretagne a préféré une approche globale et plus systématique pour examiner et diffuser les preuves de ce qui est efficace et influer ainsi sur les pratiques, tandis que les deux autres pays s'appuient principalement sur des évaluations individuelles.

La « tâche n°4 » concerne l'évaluation de la pratique et il va sans dire que pour chacun des trois pays, cet aspect reste un défi de taille à relever – un défi nécessitant des investissements supplémentaires en terme de formation et de financement. Ainsi, la plupart des « pratiques exemplaires » reconnues actuellement se basent sur l'expérience (généralement non évaluée) et non sur les preuves.

Cette brève analyse montre qu'il y a un certain nombre de choses à faire communes à tous les pays faisant partie d'une approche de santé publique fondée sur les données probantes. Cependant, les facteurs culturels et politiques propres à chacun des pays étudiés ont influencé la manière dont ces actions ont été entreprises, et l'importance accordée à chacun des éléments.

Un cadre de référence pour évaluer les programmes communautaires de promotion de l'activité physique en Amérique latine

T. L. Schmid et al., p. 112

L'intérêt grandissant pour la promotion de l'activité physique à travers des programmes communautaires multisectoriels a mis en évidence la nécessité d'une évaluation efficace de ces programmes. Un groupe de travail international réuni à Rio de Janeiro, et rassemblant des scientifiques et des praticiens des secteurs de la santé publique, de la médecine et des sciences comportementales, a approuvé le principe d'une évaluation minutieuse de tous les programmes et a développé, au terme d'un consensus, les « Recommandations de Rio de Janeiro pour l'Évaluation des Interventions pour la promotion de l'Activité physique ». Entre autres recommandations et principes figurait l'intégration de l'évaluation dès le début du programme, chaque fois que cela était possible. Le groupe de travail a également appelé à un financement approprié de l'évaluation, en proposant comme

objectif qu'environ 10 % des ressources des programmes soient consacrés à l'évaluation elle-même. Il a en outre établi que les évaluations devaient être développées conjointement avec toutes les parties prenantes d'un programme, avec lesquelles les résultats obtenus devaient être partagés ; que les évaluations devaient être guidées par des critères éthiques tels que ceux proposés par l'Association américaine d'Évaluation (AEA), et devaient examiner les processus de développement d'un programme tout autant que ses résultats ; que les résultats des évaluations devaient être utilisés pour réviser et perfectionner les programmes continus et orienter les décisions relatives à la poursuite ou à l'expansion de ces programmes. Il a par ailleurs reconnu la nécessité de former davantage les professionnels à l'évaluation des programmes et pour cela le Manuel d'Évaluation de l'Activité physique des Centres américains de Contrôle et de Prévention des Maladies pourrait être facilement adapté pour être utilisé dans des communautés de cultures différentes, en particulier en Amérique latine. Cet article décrit un processus d'évaluation en 6 étapes et détaille l'ensemble des recommandations émises par le Groupe de Travail réuni à Rio de Janeiro. Le Manuel a été traduit en espagnol et en portugais et des études de cas supplémentaires de Colombie et du Brésil ont été ajoutées. Ces traductions sont disponibles auprès de la « Physical Activity and Health Branch » des Centres américains de Contrôle et de Prévention des Maladies.

Plaider en faveur de l'activité physique – des preuves pour influencer

T. Shilton, p. 118

Le plaidoyer est un élément de pratique en santé publique insuffisamment développé pour le moment, mais en pleine expansion. À l'origine, le terme était utilisé pour désigner les activités entreprises par des personnes au nom des pauvres, des malades ou des opprimés. Dans les années 70, sous l'impulsion des activistes de la lutte contre le tabac, comme Pertschuk aux États-Unis, Gray en Australie et Daube au Royaume-Uni, le plaidoyer en santé publique s'est davantage axé sur le changement des structures et des politiques. Depuis la Charte d'Ottawa (OMS, 1986), le mouvement pour la promotion de la santé a adopté une vision plus large du rôle du plaidoyer. Aujourd'hui, la communauté des professionnels de santé publique le considère comme une action sociale destinée avant tout à susciter des changements au niveau de la législation, des politiques et des milieux favorables à une vie saine.
L'OMS définit le plaidoyer comme une combinaison d'actions sociales et individuelles destinées à gagner un engagement politique, le soutien de politiques, l'acceptation sociale et le soutien de systèmes en faveur d'un objectif ou d'un programme de santé (OMS, 1995).

Cet article présente un modèle pour comprendre et mobiliser le plaidoyer en faveur de l'activité physique. Il décrit un processus en trois étapes :

1. Recueillir et traduire les données les plus pertinentes sur l'activité physique. Pourquoi plaider en faveur de l'activité physique ?

2. Développer, à partir des données probantes, un ordre du jour des priorités en faveur de l'activité que l'on veut défendre et élaborer un plan (ou des plans) d'actions fondamentales qui vont augmenter les niveaux d'activité physique de la population. Que faut-il préconiser et/ou défendre ?

3. Mettre en œuvre un mélange de stratégies de plaidoyer pour influencer et mobiliser toutes les sources pouvant soutenir les activités en faveur de l'activité physique. Comment le plaidoyer doit-il être réalisé ?

Mettre en œuvre une action nationale qui soit basée sur la population pour favoriser l'activité physique – difficultés d'action et opportunités de collaboration internationale

F. C. Bull et al, p. 127

Cet article synthétise les derniers développements internationaux en faveur de l'activité physique en se penchant sur les difficultés et sur les opportunités que ces développements présentent. Il résume les éléments clés de la Stratégie mondiale pour l'Alimentation, l'Activité physique et la Santé de l'OMS (GSDPAH), en s'intéressant plus particulièrement aux éléments spécifiques à l'activité physique. En s'appuyant sur des réunions récentes (Atlanta, en octobre 2002 ; Miami, en décembre 2004 ; Cascais, en février 2005 ; Pékin, en octobre 2005 ; Bogotá, en novembre 2005) les auteurs décrivent les obstacles et les domaines où un soutien s'avère nécessaire pour développer et mettre en oeuvre un plan d'action national en faveur de l'activité physique et qui implique la population. Ces rencontres ont été centrées particulièrement sur les besoins des pays en voie de développement dans lesquels, jusqu'à présent, peu de chose a été faite au niveau de la population pour augmenter l'activité physique. On sait qu'à moins d'entreprendre une action rapidement, ces pays auront bientôt un lourd fardeau à porter, en raison de l'augmentation de la prévalence des

maladies non transmissibles. Certaines initiatives existantes sont présentées qui fournissent des opportunités et un mécanisme pour une action immédiate. De plus, un ensemble d'actions spécifiques est proposé à travers des domaines aussi divers que le plaidoyer, la communication et la diffusion, les réseaux et les partenariats, la recherche de fonds, le développement et la mise en œuvre de politiques, la réalisation et l'évaluation de programmes, la surveillance et le développement des capacités ; actions plus efficaces lorsqu'elles sont réalisées dans le cadre d'une collaboration internationale. Le développement de l'Alliance mondiale pour l'Activité physique fournit la structure nécessaire à une telle collaboration et son programme de travail est ici exposé.

« Muévete Bogotá » : Promouvoir l'activité physique grâce à un réseau d'entreprises partenaires

R. Gámez et al., p. 138

En 1998, à Bogotá, le bureau du maire et l'Institut du District chargé des sports et des loisirs ont créé « Muévete Bogotá », un programme de promotion de la santé et de l'activité physique pour la capitale colombienne. Muévete signifie bouger, être actif, et cette campagne destinée à promouvoir l'activité physique a été conçue pour améliorer la santé et la qualité de vie des citoyens de Bogotá en les incitant à pratiquer une activité physique régulière. Sur la base des recommandations sur l'activité physique, émises en 1995 par les Centres américains de Contrôle et de Prévention des Maladies et par le Collège américain de la Médecine sportive (Pate *et al.,* 1995), ce programme a été développé en étroite consultation avec le programme « Agita São Paulo », au Brésil (Matsudo *et al.,* 2003). « Muévete Bogotá » allie une campagne médiatique à des programmes qui visent à changer les comportements par rapport à l'activité physique. Les interventions, qui se déroulent sur les lieux de travail, dans les écoles, dans les centres de soin et dans les lieux communautaires, s'appuient sur des partenariats développés entre des professionnels de santé et de l'éducation, des dirigeants et des employés du monde de l'entreprise, et des membres de la communauté, de façon à ce que ces programmes touchent tous les milieux de vie et toutes les populations.

Comme de nombreux pays en voie de développement, la Colombie connaît une augmentation des maladies chroniques. En 1993, elles étaient à l'origine de 35,7 % de la mortalité totale enregistrée à Bogotá (Espinosa G., 1993). En 2002, les maladies cardiovasculaires causaient 40,3 % de la mortalité des plus de 60 ans et 26,8 % pour les personnes entre 45 et 59 ans (Cardona L., 2002).
Au cours des dix dernières années, l'environnement social et physique de Bogota a considérablement changé, ce qui a augmenté les possibilités en faveur de l'activité physique, mais le mode de vie sédentaire reste un important problème de santé publique pour la ville. Des programmes tels que « Muévete Bogotá », qui éduquent et encouragent la population à être plus active sur le plan physique, s'avèrent nécessaires pour compléter les changements politiques et environnementaux mis en place. 'Muévete Bogotá' est un parfait exemple de la mise en œuvre fructueuse d'une approche multisectorielle intégrée de la promotion de l'activité physique dans une grande métropole. Ce modèle pourrait s'étendre à d'autres villes d'Amérique latine et à d'autres zones urbaines de pays en voie de

Coalitions et réseaux : faciliter la promotion de l'activité physique

S. M. Matsudo et V. R. Matsudo, p. 133

Cet article a pour but de synthétiser l'expérience de coalitions et de réseaux formés pour promouvoir l'activité physique. En présentant le concept de certains partenariats, en particulier dans le contexte brésilien, les auteurs détaillent les différents facteurs qui interviennent dans le succès d'un partenariat, en en décrivant les éléments clés, comme le financement, l'adhésion des membres, les méthodes d'empowerment. Agita São Paolo, le Réseau d'Activité physique des Amériques (PANA-RAFA) et Agita Mundo servent d'exemples. Cet article montre que des programmes, des partenariats et des réseaux, tant locaux que nationaux et mondiaux, sont essentiels à tous les niveaux pour garantir la réussite de la promotion de l'activité physique en tant que stratégie de santé publique.

Marie-Claude Lamarre y Michael Pratt

Actividad física y promoción de la salud

Las opiniones expresadas en este artículo son responsabilidad de los autores y no representan necesariamente la visión oficial de los Centros para la Control y la Prevención de Enfermedades de los Estados Unidos (CDC), ni de la Unión internacional de Promoción de la Salud y Educación para la Salud (UIPES).

"Mens sana in corpore sano"... no es un dicho nuevo. Aunque atribuido a Montaigne, el famoso escritor francés del siglo XVI, de hecho hunde sus raíces en la antigua civilización griega que fomentó la actividad física y el deporte en tanto que instrumentos de desarrollo humano y de paz. En aquellos tiempos, la salud se consideraba un arte de vivir, un esfuerzo positivo, una tensión permanente encaminada a la armonía entre el ser humano y su entorno. Los Juegos Olímpicos se recuperaron a finales del siglo XIX con vistas a fomentar el crecimiento físico, intelectual y espiritual de los participantes mediante el deporte y la promoción de la amistad, la paz y el entendimiento en todo el mundo.

El concepto moderno de actividad física en todas sus formas integra también estos valores y puede comprenderse en su totalidad sólo cuando lo situamos en el contexto más amplio de la promoción de la salud actual que exige estrategias encaminadas a crear entornos que favorezcan la actividad física, la salud y el bienestar. Hay que reconocer que "la actividad física es un determinante clave del consumo energético y por lo tanto, es un elemento fundamental para el equilibrio energético y el control del peso. No obstante, la actividad física también reduce el riesgo de las enfermedades cardiovasculares, del cáncer de mama y de colon y la diabetes y conlleva importantes beneficios para otras muchas dolencias, no sólo las que están relacionadas con la obesidad" (OMS, 2002). Pero va mucho más allá. Está demostrado que la actividad física es un determinante clave de la salud mental, social y medioambiental. Las relaciones con la familia, los amigos y los iguales, la comunidad en el seno de la cual se desarrollan, la escuela, el lugar de trabajo, el vecindario, las normas sociales y culturales, la accesibilidad y seguridad del entorno físico son determinantes individuales y colectivos que aumentarán o reducirán la capacidad de una persona de realizar una actividad física regular y la incidencia que tenga esta actividad en la salud física, social y mental de dicha persona y en su bienestar. La actividad física debería ser considerada "un bien público mundial", que "no es prescindible", conlleva "no pocos beneficios y rebasa fronteras, generaciones o poblaciones" (Kaul et al., 1999). "*Cuando las comunidades carecen de infraestructuras sociales y físicas que apoyen y reafirmen a las personas que las integran, éstas no suelen desarrollar todo su potencial individual*" (Baum, 1999; Marshall et al., 2005).

A pesar de que la inactividad física ocupa un puesto destacado en la lista de elementos que contribuyen a una mala salud, sigue habiendo una gran brecha entre la base de pruebas que lo demuestran y el nivel de inversión realizada en una acción continuada encaminada a reducir los niveles de inactividad (OMS, 2002; OMS, 2005).

En 2002, la Unión internacional de Promoción de la Salud y de Educación para la Salud (UIPES) estableció un Acuerdo con los Centros para el Control y la Prevención de Enfermedades de los Estados Unidos (CDC), una agencia del Departamento de Salud y Servicios Humanos, en cuyo proyecto se incluye un elemento importante sobre actividad física y promoción de la salud. El acuerdo de colaboración se centra en la investigación, la capacitación, la defensa pública de los postulados de salud y el trabajo en red vinculado a otros proyectos sobre desarrollo urbanístico y salud. La UIPES y los CDC se plantean la actividad física, en tanto que cuestión de salud pública, basándose en la evidencia y empleando el desarrollo de estrategias de salud pública para fomentar el ejercicio físico como puerta de entrada a la acción de promoción de la salud y de prevención de enfermedades crónicas que tanto se necesita.

En varias reuniones de científicos y consultas con expertos realizadas recientemente con el apoyo de la Organización Mundial de la Salud y los CDC y en las que la UIPES ha participado se ha abordado la Estrategia Mundial de la OMS sobre Régimen Alimentario, Actividad Física y Salud y la cuestión más amplia de desarrollar acciones de salud pública que fomenten la actividad física (Bull et al., 2006). Estas discusiones subrayaron el papel de las organizaciones no gubernamentales a la hora de apoyar la promoción de la actividad física, los retos que tienen ante sí los países desarrollados y en vías de desarrollo en esta cuestión y los obstáculos y las necesidades de los países y regiones con niveles de desarrollo económico muy diversos.

El resultado natural de estas negociaciones ha sido la Alianza Mundial a favor de la Actividad Física (GAPA, en sus siglas en inglés) que integra a una amplia gama de organizaciones, algunas de ellas ya movilizadas y sumamente activas en la promoción de la actividad física y otras que en la actualidad todavía no están tan implicadas, pero con potencial de incidir a nivel mundial si se unen a esta iniciativa. GAPA representará una voz unificada y potente a favor de la actividad física y actuará como catalizador de las actividades y acciones desarrolladas por estas organizaciones no gubernamentales (ONG) internacionales y nacionales, así como por la sociedad civil y ayudará a los países a iniciar, continuar y aumentar sus esfuerzos para abordar la cuestión de la actividad física dentro del epígrafe

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más amplio de la prevención de las enfermedades no transmisibles y la promoción de la salud.

La integración de este enfoque integral de la promoción de la actividad física basado en la evidencia en una visión moderna de la promoción de la salud y de la prevención de la enfermedad constituye el sello de la colaboración de la UIPES y los CDC y queda reflejada también en este número especial de *Promotion & Education.* La práctica efectiva de la promoción de la salud y las estrategias de salud pública para fomentar la actividad física comparten filosofías, herramientas y métodos: el marco en el que se insertan las políticas, la abogacía, la vigilancia, las intervenciones basadas en la evidencia, la evaluación y los partenariados y redes que facilitan la comunicación y la realización de los programas. La promoción de la actividad física puede ser un primer paso especialmente positivo hacia un programa integral de promoción de la salud y de prevención de las enfermedades no transmisibles de muchas organizaciones dedicadas a la salud pública. Además de los beneficios demostrados que conlleva la actividad física, este número especial señala tres factores que hacen viables y atractivos los programas de salud pública encaminados a fomentar la actividad física. La claridad, simplicidad y consenso de la recomendación de realizar 30 minutos de actividad física moderada, la mayoría de los días de la semana, facilita enormemente la comunicación (Pate et al., 1995). Existen herramientas para llevar a cabo programas de salud pública que fomentan la actividad física: medidas de vigilancia, intervenciones eficaces, y métodos de evaluación específicos. Y, por último, las redes y partenariados multisectoriales que se dedican a fomentar la actividad física desde diversas perspectivas tienen un gran potencial sinérgico. La inactividad física es un problema de salud pública mundial y en este número monográfico de *Promotion & Education* presentamos una muestra representativa de respuestas que han dado los profesionales de la salud pública de todo el mundo.

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Equipo de trabajo del programa sobre la promoción de la actividad física como parte del Acuerdo de Cooperación entre la UIPES y los CDC: (arriba desde la izquierda) Thomas Schmid, Michael Pratt, Martha Perry, Luis Fernando Gómez,Diana Parra, Adrian Bauman y Victor Matsudo; (abajo desde la izquierda) Sandra Matsudo, Fiona Bull, Andrea Neiman y Olga Lucia Sarmientos. No han sido fotografiados: Mauricio Ardila, Marie-Claude Lamarre y Janeth Mosquera.

Wolf Kirsten, Adrian Bauman y Michael Pratt

La promoción de la actividad física a nivel mundial para mejorar la salud de la población

Las opiniones expresadas en este artículo son responsabilidad de los autores y no representan necesariamente la visión oficial de la Organización mundial de la Salud (OMS), de los Centros para la Control y la Prevención de Enfermedades de los Estados Unidos (CDC), ni de la Unión internacional de Promoción de la Salud y Educación para la Salud (UIPES).

El aumento de las enfermedades crónicas [no transmisibles] en todo el mundo ha sido calificado de epidemia por la Organización mundial de la Salud (OMS) (WHO, 2005). La falta de actividad física se considera actualmente uno de los factores centrales de riesgo de las enfermedades no transmisibles, especialmente la cardiovasculares y la diabetes tipo 2. La inactividad física contribuye en un 2-3% a la carga de enfermedad a nivel mundial (WHO, 2002). Además de contribuir a la enfermedad, la inactividad representa costes económicos directos de gran envergadura, así como los indirectos debidos a la morbilidad y a la pérdida de productividad.

En los últimos veinte años, han aumentado los datos epidemiológicos que demuestran las grandes ventajas que gozan las poblaciones activas tanto en el ámbito social como en el de la salud. Sin embargo, aumenta la inactividad física en muchos países del mundo, especialmente en aquellos en vías de desarrollo que están creciendo rápidamente (WHO, 2002). Esta paradoja ha llevado a muchos expertos en este campo a creer que no somos suficientemente capaces de transmitir los beneficios que conlleva la actividad física y tampoco hemos logrado convencer a los responsables de las decisiones para que inviertan más en la promoción de un tipo de actividad física que mejore la salud. La necesidad de adoptar medidas prácticas ha sido reconocida y reforzada por las orientaciones propuestas por la Estrategia Mundial sobre Régimen Alimentario y Actividad Física, auspiciado por la OMS (WHO 2004). Los que trabajan en este campo tienen que hablar de manera coherente y unificada y defender un planteamiento de la salud pública que aborde la actividad física, de la misma manera que otras iniciativas abordaron una dieta sana y un entorno sin humo.

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Una ventana abierta

En el campo de la actividad física podrían implicarse potencialmente muchos actores y organizaciones, algunos directamente –con la misión de promover la actividad física, la costumbre de ir caminando al trabajo, o el deporte para todos- y otros indirectamente, organizaciones centradas en alguna enfermedad concreta o en alguna función de la salud específica. En especial, las organizaciones no gubernamentales y del sector no lucrativo podrían desempeñar un rol, por ejemplo, en los clubes deportivos de varios países europeos. El sector deportivo es un socio potencial para avanzar en la promoción de la actividad física en beneficio de la salud y, en ese sentido, las políticas de algunos países han dejado de poner el énfasis en el rendimiento individual para centrarse en la participación de base comunitaria. Uno de los principales objetivos de la promoción de la salud sigue siendo aprovechar la experiencia y las redes de organizaciones nacionales e internacionales para que colaboren en la promoción de la actividad física. Esta coordinación es el tema principal de la Alianza Mundial a favor de la Actividad Física (GAPA, en sus siglas en inglés), que se ha constituido bajo el liderazgo de la Unión Internacional de Promoción de la Salud y de Educación para la Salud (UIPES) y los Centros de Control y Prevención de Enfermedades de los EE.UU. GAPA ofrecerá coordinación estratégica y comunicación para garantizar que las actividades e iniciativas encaminadas a fomentar la actividad física por parte de las organizaciones no gubernamentales (ONG) nacionales e internacionales, de la sociedad civil y de los gobiernos aprovechan las sinergias existentes y se enfocan de manera adecuada. El objetivo de GAPA es facilitar el fomento de la actividad física en el mundo dentro del marco de la promoción de la salud y coordinar las iniciativas, pero no realizar programas o llevar a cabo asistencia técnica directamente. La UIPES desempeñará un rol clave en este esfuerzo gracias a su extensa red internacional de organizaciones y de profesionales de la promoción de la salud. Una de las prioridades de la UIPES es crear sinergias y partenariados aprovechando las interacciones con otros proyectos de promoción de la salud ya existentes.

La Alianza Mundial a favor de la Actividad Física (GAPA)

La formación de una alianza mundial llega en un momento oportuno puesto que la Organización Mundial de la Salud (OMS) elaboró hace poco y aprobó la Estrategia Mundial sobre Régimen Alimentario, Actividad Física y Salud (EMRAAFS) (WHO, 2004), en la que esboza un plan general y unas directrices que son el resultado de un proceso de consultoría internacional y han suscitado bastante interés a nivel internacional (Bauman & Craig, 2005). Dado que esta ventana abierta puede cerrarse en cualquier momento debido a intereses en conflicto, se recomienda llevar a cabo acciones rápidamente. La EMRAAFS subraya la necesidad de utilizar un enfoque multisectorial y pluridisciplinar basado en los principios de la Carta de Ottawa en torno a la promoción de la

salud. Este enfoque es esencial para el campo de la actividad física si queremos ir más allá de la mera defensa de un estilo de vida más activo e incidir sobre los entornos y lograr políticas de apoyo (Bauman & Bellew, 1999). Por ejemplo, las alianzas con los sectores del transporte y de desarrollo urbanístico pueden ser muy provechosas. ¿Cuántas ciudades o regiones pueden afirmar que sus infraestructuras o su sistema de transportes favorecen a la actividad física? Esta tendencia es especialmente evidente en las ciudades de los países en desarrollo que están experimentando un crecimiento muy rápido: cada vez hay mas vehículos motorizados, menos bicicletas y menos personas que van caminando al trabajo, se reducen las infraestructuras urbanas como las aceras y hay menos espacios verdes.

También se recomienda que se elaboren estrategias dentro de los diferentes entornos. Sólo el entorno laboral, en el que trabajan la mayoría de los adultos,ofrece enormes posibilidades de concienciar a las personas, incidir en ellas y generar ambientes de apoyo.

La carga que soportan los países en vías de desarrollo

Es posible que los que formulan las políticas y la comunidad en general, especialmente en los países que se industrializan rápidamente, no reconozcan la enorme carga que representará el aumento de las enfermedades no transmisibles. Ésta ya es superior a la carga que representan las enfermedades transmisibles y la mala salud debido a factores medioambientales (WHO, 2005). La actividad física está de baja debido al elevado ritmo de crecimiento y a la automación. Por ejemplo, en los países latinoamericanos se constatan niveles de inactividad parecidos a los que existen en Europa y Norteamérica (Pratt, Jacoby & Neiman, 2004). Por lo tanto, en muchos países en desarrollo habrá que aplicar rápidamente programas y estrategias viables en cada uno de ellos. Sigue habiendo obstáculos importantes por falta de apoyo gubernamental, de liderazgo, de infraestructuras y de recursos y se ha avanzado muy poco en el nivel de la población. No obstante, los éxitos cosechados por Agita Sao Paulo y Muévete Bogotá son pruebas fehacientes de que los programas pueden aumentar la actividad física en los diversos entornos de los países en vías de desarrollo. Agita Sao Paolo inició su andadura como un programa regional del estado de Sao Paulo y acabó siendo un programa de alcance y repercusión nacional e internacional, y estimuló la formación de Agita Mundo, una red mundial para promover y mejorar la concienciación en el tema de la actividad física. Muévete Bogotá forma parte de una red nacional que fomenta la actividad física en Colombia y recibe gran apoyo del gobierno local.

En este número...

Este número especial presenta la situación actual de la actividad física en todo el mundo estructurándola en torno a las prioridades estratégicas de la UIPES: desarollar los conocimientos, abogar por la salud y trabajar en red. Cavill, Foster, Oja & Martin adoptan una perspectiva sistemática para estudiar los planteamientos de salud pública basados en la evidencia que se utilizan en Europa para promocionar la actividad física y muestran que el mismo planteamiento puede ser diferente en cada país. Bauman, Phongsavan, Schoepe & Owen subrayan la importancia de medir la actividad física y ofrecen un inventario de medidas establecidas para ser utilizadas en el ámbito de la promoción de la salud a nivel nacional y local. Trevor Shilton ofrece una excelente argumentación a favor de la abogacía de la actividad física mediante el modelo "Por qué, qué y cómo". La actividad de abogacía es la máxima prioridad de la GAPA, especialmente a la hora de fomentar políticas y planes de acción nacionales basados en la población. Muy pocos países han llevado a cabo programas de salud pública integrales de ámbito nacional para promover la actividad física, carencia que señalan Bull, Shepard, Pratt & Lankenau. También destacan el papel decisivo que juegan las ONG en la defensa pública de la actividad física a nivel mundial y presentan la iniciativa de la GAPA. En este número monográfico especial figuran también artículos que se centran específicamente en los éxitos cosechados en América Latina. Schmid, Librett, Neiman, Pratt & Salmon esbozan un marco para evaluar los programas de promoción de la actividad física de base comunitaria en América Latina. Los dos artículos restantes, defienden la creación de partenariados eficaces para fomentar la actividad física y la salud. Muévete Bogotá es un enfoque único multisectorial para promover la actividad física en un entorno urbano, y se explica de modo que este modelo pueda servir de referencia estratégica en otras áreas urbanas del mundo. La aportación de nuestros colegas brasileños, Sandra y Victor Matsudo, destaca los elementos necesarios para consolidar redes y para formar coaliciones para la promoción de la actividad física utilizando los ejemplos de Agita Sao Paulo, la Red de Actividad Física de las Américas (RAFA) y Agita Mundo.

Panorama

Hay que aprovechar la oportunidad única que ofrece la Estrategia Mundial sobre Régimen Alimentario, Actividad Física y Salud y las negociaciones y discusiones internacionales relacionadas con ella, a través de una mayor colaboración internacional e implicando a tantas organizaciones como sea posible. Las ONGs tienen que desempeñar un papel protagonista en la promoción y en la defensa de la actividad física para mejorar la salud y en la integración de la actividad física en las iniciativas de promoción de la salud y de prevención de enfermedades en todo el mundo.

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Medición de la actividad física – manual básico para la promoción de la salud

A. Bauman et al., p. 92

Resumen: A medida que se reconoce la importancia de la actividad física en la promoción de la salud, la tarea de medirla se convierte en un reto fundamental de la investigación y de la práctica. La medición de la actividad física es importante para los responsables de elaborar las políticas interesados en la vigilancia de la población, así como para los profesionales de la medicina cuyo interés se centra en la evaluación de los programas y en la investigación. Este artículo esboza las "mejores prácticas" en la medición de la actividad física y ofrece un inventario de mediciones de actividad física en relación con su utilización en la promoción de la salud a escala nacional y local.

Un enfoque de la promoción de la actividad física en Europa y del desarrollo de políticas al respecto basado en la evidencia: estudio comparativo

N. Cavill et al., p. 104

Resumen: La salud pública que se basa en la evidencia utiliza muchos de los principios de la medicina basada en la evidencia y los aplica a la salud pública. No obstante, se trata de una disciplina relativamente joven y no aplicada de manera universal a las cuestiones de salud pública, especialmente en el caso de una cuestión tan pluridisciplinar como la actividad física. Este artículo pretende ofrecer orientación en este tema estableciendo cuatro "tareas clave" que constituyen la base de un enfoque sistemático y basado en la evidencia de la promoción de la actividad física. Estas tareas se basan en parte en el modelo de promoción de la actividad física (Brownson et al., 1999). Para ilustrarlas se ofrecen ejemplos del trabajo realizado en tres países europeos comparados: Finlandia, Inglaterra y Suiza.

La "tarea uno" tiene que ver con el uso de la evidencia de los efectos beneficiosos que ejerce la actividad física en la salud para "argumentar la defensa de la actividad física" y aumentar la acción por parte de los responsables de elaborar las políticas. En este primer paso, los tres países adoptaron un enfoque similar y llevaron a cabo estudios académicos para recopilar las pruebas existentes de los beneficios que ejerce la actividad física sobre la salud.

La "tarea dos" consiste en realizar un seguimiento para recopilar pruebas del predominio de la actividad física. En esta fase, Finlandia y Suiza recopilaron cuidadosamente datos de tendencias y los utilizaron para su labor de defensa, mientras que en Inglaterra los cambios repetidos en los cuestionarios y en la metodología de las encuestas hicieron que no se consiguiese datos suficientes de tendencias.

La "tarea tres" consiste en estudiar las pruebas de "lo que funciona" a la hora de aumentar la actividad física para incidir en la práctica. Parece ser que Inglaterra está adoptando un enfoque más sistemático de esta tarea, es decir, utiliza un enfoque integral para estudiar la evidencia de lo que funciona y lo divulga para incidir en las buenas prácticas, mientras que los otros dos países se basan principalmente en estudios de evaluación individuales.

La "tarea cuatro" es la evaluación de la práctica y queda claro que en los tres países esto sigue siendo un reto pendiente que requiere mayor formación y mayor inversión. El resultado de ello es que gran parte de las "buenas prácticas" actuales se basan en la experiencia (por lo general, no evaluada) y no en la evidencia.

Este breve análisis muestra que existen algunas "tareas" comunes que deben llevarse a cabo como parte fundamental de un enfoque de salud pública basado en la evidencia. No obstante, los factores culturales y políticos de cada país sometido a estudio han incidido en la manera en que se realizaban dichas tareas y en la importancia que se otorgaba a cada elemento.

Marco para la evaluación de programas de promoción de la actividad física de base comunitaria en América Latina

T. L. Schmid et al., p. 112

Resumen: El interés creciente que está cobrando la promoción de la actividad física a través de programas multisectoriales de base comunitaria ha subrayado la necesidad de realizar una evaluación eficaz de dichos programas. Reunido en Río de Janeiro, un grupo de trabajo internacional integrado por científicos expertos en conductas, en medicina, en salud pública y de otras disciplinas ratificaron la importancia de realizar una evaluación pormenorizada de todos los programas y elaboraron, tras un proceso de consenso, las "Recomendaciones de Río de Janeiro para evaluar las intervenciones en materia de actividad física". Una de dichas recomendaciones y principios es que, siempre que sea posible, la evaluación deberá estar "integrada" en el programa desde el principio. El grupo de trabajo también defendió la necesidad de una financiación adecuada de la evaluación, fijando la cifra de 10% de los recursos del programa para la labor de evaluación. El grupo determinó también que la

evaluación tiene que desarrollarse con todas las personas que tengan un interés en el programa y los resultados deben compartirse con ellas. Las evaluaciones deberán inspirarse en las normas éticas propuestas por la Asociación Americana de Evaluación y deberán valorar tanto los procesos del programa como los resultados. Los resultados de la evaluación deberán utilizarse para revisar y afinar los programas en curso y para orientar las decisiones en cuanto a la continuación o expansión de los mismos. Asimismo, se reconoció la necesidad de una mayor formación profesional en materia de evaluación de programas y se constató la posibilidad de adaptar fácilmente el Manual de Evaluación de la Actividad Física de los Centros de Control y Prevención de Enfermedades, para que pudiese utilizarse en comunidades de culturas diversas, especialmente en América Latina. El artículo describe un proceso de evaluación en 6 pasos y ofrece todo el conjunto de recomendaciones del Grupo de Trabajo de Río de Janeiro. El manual ha sido traducido y se han añadido casos prácticos de Colombia y Brasil. En la web de los Centros para el Control y la Prevención de Enfermedades, en la oficina de Actividad Física y Salud, se hallan disponibles las ediciones del Manual de Evaluación en español y en portugués.

Defender públicamente la actividad física: de la evidencia a la incidencia

T. Shilton, p. 118

Resumen: La abogacía *(advocacy)* es un elemento de la práctica de la salud pública que se halla todavía en proceso de evolución insuficiente.
Históricamente, la expresión se utilizó para describir una serie de actividades que llevaban a cabo las personas en nombre de los pobres, los enfermos o los oprimidos. En los años 70, liderada por los defensores del control del tabaco, como Pertschuk en los Estados Unidos, Gray en Australia y Daule en Reino Unido, la defensa de la salud pública se centró más en la necesidad de provocar cambios estructurales y en las políticas gubernamentales. Desde la Carta de Ottawa (OMS, 1986), el movimiento de promoción de la salud ha adoptado una visión más amplia del papel de la defensa pública de sus postulados. La comunidad dedicada a la salud pública considera que la abogacía es, ante todo, una acción social dirigida a provocar cambios en la legislación, en las políticas y en los entornos que sirven de soporte a una vida sana. El término abogacía es definido por la Organización Mundial de la Salud como *la combinación de acciones individuales y sociales dirigidas a obtener el compromiso político, el apoyo de las políticas, la aceptación social y el apoyo de los sistemas para la consecución de un objetivo o programa de salud concreto* (OMS, 1995).

El artículo describe un modelo para comprender el concepto de abogacía por la actividad física y movilización. El proceso que contempla tiene tres etapas:

1. Recopilar y traducir la evidencia más pertinente en materia de actividad física.
   ¿Por qué defender públicamente la actividad física?
2. A partir de la evidencia, elaborar una agenda de defensa de la actividad física y establecer un plan (o planes) de acción clave(s) que incrementará el nivel de actividad física de la población.
   ¿Qué debemos defender públicamente?
3. Implementar una mezcla de estrategias de abogacía para incidir en la agenda de actividad física y movilizar apoyos.
   ¿Cómo llevar a cabo la defensa pública de la actividad física?

Intervenciones a escala nacional en el ámbito de la actividad física basadas en la población– retos y oportunidades para la colaboración internacional

F. C. Bull et al, p. 127

Resumen: Este artículo sintetiza las novedades internacionales más recientes y actuales en el tema de la actividad física estudiando los retos y oportunidades que plantean. Ofrece un resumen de los elementos clave de la Estrategia Mundial de la OMS sobre Régimen Alimentario, Actividad Física y Salud (EMRAAFS), centrándose en los elementos relacionados específicamente con la actividad física e inspirándose en los encuentros internacionales más recientes (Atlanta, Octubre 2002; Miami, Diciembre 2004; Lisboa, Febrero 2005; Beijing, Octubre 2005; Bogotá, Noviembre 2005), explica los obstáculos que se han detectado y las áreas que necesitan apoyo para que se desarrollen con éxito y se lleven a cabo acciones a favor de la actividad física de ámbito nacional y basadas en la población. Los encuentros mencionados se centraron especialmente en las necesidades de los países en vías de desarrollo en los que, hasta la fecha, se ha hecho muy poco para aumentar la actividad física de la población. Se ha reconocido que si no se toman medidas inmediatas, estos países sufrirán pronto un aumento significativo de la prevalencia de enfermededes no transmisibles. Los autores identifican iniciativas ya existentes y éstas representan tanto la oportunidad como los mecanismos para apoyar acciones inmediatas. Además, proponen una serie de acciones concretas desde la defensa pública de la actividad física, actividades de comunicación y divulgación, redes y partenariados, hasta recaudación de fondos, desarrollo y aplicación de políticas, aplicación y evaluación de programas, vigilancia y capacitación, cuya consecución se optimizará mediante la colaboración internacional. El desarrollo de la Alianza Mundial a favor de la Actividad Física (GAPA) ofrece la estructura necesaria para llevar a cabo esta colaboración, y en el artículo figura su programa de trabajo.

Sandra Mahecha Matsudo y Victor Rodrigues Matsudo

Coaliciones y redes: cómo facilitan la promoción global de la actividad física

Resumen: Este artículo tiene como objetivo, resumir la experiencia de los programas y redes contemporáneas de promoción de la actividad física en grandes poblaciones mediante la utilización de coaliciones (parcerias). Tras describir el concepto de coaliciones, en especial en el contexto brasileño, los autores enumeran algunos de los principales elementos que dan evidencia de la efectividad en la formación de coaliciones y redes, como por ejemplo, la financiación, la membresía, el principio de inclusión o *empowerment.* Agita Sao Paulo, la Red de Actividad Física de las Américas –RAFA y Agita Mundo son utilizados como ejemplos. De esta forma el artículo demuestra que la experiencia de programas y redes locales y globales, que las alianzas o coaliciones y la formación de redes en todos los niveles es esencial para garantizar el éxito de la promoción de la actividad física como estrategia eficaz de la promoción de la salud pública.

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La promoción de la actividad física entre la población es tan primordial como compleja. Si por un lado no es tan difícil difundir los conocimientos sobre los beneficios de la práctica de la actividad física regular, lograr que la población pase a realizarla es una historia mucho más compleja. Probablemente por eso tenemos una situación paradójica en la cual, por un lado, nunca antes se supo tanto científicamente sobre los beneficios de la vida activa, pero, por otro lado, el sedentarismo ha crecido desmesuradamente, comprometiendo a cerca del 60 a 70% de las personas en todo el mundo (Caspersen, 1997; Rego *et al*, 1990, Vuori, 2001). Las personas sedentarias son aquellas que no logran practicar actividad física suficiente para obtener beneficios sobre la salud.

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El presente artículo busca documentar y examinar una de las experiencias más interesantes existentes en la región latinoamericana con relación a la construcción y mantenimiento de una amplia coalición que abarca diferentes sectores de la salud: el programa Agita São Paulo. Se trata de una alianza de organismos gubernamentales, no gubernamentales y del sector privado congregados en torno a una iniciativa estatal para promover la actividad física y la salud de la población (Matsudo V, 1997, Matsudo S *et al.,* 2002, Secretaria Estadual de Saúde de São Paulo, 2002). Para este artículo ha sido utilizada parte de la valiosa información científica recogida por especialistas en el área, a través de la literatura científica disponible sobre alianzas y coaliciones y los relatos de las experiencias de diferentes aliados del Programa Agita São Paulo en 1999 (Meresman, *et al.* 2000), los cuales se incluyeron posteriormente en un Manual de Coaliciones en Salud con el ejemplo de Agita São Paulo, publicado por la Organización Panamericana de Salud, OPS (PAHO, 2002).

De acuerdo con esta exhaustiva revisión realizada por Meresman y colaboradores en 2000, la palabra coalición se deriva del latín *coalescere* -envejecer- y de *coalitio* - unión. Indica la "conjunción de productores de una misma categoría que objetivan ventajas o lucros comunes o buscan protegerse contra la competencia desleal". Así también, las coaliciones se diferencian de otras organizaciones colectivas tales como las redes y asociaciones por tener una estructura más formal y acotada (Meresman *et al.,* 2000.)

Coalición podría ser definida como una *organización de individuos que representan diversas organizaciones o grupos constituyentes, que acuerdan trabajar en conjunto hacia un objetivo común* (Feighery & Rogers, 1990; Butterfoss, Goodman & Wandersman, 1993). También se define como una *organización de diversos grupos de interés que combinan sus recursos humanos y materiales para lograr un cambio específico que sus miembros no podrían alcanzar si trabajaran de forma independiente* (Butterfoss, Goodman & Rogers, 1993).

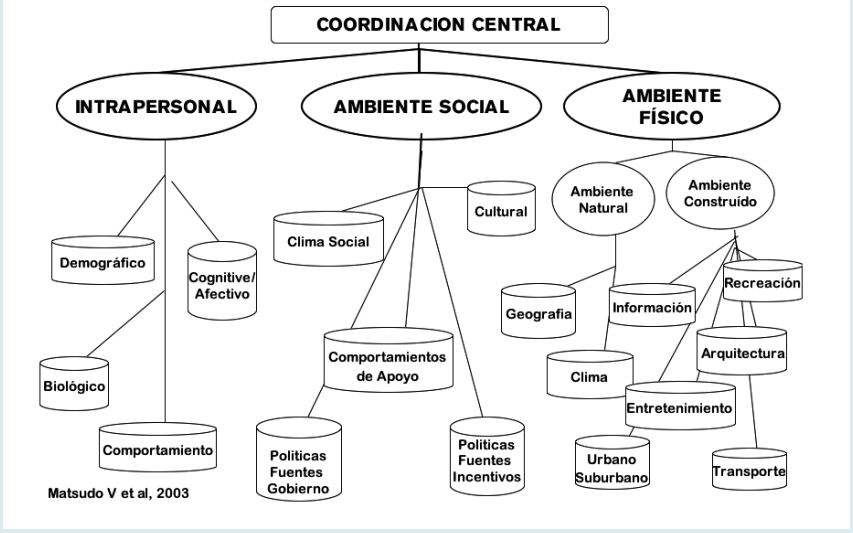
En Brasil, se utiliza, de acuerdo con Meresman *et al.* (2000), la hermosa palabra portuguesa *parcería*, que se refiere a "parecido", "semejante» y también "compañero", lo que la aproxima al término inglés "partner". El diccionario de la lengua portuguesa, define parcería como "Sociedad, compañía. Reunión de individuos para cierto fin o interés común." Se trata de una referencia semántica que también alude a una modalidad de exploración común en el medio agrícola brasileño, en el que el trabajador (*parcero*) entrega una parte de la producción al dueño de la tierra en pago por su uso.

El trabajo de colaboración tiene una larga tradición entre los pueblos y comunidades, y de forma más relevante en América Latina, donde numerosos dichos populares expresan el valor que se le asigna al trabajo solidario, como "*la unión hace la fuerza".* Esta sabiduría

Palabras clave

- promoción
- actividad física
- redes
- salud

Figura 1 Gestión móvil – modelo ecológico



popular, carga con un significado profundo el término "colaboración" y remarca una perspectiva de la participación social según la cual "el todo es más que la mera suma de las partes". Como estrategia para el desarrollo de políticas publicas, la formación de alianzas de colaboración orientadas a movilizar la participación social ha sido analizada tanto como un *medio* o como un *fin en sí mismo* (Meresman, 1995.)

Sin embargo, el agente motivador más importante para el desarrollo de alianzas y coaliciones para la salud parece ser la creciente limitación de recursos económicos tanto en el campo de las instituciones públicas, como de la mayoría de las privadas, y en especial, de recursos disponibles para programas preventivos (Merrill-Sands & Sheridan 1996.)

Objetivos

Este artículo pretende analizar los puntos fundamentales en programas y redes contemporáneos de promoción de la actividad física, como Agita São Paulo, la Red de Actividad Física de las Américas (RAFA) y la Red Agita Mundo.

Enfocaremos la experiencia desarrollada en el estado brasileño de São Paulo a partir de una alianza de instituciones gubernamentales, no-gubernamentales y el sector privado interesadas en el fomento de la actividad física.

El estudio y la difusión de las experiencias como las de Agita São Paulo, RAFA y Agita Mundo en la formación de alianzas de colaboración sobre iniciativas de salud, expresa el interés de la Unión internacional de Promoción de la salud y Educación para la salud (UIPES) por impulsar a partir de ejemplos específicos y probados, un marco conceptual y operativo que respalde el desarrollo de procesos similares en otros países del mundo.

La Gestión móvil del modelo ecológico

El enfoque ecológico para la promoción de la salud se ha mostrado efectivo, particularmente aplicado en el área de la actividad física propuesta por Sallis & Owen (1997). Sin embargo, involucra múltiples componentes, como son los factores intrapersonales, del ambiente social y del ambiente físico natural o construido, que lo hacen muy poco tangible o muy complejo de manejar en un programa. La "Gestión móvil" del modelo ecológico, propuesta recientemente por Matsudo *et al.,* 2004 intenta viabilizar la ejecución concomitante de diversos de esos componentes con la utilización de instituciones *parceras*.

Conseguir las instituciones aliadas estratégicas con los diferentes componentes del modelo ecológico es importante para el éxito, porque los esfuerzos para movilizar recursos comunitarios para la promoción de la salud dependen fundamentalmente de las estrategias interpersonales y organizacionales, tales como, la asistencia técnica, el desarrollo profesional, y el intercambio del conocimiento entre los expertos y habitantes locales. La Gestión móvil estimula grupos de la promoción de la salud para lograr mayor colaboración y desarrollo de coaliciones entre las organizaciones existentes (incluyendo instituciones publicas, privadas y no-gubernamentales) en la comunidad.

Sin embargo, trabajar con diferentes componentes del Modelo ecológico al mismo tiempo es difícil y complejo. La gestión móvil ha tenido primordial importancia, y ha sido probablemente el mejor enfoque, porque intenta manejar tanto la dificultad, como la complejidad y el uso de las *parcerias* (coaliciones) estratégicas para manejar diversos factores del modelo ecológico de forma sincronizada. El equilibrio de la magnitud, el *timing*, la pertenencia de las diferentes intervenciones desarrolladas por grupos de aliados para alcanzar componentes intrapersonales, sociales, y del ambiente físico del modelo ecológico, son centrales en la gestión móvil.

Parceria desde el nombre

Desde el momento de escoger el nombre, Agita São Paulo revela la importancia asignada en la propuesta a los aspectos de *marketing social,* los cuales han probado ser fundamentales para su desarrollo. Pero eso sólo fue posible a través de la parceria con empresas de comunicación que durante un largo tiempo estudiaron un nombre que expresase mejor el objetivo del programa. El vocablo Agita propone una semántica que relaciona la idea de movimiento y actividad física con otros significados más vinculados a la práctica social y la participación colectiva: agitación, lucha, activismo transformador. Agita significa no sólo moverse físicamente, pero también mentalmente y socialmente, de acuerdo con el concepto de ciudadanía activa.

El valor de las parcerías intelectuales

Independientemente de la experiencia que posea la institución líder del proceso de desarrollo de los marcos conceptuales del programa, ésta no puede abarcar todos los aspectos involucrados con el tema. Así es importante el establecimiento de *parcerías intelectuales*, que además van a servir para superar barreras eventuales

o naturales en el mundo académico. En el caso de Agita Sao Paulo, como en Muévete Bogota, expertos nacionales y de otros países fueron invitados a colaborar en el Comité Científico. Instituciones internacionales brindaron un apoyo significativo en el ámbito científico, logístico, político y administrativo, como es el caso de los Centros para el Control y la Prevención de Enfermedades de los Estados Unidos (CDC), la Unión internacional de Promoción de la salud y Educación para la salud (UIPES), el Instituto de Investigación Aeróbico de Dallas, Texas, y la Organización Mundial de la Salud (OMS), con sus agencias Regionales. Las *parcerías intelectuales* son reconocidas como un antecedente clave en el desarrollo de la estrategia de colaboración de ***Agita São Paulo.***

Figura 2 **Estructura organizacional de las alianzas cientificas y ejecutivas**

Convocatoria y membresía

Programas y Redes, como *Agita Mundo, RAFA* y *Agita São Paulo* funcionan con base en una estructura abierta, es decir, que las organizaciones interesadas en sumarse a ella pueden hacerlo en cualquier momento. De esta manera se pone en práctica un principio de amplia inclusión, que se considera inherente a la estrategia de *parcerías*. Se indica además, el carácter siempre "inconcluso" y abierto del proceso colaborador: *"Agita es una estructura dinámica, en permanente búsqueda. Ser coherentes con esto implica permanecer siempre abiertos a nuevas incorporaciones y nuevos cambios"* (Meresman, 2000.)

Formalidad de la participación en la coalición

La modalidad de afiliación utilizada en *Agita São Paulo,* que inspiró las redes continentales (RAFA) y mundiales (Agita Mundo), podría caracterizarse bajo la regla: *mínima formalización/máxima flexibilidad.* En los hechos, la alianza ha optado por evitar los mecanismos excesivamente formalizados para regular la inclusión de nuevas organizaciones. El Programa ofrece a quienes están interesados en incorporarse como colaboradores, la firma de una "Carta de Intención", que expresa simplemente *"su voluntad de colaborar con los objetivos del programa."*

La firma de una "Carta de Intención" tiene un alto valor simbólico a pesar de que no implica efectos contractuales o reglamentarios estrictos en el sentido de establecer deberes y/o derechos. Por su carácter institucional y no personal, es instrumento importante de perennidad en las relaciones, particularmente en los países en vías de desarrollo por su histórica instabilidad. Su función sería la de "documentar" una relación recíproca: por un lado, *"simboliza el compromiso de la institución firmante con los valores y objetivos sustentados por el Programa"* y por otro, *"es un reconocimiento simbólico de la pertenencia del firmante a la alianza multisectorial."*

El financiamiento de la estrategia de colaboración

Las redes y programas contemporáneos cuentan en general con tres fuentes de recursos:

1- Los Gobiernos, que pueden aportar la cobertura salarial correspondiente a profesionales involucrados en el programa, con materiales promocionales y educativos básicos los cuales son ofrecidos a las instituciones *parceras* en apoyo a sus eventos;
2- Las instituciones *parceras* aportan recursos indirectos (utilizando acciones o programas previamente establecidos) o directos (en acciones o programas especialmente concebidos);
3- Las empresas comerciales (que preferentemente deben ser consideradas como "sponsors" del programa, y no "parceras"), las cuales simplemente aportan recursos financieros para la producción de materiales educativos o promocionales.

Factores determinantes de la participación en la coalición

Existen una serie de elementos que participan del proceso de convocatoria y formación de la alianza multisectorial, y cuyo valor real o simbólico moviliza el interés inicial de los participantes, generando una actitud favorable al trabajo de colaboración. Estos son algunos de los factores identificados en las redes contemporáneas:

- Afinidad previa;
- Prestigio;
- Sencillez de la propuesta;
- Integración de espacios y actores sociales diversos;
- Oportunidades de innovación;
- Acceso a cooperación técnica.

Parcerias inter-sectoriales e intra-sectoriales

A largo plazo se reconoce el valor de las alianzas inter-sectoriales. Así en Agita São Paulo se ha podido constatar la importancia de las coaliciones hechas intra-sectorialmente, en que la coordinación incentiva a la participación de más de un protagonista por sector social. Así, por ejemplo, entre los clubes de filantrópicos no se restringe a un eventual apoyo del Lions Club, sino que se busca inmediatamente la adhesión del Rotary Club. De la misma forma, buscar las escuelas privadas para equilibrarlas con las publicas, y así sucesivamente. Esta estrategia permite el desarrollo de competencia saludable entre instituciones del mismo sector, hecho que aumenta el potencial de beneficio del programa.

"Principio de inclusión"

El sentido *amplio e inclusivo* de la convocatoria formulada por los programas contemporáneos, como Agita São Paulo, ha reforzado la credibilidad y fortaleza de su estrategia de colaboración y puede reconocerse como uno de los valores fundamentales de la coalición. La preocupación por la inclusión no está restricta a la institución, sino también en todas las acciones, mensajes y materiales de los programas. Esta posición de apertura amplia e inclusión pro-activa constituye uno de los *principios éticos* que fundamentan el trabajo de colaboración. Para decirlo en las palabras de uno de los entrevistados, la ética de la inclusión, *"es inherente a toda propuesta de parcería"* (Meresman 2000).

Criterios de selectividad y elegibilidad complementarios

El anteriormente indicado "principio de inclusión" y la constante expansión que han predominado en la estrategia de programas como *Agita São Paulo,* se ven limitados por la tarea de preservar los principios ideológicos y los objetivos fundamentales que sostienen la coalición.

Este *criterio de selectividad* se ha demostrado de particular importancia a la hora de decidir la inclusión de colaboradores y auspiciadores vinculados al sector comercial. Fue muy cuestionada (y finalmente desechada), por ejemplo, la participación de empresas que -por su poder económico y comercial- tendrían posibilidades de ejercer excesiva influencia en la propuesta, desvirtuando sus propósitos o determinando acciones contrarias al interés de otros *parceros*.

Enfoque no voluntarista del trabajo de colaboración

Frecuentemente, las iniciativas para establecer colaboraciones inter-sectoriales incurren en planteamientos "voluntaristas" e idealistas acerca de la participación social. *Agita São Paulo* ha evitado esto otorgando gran importancia a la existencia de *incentivos* que motiven y sostengan la participación. También se hace hincapié en los logros y resultados concretos obtenidos por cada *parcero* de forma individual, además de los de la alianza en su conjunto.

Aspectos de liderazgo

Un liderazgo confiable refuerza la credibilidad de la convocatoria**.** La construcción y sostenimiento de un espacio de colaboración amplio y eficaz, se ha beneficiado de un tipo de liderazgo (como el de CELAFISCS en Agita São Paulo, como del IDRD en el caso de Muévete Bogotá, como los CDC en la RAFA), que aporta, por un lado, el recorrido propio de muchos años de investigación y trabajo en la interface actividad física/salud, a la vez, que expresa y lleva adelante un compromiso profesional, institucional y personal con los modelos cooperativos de acción. El papel de ese liderazgo ha resultado esencial en la etapa inicial, en que las *parcerias intelectuales* también son fundamentales, permitiendo vencer las resistencias y el escepticismo que aparecían principalmente vinculados con la desconfianza, la falta de credibilidad y las bajas expectativas de algunas organizaciones en relación con la acción publica.

Construcción "transversal" de la coalición

En la experiencia de *Agita São Paulo* se corrobora una hipótesis que aparece apenas insinuada en la literatura acerca de las coaliciones en salud publica: ha resultado fundamental que el "centro de gravedad" de la alianza no haya estado localizado en la institución rectora del sector salud (Ministerio de Salud), sino que se construya de forma *transversal*, entrelazando la mayor variedad posible de actores sociales y espacios institucionales. Como se ha analizado, el papel de la Secretaría de Salud del Estado de São Paulo ha sido el de convocar la creación de la iniciativa y supervisar su desarrollo, otorgando un mandato que legitima y facilita un amplio proceso de participación y colaboración y que cobra luego su propia dinámica y autonomía (Meresman, 2000).

Empoderamiento

En lugar de la coordinación de los programas, solicitar un cambio en la agenda de las instituciones *parceras* ha sido más eficaz la solicitud de inclusión del concepto y el desarrollo de actitudes de acuerdo con los propósitos de las intervenciones, adoptando técnicas de *empoderamiento*. En términos simples: "todos cargando la bandera del programa, pero respetando las tradiciones y valores de cada institución" (Meresman 2000.)

El abordaje de "dos sombreros"

En muchas ocasiones, particularmente en países en vías de desarrollo, el gobierno no representa la forma más eficaz de articular un programa de intervención. Para superar dificultades político-administrativas en las cuales las fuerzas o los partidos antagónicos dominan el poder en determinada ciudad o región, ha sido muy útil el abordaje de los "dos sombreros" propuesta por Agita São Paulo, en el cual la coordinación del programa decide trabajar con instituciones de la sociedad civil o con las del gobierno, de acuerdo con el mejor potencial de éxito.

Pertenencia

Un componente importante de las *parcerias* es el desarrollo y mantenimiento del sentimiento de pertenencia. En las redes de Agita São Paulo, RAFA y Agita Mundo, ésta se estimula a través de espacios apropiados en los materiales de divulgación, folletos promocionales, publicaciones oficiales, e incluso en entrevistas para los medios de comunicación**.**

Mecanismos de sustentación

Entre las propuestas para mantenimiento de las instituciones *parceras* destacamos: a- involucrarlas en una Junta o Comité Ejecutivo, con voto unitario; b- reunión periódica, si es posible mensuales, de la Junta Ejecutiva; c- acceso a informaciones científicas actualizadas, distribuidas por la coordinación, participación en cursos y congresos; d- creación de un instrumento de comunicación para maximizar el intercambio entre las instituciones *parceras* como: conferencias telefónicas, boletines informativos o boletines electrónicos, entre otros.

Los medios de comunicación no pagan– "Midia no paga"

Los recursos económicos para programas de promoción de la salud son siempre un gran problema**.** Por consiguiente, es una mala estrategia emplear el dinero en los medios de comunicación, particularmente en televisión, ya que, aunque se logre visibilidad, consumiría buena parte de los limitados presupuestos. Asimismo, esta visibilidad súbita puede significar un

Tabla 1 **Lecciones aprendidas con la promoción de la actividad física en la Red de la Actividad Física en América Latina**

1. La promoción depende en gran parte de la voluntad, participación permanente y creatividad de los responsables del programa	6. Dependencia de apoyo financiero permanente en la mayoría de los programas
2. Falta de voluntad y apoyo político para la mayoría de acciones de promoción de la AF	7. Escasez de profesionales entrenados, capacitados y actualizados en los paradigmas y en las estrategias actuales de promoción de la AF.
3. Necesidad de superar problemas de pobreza, falta de voluntad e interés político, violencia, falta de recursos económicos para promover la AF	8. Necesidad de mejorar e implementar medidas de evaluación de impacto y de proceso de las acciones de promoción de AF
4. Crucial apoyo de instituciones internacionales bien reconocidas como OPS, OMS, CDC, RAFA y CELAFISCS entre otros	9. Necesidad de aumentar la investigación científica en el área de promoción de la AF
5. Necesidad de implantación de políticas locales, regionales y/o nacionales que garanticen las estrategias independientemente de los lideres políticos existentes	10. La mayoría de los programas han mostrado eficiencia en sus acciones mismo sin la necesidad de usar campañas publicitarias pagas en televisión, radio o periódicos.

impacto positivo, pero sólo a corto plazo, creando una expectativa que a largo plazo puede convertirse en decepción cuando los recursos económicos no garantizan el mantenimiento de la divulgación del programa en los medios. La experiencia de Agita Sao Paulo fortalece el uso de "midia no paga" (los medios de comunicación no pagan, convirtiendo la television, la radio y los periódicos en *parceros* o defensores y partidarios del programa, lo que ha propiciado que el 50% al 70% de la población de todas las clases sociales retenga el nombre del programa.

RAFA/PANA

La *Red de Actividad Física de las Américas (RAFA)* ha sido un buen ejemplo de trabajo de *parcerias*, de cómo las alianzas o coaliciones estratégicas han funcionado para promover la actividad física en Latinoamérica. RAFA es una red cuyo objetivo es facilitar la promoción de la actividad física en las Américas con una mínima estructura burocrática. Se basa en la acción, inclusión, simplicidad y flexibilidad. Los principios orientadores de la Red son:

a. Es una red inclusiva integrando instituciones públicas y privadas nacionales e internacionales;
b. Se centra en la investigación y programas de salud pública basada en la población y las comunidades;
c. Promueve el intercambio de experiencias y conocimientos; y
d. Facilita la promoción del desarrollo profesional.

La Red surgió a partir de las experiencias nacionales de promoción de la actividad física realizadas por algunos países. Inicialmente con la propuesta de Agita São Paulo en Brasil (Matsudo S *et al*, 2003) surgieron posteriormente programas en América Latina que básicamente han seguido la propuesta inicial del modelo utilizado por el programa Agita São Paulo, tales como: *A Moverse Argentina, Argentina en Movimiento, Salí a Moverte o Sacúdete,* en Argentina; en Bolivia, *Muévete Bolivia*; en Colombia, *Red Colombiana de Actividad Física: Muévase Pues, Muévete Bogotá, Risaralda Activa, Activate en Pereira, Buga en Movimiento, Guajira Activa, Madrúgale a la Salud, Palpita/Vibra Quindío, Cauca Activa, Cundinamarca Activa y Positiva, Boyacá Activa, Colombia Activa y Saludable, Cali en Movimiento, Bucaramanga: A Moverse Digame, Huila Activo y Saludable, Putumayo Saludable en Movimiento*; en Costa Rica, *Movámonos Costa Rica*, en Ecuador, *A Moverse Ecuador*; el *Programa Nacional de Activación Física y PROESA* en México; en Panamá, *Muévete Panamá*; en Perú, *Muévete Perú*; o en Venezuela, *Venezuela en Movimiento*, *Red Venezolana de Vida Activa*. A partir de las acciones idealizadas por la propuesta del programa, las redes nacionales en diferentes países comenzaron a realizar también acciones con alianzas y estrategias con características que utilizan todos los conceptos y lecciones aprendidas de las coaliciones en la promoción de la actividad física (Tabla 1).

Agita Mundo

El objetivo de la red Agita Mundo es promover la actividad física como un comportamiento saludable para personas de todas las edades, naciones y características. La red Agita Mundo desde su creación en 2002 está estimulando la investigación, la diseminación de la información sobre los beneficios de la actividad física y las estrategias para incrementar la actividad física, abogar por la actividad física y la salud y apoyar el desarrollo de programas y redes locales y nacionales de promoción de la actividad física.

En la última reunión de la red Agita Mundo, realizada en São Paulo en Octubre de 2004, se decidió por la creación del mapa de la Red Agita Mundo que se propone elaborar:

1. Lista de programas de intervención
2. Lista de páginas web sobre actividad física
3. Publicaciones más relevantes
4. Instituciones aliadas de la Red
5. Prevalencia del sedentarismo de los continentes
6. Centros de referencia de AF.

Los principales resultados conseguidos en la movilización de estas redes internacionales de RAFA y Agita Mundo están resumidas en la Tabla 2.

Conclusión

Las más de 350 instituciones aliadas del Programa Agita São Paulo representan el principal motivo del éxito del programa en manejar tantos componentes importantes para la promoción de la actividad física en grandes poblaciones. De forma similar RAFA y Agita Mundo lograrán avanzar en sus agendas en función de la cooperación y actuación sinérgica de las instituciones hermanas. Incrementar los niveles de actividad física sigue siendo a la vez importante y un gran desafío. Coaliciones estratégicas que permitan la gestión de múltiples componentes del modelo ecológico de forma sinérgica parecen ser una propuesta y/o herramienta muy promisoria en la promoción de la actividad física como estrategia actual e innovadora en la promoción de la salud mundial.

Table 2 **Principales resultados logrados por las redes internacionales de promoción de la actividad física RAFA y Agita Mundo desde su implantación**

Caracteristícas	RAFA	Agita Mundo
Número de instituciones participantes	151	236
Número de países miembros	17	58
Eventos científicos organizados	- 3 Foros Internacionales de Actividad Física y Salud - 2 Cursos Internacionales de Actividad Física y Salud Pública (2004-2006) - 1 Foro y 1 curso Anual permanentes	
Eventos de movilización	Cada país organiza mega eventos de movilización y actividades permanentes en trabajadores, escolares y adultos mayores en fechas específicas.	Día Mundial de la Actividad Física – Agita Mundo celebrado el 6 de Abril: 2002: 1645 eventos,127 países 2003: 1987 eventos, 148 países 2004: 6745 eventos, 23 países, 988 ciudades 2005: 2224 eventos, 29 países 2006: 1700 eventos, 195 ciudades
Instituciones coordinadoras	CDC & CELAFISCS	CELAFISCS
Reuniones anuales	1 Reunión Anual del Comité Ejecutivo (1 país diferente por año) 1 reunión general científica en Octubre en Brasil durante Simposio Internacional de CELAFISCS	1 reunión anual del Comité y una científica en Octubre en São Paulo durante Simposio Internacional de CELAFISCS
Material de divulgación	1 Folleto Oficial en Inglés, Español y Portugués	1 Folleto Oficial en Inglés, Español y Portugués
Manifiestos	1 Manifiesto de São Paulo para la Promoción de la Actividad Física en Las Américas	1 Declaración de São Paulo para Promover la Actividad Física en el Mundo
Internet:	www.rafapana.org	www.agitasp.org.br
Correo electrónico:	Español/Portugues: rafa@rafapana.org Ingles: pana@rafapana.org	agitamundo@rafapana.org

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Rocío Gámez, Diana Parra, Michael Pratt and Thomas L. Schmid

Muévete Bogotá: promoción de la actividad física a través de una red de empresas amigas

Resumen: En 1998, la Alcaldía Mayor de Bogotá a través del Instituto Distrital para la Recreación y el Deporte (IDRD), diseñó Muévete Bogotá, un programa de actividad física y salud para la capital de Colombia. Muévete se refiere a moverse o ser activo. Esta campaña de promoción de actividad física fue diseñada para mejorar la salud y la calidad de vida de los ciudadanos de Bogotá a través de la practica regular de actividad física. Muévete Bogotá esta basado en las recomendaciones de los Centros para el Control y la Prevención de Enfermedades de Estados Unidos, y el Colegio Americano de Medicina Deportiva, publicadas en 1996 (Pate *el al.,* 1995). El programa fue desarrollado con la asesoría permanente del programa Agita São Paulo de Brasil (Matsudo *el al.,* 2003). Muévete Bogotá comprende una campaña de comunicación masiva con programas de cambio comportamental hacia la adopción de actividad física. Las intervenciones son llevadas a cabo en sitios de trabajo, escuelas, centros de salud y sectores de la comunidad y se basan en las alianzas creadas con los miembros de estos sectores para instaurar programas en cada uno de estos ámbitos y poblaciones.

Como muchos otros países en vía de desarrollo, Colombia esta experimentando un incremento en la epidemia de enfermedades crónicas. En 1993, la tasa de mortalidad en Bogotá, debida a enfermedades cardiovasculares era del 35.7% (Espinoza, 1993). Para el 2002 las enfermedades cardiovasculares representaban el 40.3% de la mortalidad para la población mayor de 60 años y el 26.8% para las personas de 45 a 59 años (Cardona, 2002.)

A pesar de que Bogotá ha experimentado importantes cambios en su infraestructura física y social durante la última década, que han incrementado posiblemente oportunidades para la actividad física, el sedentarismo continúa siendo un gran problema de salud pública.

Programas como Muévete Bogotá que eduquen y motiven a las personas a ser mas activas físicamente, son necesarios para complementar los cambios ambientales y políticos de base. La ciudad de Bogotá y la campaña Múevete Bogotá brindan un ejemplo de la implementación exitosa de un abordaje multi-sectorial comprensivo para la promoción de la actividad física en un área metropolitana extensa, que puede ser útil para guiar los esfuerzos de promoción en salud en Latinoamérica y en áreas urbanas de países en vía de desarrollo al rededor del mundo.

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Las opiniones expresadas en este artículo son responsabilidad de los autores y no representan necesariamente la visión oficial de los CDC ni del IDRD.

La inactividad física ha sido ampliamente reconocida como un problema mayor de salud publica tanto en países desarrollados como en países en vía de desarrollo. Sin embargo, relativamente pocos países en vía de desarrollo han planeado e implementado programas públicos masivos para enfrentar el problema de la inactividad física y muy pocos han evaluado cuidadosamente sus programas y documentado sus experiencias (Pratt *et al.*, 2004). En este artículo describiremos el desarrollo y la implementación exitosa de un abordaje multi-sectorial comprensivo para la promoción de actividad física en Bogotá, Colombia.

El orígen del programa

Bogotá, es la capital de la República de Colombia, localizada a una elevación de 2,650 m, en la porción oriental de la cordillera de los Andes. Bogotá tiene una población de más de 7 millones de habitantes y es considerada una ciudad joven con la mayoría de su población (60%) compredida entre las edades de 20 a 50 años (Departamento Nacional de Estadística, 2003).

Bogotá ha experimentado cambios significativos en sus ambientes físicos y sociales, convirtiéndola en una de las ciudades líderes en Latinoamérica, en transporte publico y alternativo, motorizado y no motorizado (Pizano, 2003).

El Instituto Distrital para la Recreación y el Deporte, IDRD, es una institución descentralizada perteneciente a la Alcaldía Mayor de Bogotá, encargada de promover el deporte, la recreación y el buen aprovechamiento del tiempo libre.
En el año 1998 el IDRD definió una nueva misión: "promover la recreación, el deporte, el buen uso de los parques y el aprovechamiento del tiempo libre de todos los habitantes de Bogotá, con prioridad en los grupos más necesitados, para formar mejores ciudadanos, enseñar los valores de la sana competencia y mejorar la calidad de vida en armonía con los ecosistemas y el medio ambiente." Este nuevo mensaje enfocaba la necesidad de promover la regularidad de la práctica de actividad física en la población.
Guiado por esta nueva misión y basado en la experiencia internacional y en el programa Agita Sao Paulo, el programa de actividad física para la ciudad de Bogotá fue lanzado en Noviembre de 1998, recibiendo el nombre de Muévete Bogotá.

Su objetivo inicial era informar e incrementar el nivel de conocimiento del público acerca de los beneficios para la salud de la actividad física y brindar apoyo a diferentes sectores, como el educativo y el empresarial, para desarrollar sus propios programas de promoción de actividad física. Las

Palabras clave

- actividad física
- empresas amigas
- Bogotá
- promoción de la salud

estrategias de vinculación e intervención de las empresas amigas fueron utilizadas para que éstas pudieran proveer oportunidades para la práctica de actividad física en sus grupos poblacionales.

Muévete Bogota comprende una campaña promocional con programas enfocados a cambiar el comportamiento hacia la actividad física. Las intervenciones que son llevadas a cabo en sitios de trabajo, escuelas, centros de salud y en la comunidad se basan en las alianzas creadas entre los profesionales de estos sectores, con el fin de implementar el programa en cada una de estas poblaciones.

Medición del problema

En 1999, el IDRD y el Instituto Distrital de Cultura y Turismo, IDCT, realizaron una encuesta (Ardila & Gamez, 1999) sobre el nivel de conocimiento, percepción y patrones de actividad física de los mayores de 18 años en Bogotá, donde se encontró que el 84% de la población no acumulaba la cantidad suficiente de actividad física recomendada para obtener beneficios sobre la salud (por lo menos 30 minutos/dia, la mayoría de los días de la semana) y el 39% de las personas indicaron ser completamente sedentarias en tiempo libre. Las personas mayores de 30 años tendían a ser más sedentarias en tiempo libre y utilizar más el transporte. Otro hallazgo preocupante fue la elevada prevalencia de sedentarismo en los sitios de trabajo (47%) (Gomez *et al.,* 2005), siendo esta una de las motivaciones principales para enfocar la intervención del programa. La evaluación de los estados comportamentales frente a la actividad física mostró que el 7% de los entrevistados no estaban interesados en iniciar la practica de actividad física, el 49% estaba pensando en iniciar la practica de actividad física y el 43% eran activos (Calfas *et al*, 2002). Esta encuesta confirmó que la inactividad física era un problema mayor en Bogotá y fue utilizada como línea de base para establecer las metas del nuevo programa.

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Implementación del programa

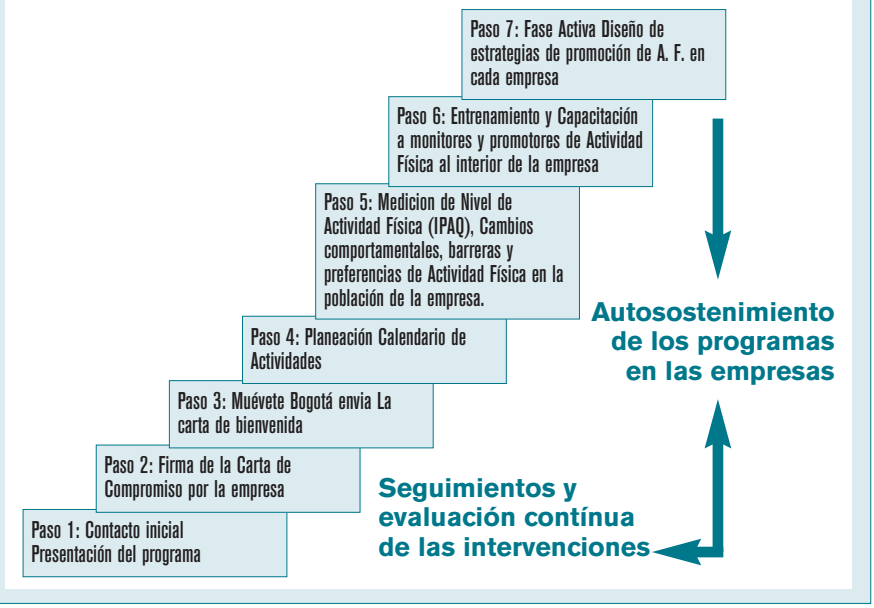
Muévete Bogotá forma parte del área de Fomento y Desarrollo Deportivo de la División de Deportes del IDRD. Muévete es dirigido por un coordinador general, permanentemente asesorado por un comité científico y un comité de apoyo de otros programas del IDRD. El programa cuenta con 5 gestores en los distintos ámbitos, que vinculan e intervienen con las empresas amigas para implementar el programa en los sitios de trabajo.

El coordinador del programa diseña el plan de implementación, la dirección del IDRD lo aprueba y asigna el presupuesto para el programa. Desde la creación del programa se han realizado evaluaciones anuales con la participación y retroalimentación de representantes de las empresas amigas, el comité científico, el director y el personal de apoyo del IDRD. Estas evaluaciones se llevan a cabo 2 o 3 veces al año.

Estructura del programa

Las empresas amigas son las entidades, instituciones, asociaciones o grupos de trabajadores del sector educativo (publico, privado, universidades), empresarial (gubernamental y no gubernamental), el sector salud, así como grupos comunitarios y locales que tienen la meta de desarrollar programas de actividad física para su grupo poblacional; promoviendo acciones conjuntas para contribuir a la disminución del sedentarismo y la mejora de la calidad de vida.
El programa fue estructurado en siete pasos para cada una de las empresas amigas, desde su vinculación y fase de información hasta la fase activa de intervención como indica la Figura 1.

Figura 1 **Estructura del programa**



Muévete Bogotá utilizó 3 estrategias con las empresas amigas:

1. Diseminar el programa y vincular empresas amigas,
2. Educación y capacitación por parte de los gestores de Muévete.
3. Intervención en las empresas. Estas estrategias se han desarrollado basadas en revisiones sistemáticas de la literatura y en lecciones practicas aprendidas de los éxitos y fallos de otros programas de promoción de la salud (CDC, 2002) (Kahn *et al.*, 2001) (Kahn *et al.,* 2002).

Las actividades desarrolladas por el programa durante la fase de intervención incluyen:
1) Módulo de Bogotá Saludable y Activa,
2) Capacitación,
3) Encuentros saludables y Activos,
4) Semana del estudiante activo,
5) Semana del Trabajador activo, y
6) Día de moverse por la salud.

Módulo de Bogotá Saludable y Activa, basado en las recomendaciones del *Manual de Evaluación de la Actividad Física* de los Centros para el control y la prevención de enfermedades de los Estados Unidos (CDC); se diseñó por gestores profesionales del programa Muévete Bogotá. El objetivo es la evaluación de la aptitud física de los habitantes de Bogotá que asisten al Sistema Distrital de parques, a ciertos puntos de Ciclovía y Recreovía y en algunas empresas amigas· Ciclovía son 128 kilómetros de las principales vías de la ciudad destinadas, en forma transitoria, para el desarrollo exclusivo de actividades físicas recreativas y deportivas, los domingos y festivos., de 6 de la mañana a 2 de la tarde. Recreovia son Clases de actividad física aeróbica, dirigida por profesionales, localizadas en 19 puntos distintos de la ciudad, a lo largo del recorrido de la Ciclovia y en algunos parques, los días domingos y festivos y algunos días de la semana, de 8 a 11 de la mañana. Se evaluan personas de entre 18 y 55 años de edad. Mediante la instalación de estaciones que permiten la aplicación de pruebas físicas sencillas, (composición corporal, resistencia cardiovascular, fuerza y flexibilidad). Al final de la jornada se entregan resultados y se brindan recomendaciones a quienes participan, motivando de esta manera el mantenimiento o incremento de la actividad física de una manera sencilla, agradable y práctica.

Hasta la fecha se han realizado 15 módulos de medición por la ciudad, con una participación total de 2800 personas. Estas mediciones servirán de línea de base para determinar la aptitud física de los habitantes de Bogotá.

Capacitación de promotores, es una de las herramientas fundamentales en la promoción y adquisición de estilos de vida activos, la formación y educación de líderes y agentes promotores de la salud y actividad física.

Muévete Bogotá a través del grupo de gestores y del comité científico realiza dos jornadas de capacitación por año con contenidos científicos y talleres prácticos de acuerdo con el grupo objetivo. Se enfatiza en especial en los estudiantes de carreras del área de la salud y la actividad física, así como en los jefes de salud ocupacional y bienestar de las empresas amigas, debido a la gran influencia que estos tienen sobre los comportamientos de los pacientes (Frank *et al.*, 2000.) Los líderes comunitarios, estudiantes y docentes de colegios públicos y privados, también participan de estas actividades con el fin de formar promotores y monitores de actividad física.

Encuentros Saludables y Activos, fueron diseñados buscando la mayor participación activa de la población de las empresas amigas. Estos son jornadas de actividad física y salud en las cuales se reúnen las empresas amigas y compiten cada una con un equipo de 10 representantes. Con la aplicación de pruebas en grupo e individuales (baile, caminata, fuerza de piernas, fuerza abdominal, flexibilidad, conocimientos sobre actividad física y alimentación saludable, índice de masa corporal y perímetro de cintura) que evalúen aspectos de la aptitud física se contribuye al fomento del inicio, mantenimiento o incremento de la práctica de la actividad física.

Al final de la jornada se ingresan los datos por cada uno de los equipos, se realizan promedios y se elige el equipo más saludable y activo, estimulando a los otros competidores a prepararse para el próximo encuentro. Hasta la fecha se han realizado 3 encuentros saludables y activos con la participación de 650 personas.

La **semana de "Muévete Escolar"** es una propuesta mundial que moviliza a toda la comunidad educativa en torno a la importancia de la actividad física.
Esta estrategia se realiza desde el año 2002 con el lema "POR UN FUTURO SALUDABLE, UN PRESENTE ACTIVO", y fue basada en la experiencia de Agita Galera, de Brasil (Matsudo *et al.*, 2003). Su propósito es promover la actividad física, logrando que toda la comunidad educativa: padres, alumnos, docentes y personal administrativo, generen una actitud positiva frente a esta. La idea es realizar diariamente durante la semana actividades educativas y prácticas en cualquier área académica y momento de la jornada, la cuales eduquen a los estudiantes acerca de los componentes de la aptitud física para la salud: flexibilidad, fuerza, resistencia y unida a otros temas como alimentación saludable, no al tabaco y al alcohol, entre otros.

Los gestores de Muévete Bogotá visitan las instituciones para observar y calificar las actividades y obtener evidencias de las actividades realizadas a través de registro escrito, fotográfico y fílmico. Finalmente se analizan los resultados y se premian las iniciativas que permiten la mayor participación de actividad física. Desde el 2002 hasta el 2004, 58 colegios han desarrollado esta estrategia permitiendo que cerca de 80.000 personas entre estudiantes, docentes y comunidad educativa permanezcan a través del año escolar involucrando la actividad física en las diferentes áreas del conocimiento.

Cabe destacar que durante el año 2004, la participación de actividad física en la semana de Muévete escolar según las fichas de registro fue de 102 minutos/día por alumno, alcanzando y superando así las recomendaciones mundiales establecidas para jóvenes y niños (Minister of Works of Canada, 2000.)

Muévete trabajador, estrategia diseñada en el año 2004, como una idea adaptada del Departamento de Servicios de Salud Pública Ambienta y de la Comunidad del Canadá (Hamilton´s Healthy Workplace Week). El objetivo es dedicar una semana a la promoción y practica de la actividad física, en el sitio de trabajo. La idea es programar y realizar distintas actividades en el marco del día mundial del trabajo. Basados en las fichas de registro de cada empresa en el año 2004 participaron 13 empresas, con 2962 participantes. El

promedio acumulado de minutos de actividad física por persona a la semana fue de 96.4 minutos.

El IDRD hace parte de la Red de Actividad Física de las Américas a través de su programa Muévete Bogotá, y desde el año 2002 celebra en el mes de abril el **Día Mundial de la actividad física** una iniciativa de la Organización mundial de la Salud. Unidos al movimiento nacional y mundial se ha realizado una caminata de 3.8 Km de recorrido, desde el centro interactivo de ciencia y tecnología de Bogotá, Maloka, hasta la plaza de eventos del Simón Bolívar. Con la participación de las empresas amigas se ha hecho de esta actividad un éxito. El primer año 6.200 personas iniciaron la caminata y luego se unieron más hasta llegar a 15.000 personas que finalizaron su recorrido en el parque Simón Bolívar con dos horas de folklore aeróbico. Miembros de la comunidad, colegios, universidades, juntas de acción comunal, alcaldías locales, conjuntos residenciales, sociedades científicas, hospitales, centros comerciales, organizaciones no gubernamentales y miembros de los demás programas de recreación y deporte del IDRD participan en esta caminata.

Evaluación del programa

Información extensiva fue recolectada en muchos aspectos de Muévete Bogotá y algunos de estos datos han sido usados para evaluación tanto formal como informal del programa. El énfasis de la evaluación se ha hecho en refinar, enfocar y mejorar los esfuerzos programáticos. Investigaciones y publicaciones científicas no han sido prioridades. Inicialmente la evaluación no fue guiada por un marco formal, pero actualmente esta evaluación esta siendo guiada por el modelo de evaluación de la comunidad del CDC (CDC, 2002).

A finales del año 2004, se llevo a cabo una evaluación cuyo propósito era establecer la efectividad de la estrategia de vinculación e intervención de las empresas amigas del sector empresarial, con el fin de iniciar y mantener programas de promoción de actividad física.
Los principales hallazgos de esta evaluación también permitieron tomar decisiones acerca del programa, el desarrollo de más herramientas de intervención, estrategias promociónales o contratación de más personal y para mejorar los resultados y cumplir con los indicadores de rendimiento establecidos.

Los indicadores de Rendimiento se enfocaron primordialmente en medidas de proceso entre el IDRD y las empresas amigas. Un resumen de varios indicadores claves se presenta a continuación:

- 12,136 promotores de actividad física han sido capacitados, 31.3% de ellos son del sector empresarial.
- 9 talleres de capacitación en 5 años. un poco menos para alcanzar la meta de 2 talleres por año.
- 163 compañías, incluyendo 76 (46%) del sector empresarial, se han vinculado sobrepasando el objetivo establecido del 40%.
- El 82% de las compañías han realizado intervenciones, casi alcanzando la meta del 100%.
- El 27% de las compañías han creado su propio programa, logo y mensaje de actividad física, excediendo el objetivo de 20%.
- Solamente el 15% de las compañías han completado adecuada recolección de datos de base, un poco menos de la meta del 20%.
- 59.2% de las empresas amigas participan regularmente en las actividades de promoción masiva de Muévete Bogotá. A pesar de ser un buen porcentaje. Esto representa un 40% menos de la esperado.

Además de la evaluación de los procesos para guiar la ejecución del programa, Muévete Bogotá ha colaborado con instituciones de investigación para recolectar datos a nivel de las compañías y de la población y poder así evaluar el impacto del programa a corto plazo en las compañías y a largo plazo sobre los niveles de actividad física de las personas. Análisis preliminares de estos datos han sido completados. Los resultados de la evaluación del 2003 sugieren que la participación de la población en actividad física en Bogota ha mejorado. En 1999, el 84% de la población adulta reporto niveles insuficientes de actividad física. La inactividad física continua siendo un problema importante de salud publica en Bogotá. Los patrones de actividad física entre los años 1999 y 2003 fueron muy similares, con los mayores niveles de sedentarismo entre la población adulta mayor y las mujeres.

Diseminación de resultados

Muévete Bogotá ha trabajado sistemáticamente para diseminar los resultados y la metodología del programa. La diseminación se ha enfocado en la retroalimentación primaria de los interesados, (empresas amigas y tomadoras de decisiones) en compartir las lecciones aprendidas con otras comunidades de Colombia interesadas en iniciar programas similares y en la comunicación con otros promotores de salud regionales e internacionales

Local

La Actividad Física y la "marca" Muévete han sido incorporadas a la misión y los objetivos de muchas empresas amigas. Esto es considerado un éxito importante debido al efecto multiplicador que esto tiene en las políticas de los sitios de trabajo y en la promoción de actividad física. Algunos ejemplos son:

- "Muévete Alqueria" es una compañía de productos lácteos que dedica parte de su presupuesto total a su programa de actividad física y ha institucionalizado pausas activas entre muchas otras actividades.
- "Muévete Levapan", de una compañía de productos de panadería que dedica 10 minutos de la jornada laboral para realizar estiramientos y ejercicios de calentamiento 5 veces a la semana. Ellos también comenzaron una campaña promocional para incrementar el uso de la bicicleta para ir al trabajo; actualmente el 55% de los empleados se desplazan en bicicleta al trabajo, donde los tiempos de desplazamiento van desde 10 a 45 minutos. Esto representa un incremento del 10% en el uso de bicicleta de acuerdo a la información de línea de base.
- "Camina Policía", el programa del departamento de Policía de Bogotá, es uno de los programas mas reconocidos y exitosos. Ellos han asignado personal y presupuesto para apoyar los programas de actividad física, incluyendo actividades de promoción masiva, como concursos, y también han expandido el programa nacionalmente para alcanzar aproximadamente 150,000 empleados y miembros de la policía e incluso sus familiares.

Nacional

Muévete Bogotá ha contribuido al desarrollo e implementación de

programas de promoción de actividad física y salud a nivel nacional, como la estrategia de la Organización Panamericana de Salud (OPS)/ CARMEN (Conjuntos de Acciones para la Reducción Multifactorial de las Enfermedades no Transmisibles). Actualmente trabaja con la Secretaría Distrital de Salud en un proyecto para promover la actividad física y reducir los factores de riesgo comportamentales en una localidad de Bogotá. El Ministerio de Protección Social y Coldeportes Nacional, crearon "COLOMBIA ACTIVA Y SALUDABLE", lanzada el 7 de Abril de 2003, y basada en la estructura y experiencia del programa Muévete Bogotá.

Desde el año 2001, Muévete Bogotá comenzó a asesorar, a nivel nacional, programas como "Risaralda Activa", "Cundinamarca Siempre Activa", "Cauca Activa", "A Moverse Dígame" (Bucaramanga) y "Boyacá Activa", entre otros municipios. En el año 2002 se creó la Red Colombiana de Actividad Física REDCOLAF. Muévete Bogotá apoya, asesora y participa activamente en ella desde entonces. En el año 2004, asesoró a la ciudad de Manizales; así mismo en el año 2005 participó en el Foro regional de Actividad Física con el objetivo de crear el programa Caquetá Activa y Saludable.

Internacional
Se brindó asesoría a programas de otros países de Latinoamérica, incluyendo "Movámonos Costa Rica" y "Venezuela en Movimiento" y en Guatemala a través de la oficina de la OPS en la población de Villa Nueva.

Además de ser un miembro activo de la Red de Actividad Física de las Américas (RAFA-PANA) y de Agita Mundo, Muévete Bogotá ha jugado un rol importante en la organización de eventos científicos y académicos en Bogotá tales como el «Primer Foro Internacional para la Promoción de la Actividad Física» (con el apoyo de los CDC) y el «Primer Seminario Internacional en Estilos de Vida Saludables» (con el apoyo de ILSI Nor Andino Instituto de Ciencias de la Vida).

Conclusiones

Muévete Bogotá es un programa complejo, que posee una gran variedad, es un programa relativamente nuevo que tiene sus fortalezas así como sus debilidades bien definidas. A continuación se presenta un resumen de estas.

Muévete Bogotá en un programa extensivo de múltiples omponentes que involucra el uso de una gran variedad de herramientas y de estrategias de intervención.

Muévete Bogotá esta bien organizado y ha sido exitoso en parte gracias a la clara definición y distribución de roles y tareas entre su personal.

El programa se ha basado en evidencia científica y en experiencias exitosas de otros programas, que han sido adaptados y aplicados de acuerdo al contexto local de Bogotá.

La retro alimentación regular de los interesados y la detallada evaluación del programa, ha sido efectivamente usada para revisar, dirigir y enfocar las intervenciones en el sitio de trabajo y mejorar su entrega.

Muévete Bogotá ha recibido constante apoyo institucional y financiero de las directivas del IDRD, en parte debido a la gran diseminación local y nacional del programa, consolidando de esta manera su estructura económica y organizacional.

El presupuesto anual se ha incrementado, permitiendo el desarrollo de mejores estrategias promocionales así como la contratación y capacitación de más personal.

El gran apoyo recibido por parte del público y la comunidad de Muévete Bogotá se ha representado en la creación de nuevas estrategias para atender a las necesidades de las empresas amigas, de aquí surge la próxima estrategia a ser implementada en el 2005: Muévete Comunidad.

La integración que realiza Muévete de los componentes de promoción y educación de la salud, a nivel individual y de grupo, junto con los cambios en el ambiente físico que la ciudad ha experimentado en la ultima década, es inusual entre los programas de promoción en salud. La construcción y recuperación del espacio público en la forma de parques, carriles especiales para bicicleta, andenes y alamedas; facilitan que el mensaje de 30 minutos diarios de actividad física sean aceptados y adoptados de una manera mas sencilla en la población.

La exitosa entrega del programa de promoción actividad física a las empresas amigas demuestra que esta estrategia puede servir en Mega-ciudades de países en vía de desarrollo, tales como Bogotá, para extender el alcance de los programas gubernamentales.

Aunque la evaluación del programa actual demostró que en general el programa ha sido exitoso, varias debilidades operacionales fueron halladas. Más inversión en recursos económicos y humanos es necesaria para mejorar la intervención en las empresas amigas. La evaluación también identificó la necesidad de desarrollar estrategias más agresivas que incrementen el liderazgo entre los empleados y fortalecer el trabajo intersectorial con las Aseguradoras de Riesgos Profesionales.

El alcance de Muévete Bogotá y su efectividad en promocionar la actividad física permanecerá limitado mientras el programa se encuentre enfocado en el sector deportivo y recreacional. Mientras Muévete Bogotá tiene un alcance más amplio que otros programas de salud y se puede beneficiar de la interacción entre sectores como el educativo, salud, espacio público, desarrollo urbano y transporte para colaborar por una Bogotá más activa y saludable.

Muévete Bogotá es un ejemplo de los programas que recogen mas información de la que pueden analizar. Es por tanto fundamental la capacitación de personal y así lograr mayor efectividad en la evaluación del programa. Quedándose corto en personal especializado en estas funciones analíticas y en el tiempo para realizar análisis de los datos, limitando así la diseminación en publicaciones científicas a una mayor audiencia internacional y reduciendo la aplicación de los datos recolectados a la evaluación del programa. Abordar esta debilidad requiere de nuevas alianzas y entrenamiento así como la asignación personal para la evaluación del programa. Sin embargo, asignar tiempo separado para analizar los datos y resultados de la evaluación es difícil en un programa tan dinámico y en permanente crecimiento como Muévete Bogotá.

Muévete Bogotá es un ejemplo exitoso de como intervenciones en actividad

física basadas en la evidencia pueden ser adaptadas al contexto local y cultural. El programa ha crecido contando con una coordinación efectiva y con el compromiso de utilizar personal capacitado y entrenado en promoción de actividad física y en la evaluación práctica del programa. Mejor planeación y evaluación de los resultados será requerida para documentar los cambios poblacionales en los niveles de la actividad física, sin embargo el proceso existente de evaluación demuestra claramente la viabilidad de desarrollar un programa comprensivo de promoción de actividad física en un área metropolitana a pesar de su complejidad y sus problemas económicos, políticos y sociales.

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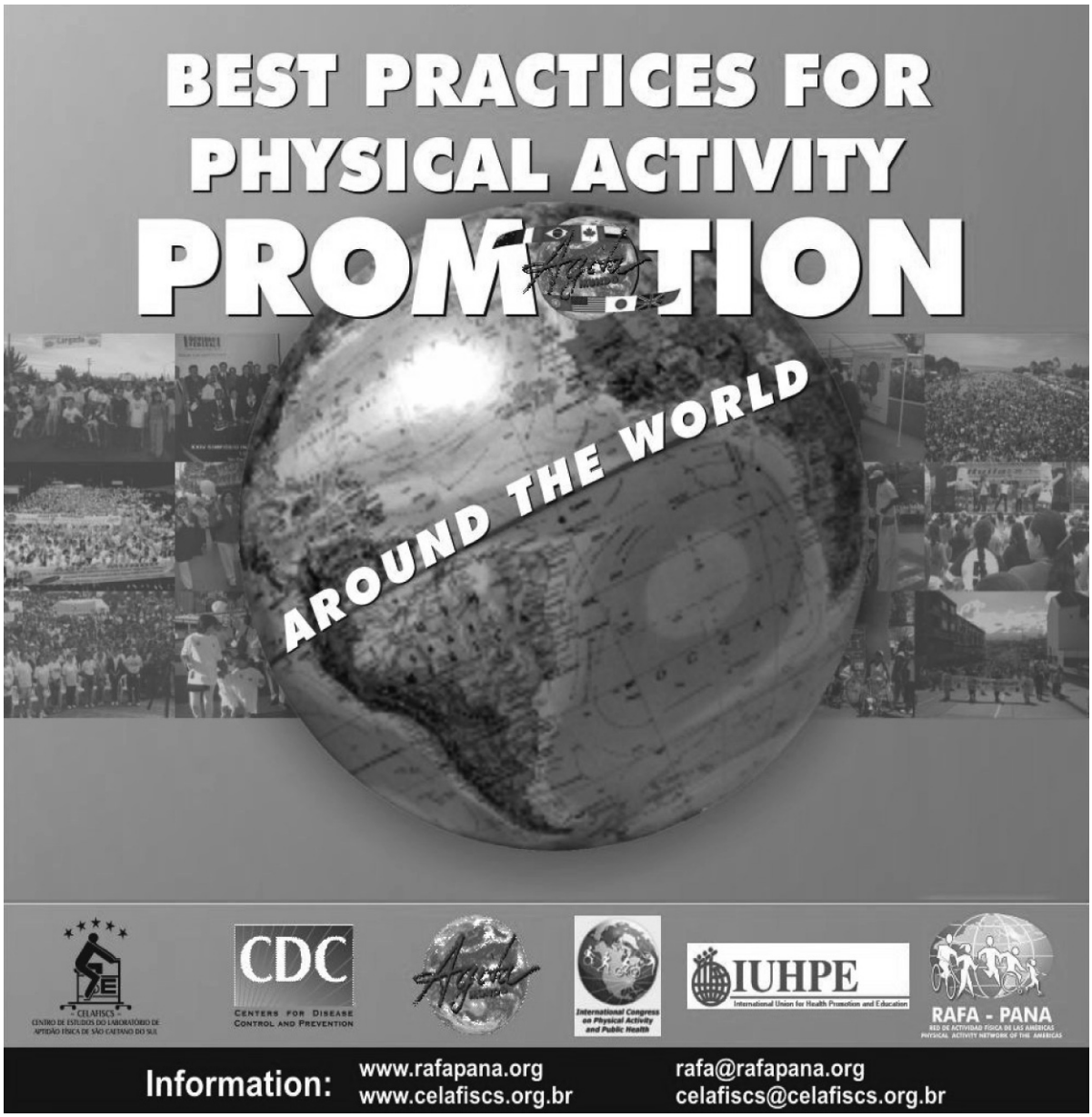

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