



Agita São Paulo

Topic:

Physical activity

Organisation:

Centro de Estudos do Laboratório de Aptidão Física de São Caetano do Sul (CELAFISCS)

Location:

São Paulo (Brazil)

Dates:

1994 to ongoing

Budget:

US\$150,000 to US\$400,000 per year

Website:

www.agitasp.org.br

Contact:

Sandra Mahecha Matsudo (Scientific technical advisor)

Email:

Sandra@celafiscs.org.br

Telephone:

+55 (11) 4229 8980



Overview

The Agita São Paulo programme was developed in 1996 to combat the low levels of physical activity amongst residents of the Brazilian state of São Paulo. The Portuguese word 'Agita' means to move the body, but the term also includes considerations of the mind, social health and citizenship. The programme encourages residents of São Paulo to accumulate at least 30 minutes of moderate physical activity per day, and this message is supported by the programme's mascot – the 'half-hour man'.

To encourage people to become more physically active, the Agita São Paulo programme seeks to deliver interventions that impact on interpersonal, social and physical environmental factors. This has included: mass media; promotional giveaways; mega-events; creating access to sporting facilities; influencing policies, statutes and laws; improving physical environments; and working with health professionals to 'prescribe' physical activity.

Results:

- Proportion of inactive individuals declined from 10 per cent in 2002 to 3 per cent in 2008
- Proportion of very active individuals increased from 7 per cent in 2002 to 16 per cent in 2008
- 37 per cent of the state's population was aware of Agita São Paulo in 2002, rising to 60 per cent in 2008



The World Health Organization (WHO) has declared that at least 60 per cent of the world's population fails to complete the recommended amount of physical activity required to generate health benefits. Further, physical inactivity has been identified as the fourth leading risk factor for global mortality (six per cent of deaths worldwide). It is estimated that physical inactivity is the main cause for approximately 21 to 25 per cent of breast and colon cancers, 27 per cent of diabetes and 30 per cent of ischaemic heart disease globally. Physical inactivity levels are rising in many countries with major implications for the prevalence of non-communicable diseases.

Data from the Brazilian census of 1996 and 1997 showed that barely 13 per cent of Brazil's population engaged in at least 30 minutes of physical activity in their leisure time on 1 or more days per week, and that only 3 per cent carried out the minimum daily recommended amount of at least 30 minutes five times per week. A survey conducted in the state of São Paulo in the early 1990s found that 69.3 per cent of adults were not sufficiently active and this was truer of women (80.2 per cent) than of men (57.3 per cent).

The cost of sedentary lifestyles on health systems has been estimated by the Centers for Disease Control and Prevention (CDC) to represent about 70 per cent of all health expenses. An evaluation of public sector hospitalisation costs for 10 diseases and conditions related to physical activity in São Paulo, plus state-wide physical activity prevalence data suggests that more than 3 per cent of direct medical costs within the state are attributable to physical inactivity (US\$37.5 million). The high prevalence of physical inactivity in São Paulo – particularly among the lower income sectors – called attention to the need to implement interventions for individual behaviour change and to reduce the prevalence of sedentary lifestyles.

Consequently, in 1996 the then State Secretariat of Health of São Paulo asked the Studies Centre of the Physical Fitness Research Laboratory of Sao Caetano do Sul (Centro de Estudos do Laboratório de Aptidão Física de São Caetano do Sul, or CELAFISCS) to develop a state-wide programme to promote physical activity amongst São Paulo's population of 35 million.



Programme structure

The Agita São Paulo programme is coordinated by CELAFISCS, with financial support from the Health Secretariat of the State of São Paulo. The Secretariat oversees the health of approximately 35 million inhabitants in the 645 municipalities in the state.

The programme has two boards that are part of its structure: the Scientific Board and the Executive Board. The Scientific Board consists of both Brazilians and persons from other countries who have an academic background and experience in the area of physical activity, including its promotion. These professionals helped establish the programme's scientific foundation and have helped assess the specific activities that have been implemented. A Medical Committee was created as a sub-unit of the Scientific Board to work with the medical community in promoting physical activity. The Executive Board includes more than 300 governmental, non-governmental and private organisations that have joined the programme. These groups represent sectors ranging from health, education and sports to industry, workers and the environment. Those organisations are directly responsible for planning, organising and carrying out the programme's multiple activities intended to disseminate its message in the community.

To share learning and coordinate work, the programme's Executive Board meets once a month to plan and report on activities, approve new members and consider scientific information in the area of physical activity promotion. The Executive Board also publishes a monthly newsletter 'Agita News', which is disseminated via the internet. The newsletter features the activities of all the organisations that are members of the Executive Board.

Programme funding

Agita São Paulo has three sources of funding:

- 1. The State Secretariat of Health
- 2. The partner institutions, which contribute resources both directly and indirectly
- 3. Businesses, which contribute financial resources for the production of educational and promotional materials

The direct costs of Agita São Paulo are largely covered by the State Health Secretariat, with a budget ranging between US\$150,000 and US\$400,000 per year. This represents an investment of approximately less than US\$0.01 per state inhabitant per year. In contrast, the estimated costs of illness related to a sedentary lifestyle in the state are about US\$1.00 per person per year. Forty per cent of the budget amount covers educational and marketing material, 35 per cent human resources, 14 per cent research and 11 per cent logistics materials and services, such as paper, postage, and photocopying and printing.

There is also a large volunteering component, with academics and professionals donating their time to the research and organisation of activities.



The scoping and development phases started in 1994 and lasted two years. The research began with a review of the literature on physical activity with a particular focus on physical activity levels in developing countries, as well as health promotion initiatives.

This literature review was supported by a consultation with experts in physical activity and health promotion, including:

- The Pan American Health Organisation (PAHO)
- The CDC
- The UK's Health Education Authority (HEA)
- The Institute of Aerobics Research in Dallas, Texas
- Advisors from Brazil, the US, Finland, UK and Australia

Aims

Taking into consideration epidemiological evidence and experiences in other countries, the programme established two primary purposes:

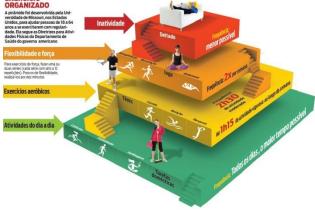
- To increase people's knowledge of the importance of physical activity as a way to promote health by 50 per cent
- 2. To increase people's physical activity level by 20 per cent over a 10-year period

Behavioural goals

The programme promotes the recommendations made by the CDC and American College of Sports Medicine (ACSM), which are for:

- Adults to achieve at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week, in either a continuous or accumulated way (in sessions of 10 to 15 minutes)
- Children and youth to engage in at least 20 minutes of sustained vigorous physical activity three days a week

EXERCÍCIO ORGANIZADO



Target audiences

Based on the literature review and consultation with experts, the following target audiences were identified:

- Students (children and adolescents)
- Workers (young economically active men and women)
- Older adults (those over 60 years of age)

While the programme would target the whole population, it was decided that a particular emphasis would be placed on these target audiences, as they were identified as being most likely to lead a sedentary lifestyle.

Primary research

Approximately 20,000 questionnaires were conducted with the target audiences across a number of different settings to understand barriers and motivations to physical activity. These questionnaires were conducted as part of a series of research studies, many of which have been published by the journal of Medicine and Science in Sports and Exercise. Examples of the questionnaire samples from these studies include:

- 271 'white collar workers' aged 19 to 65
- 82 students from Faculdades Metropolitanas Unidas, the university in Brazil based in São Paulo
- 86 boys aged 9- to 18-years-old

These various studies uncovered a number of insights about physical activity, particularly about the perceived and actual barriers to increasing levels of physical activity.

Barriers to physical activity

- Lack of time was the most cited barrier, regardless of sex or stage of behaviour change
- Lack of company
- Lack of interest



The team sought to develop interventions that considered the main determinants on physical activity levels, as proposed by Sallis and Owen's Ecological Model. Sallis and Owen identified the main influences on physical activity as:

- Intrapersonal factors (demographics, biological, cognitive and behavioural)
- Social environment factors (social and cultural environment, policies governing incentives and resources for activity/inactivity)

 Physical environment factors, including both natural environment (climate and geography) and built environment (architecture, infrastructure, transport and leisure facilities)

Subsequently, interventions developed for Agita São Paulo were organised around interpersonal, social and physical environment factors.

The health benefits derived from an active lifestyle, such as reduced blood pressure, improved joint mobility and muscular strength, feature in all of the materials developed for the Agita São Paulo programme. But importantly, because these are long-term benefits that are accrued in some cases only gradually and so are not always immediately perceived by the target audience, the promotional materials emphasise benefits the target audience could gain quickly. These include physical and mental health benefits, but particularly the latter because people's perception of increased mental wellbeing can occur directly following physical activity.

Programme name and mascot

With the help of external consultants, it was decided the name of the programme would be Agita São Paulo. 'Agita' is a Portuguese word meaning to move the body, but it also suggests stimulating the mind, changing your way of thinking and becoming a more active citizen.



A mascot was developed for the programme, which reinforces the main behavioural goal of the programme. The mascot is a clock called 'Meia-Horito' or 'half-hour man', to remind participants to get 30 minutes of moderateintensity physical activity a day. This mascot was adapted for both gender and regional cultures, and so a 'half-hour woman', a 'halfhour cowboy' and a 'half-hour seashoreman' were also created.



Media and communications

The programme was faced with the difficult task of suggesting that the traditional, structured physical activity programmes, such as sports and fitness supervised by instructors in health clubs and gyms, are not the only way to promote health among people who are sedentary. Rather than saying 'sports is health' or 'fitness is heath', the Agita São Paulo programme has taken the position that it takes only minor changes in people's sedentary lifestyles to start gaining the many health benefits that come from an active way of life. The programme has emphasised that this can be done at little or no cost and with less chance of injury than is true for the traditional models of sports and physical fitness, while offering nearly the same health benefits. Shifting from a sedentary lifestyle to one that is slightly active can reduce the risk of death from cardiovascular disease by as much as 44 per cent.

Programme communications were designed to address the most frequent reason for not doing more exercise: a lack of time. They emphasise that daily activities can count towards the required amounts of physical activity a day. Activities can include recreational activities (such as football, baseball, running, walking, biking, dancing and swimming) and housework (such as washing the car, walking the dog, vacuuming, cleaning windows and mowing grass). They can also include activities incorporated into the working day, such as walking or biking to work, getting off the bus a stop earlier, or walking up stairs rather than using escalators.

In trying to change the behaviour of the general population, the Agita São Paulo programme applies the Transtheoretical Model of stages of behaviour change. The model suggests that there are five stages of behaviour change: precontemplation (not considering change), contemplation, preparation, action and maintenance. The Agita São Paulo programme carries out activities that are intended to call people's attention to the importance of a physically active lifestyle and prepares educational materials such as posters, flyers and brochures targeted to population groups in the different behaviour change stages. The programme actions and messages are intended to turn sedentary individuals into somewhat active ones, persons who are not very active into active ones, those who are regularly active into even more active ones, and those already very active into individuals able to remain so, at no risk of suffering injury.



Mega-events

Mega-events were developed to raise awareness of the need to engage in physical activity in a way that brought people together in the spirit of carnivals and festivals, which are very important to Brazilian culture. A megaevent is intended to reach the majority of the cities in the state of São Paulo and/or to involve at least a million people. Mega-events are generally linked to cultural or seasonal events such as International Labour Day, Carnival or summer vacation.



Actions carried out with partner institutions The programme believes that mega-events alone are not enough to encourage the population to change its behaviour in connection with physical activity. Therefore ongoing activities for promoting the physical activity message have been developed by most of the 300 programme partner institutions to reach the persons served by those institutions and the community in general.

The partners can carry out activities that require direct financial investment as well as ones that do not require investment. Partners can pay for the production of special educational materials such as flyers, posters, videos and T-shirts that contain 'Agita' and the institution's insignia, to use with their own employees or for events that they organise in the community. Other partner activities carry no additional cost, such as printing the message of 'accumulate 30 minutes of physical activity every day' on the institution's letterhead,

employee pay stubs, or magazine or newsletter. Partners can also put up posters or distribute flyers among their employees and organise lectures or workshops about physical activity and health.

The programme works with organisations to ensure that physical activity is incorporated in institutional policies, like human resource training. The programme also encourages organisations to incentivise their employees or members to increase their physical activity through initiatives like providing discounts for monthly medical insurance.

Changes to physical spaces

The programme works to establish physical spaces that stimulate and facilitate the practice of daily physical activity. Initiatives include: construction of pavements and cycle, walking and running pathways; construction or revitalisation of wider and more regular pavements; removal of obstacles on pavements; and creation of green areas and leisure spaces for practicing sports.

'Agitol'

Based on the medical committee's research, CELAFISCS designed an intervention to encourage medical professionals to 'prescribe' physical activity. Taking into account that the culture of medical care in Brazil encourages prescribing medication for most health conditions, 'Agitol – the formula for an active campaign' was developed so that medical professionals could prescribe physical activity. Doctors could dispense an Agitol box (similar in style to a prescription medication packet), which contains the 'prescription' and educational materials about the health benefits of physical activity. The materials prescribe physical activity in dosages:

- Single dose: 30 minutes of physical activity a day
- Two doses: 15 minutes of physical activity a day

 Three doses: 10 minutes of physical activity a day

Using the language of prescribing medication lends humour to the intervention and aims to increase its popularity with health professionals.



Implementation of the Agita São Paulo programme began in 1996. To promote the main messages, the programme utilised nonpaid media, as well as a range of other communication channels, such as putting the Agita São Paulo message on electricity company bills, in the football stadium and at metro stations.

Annual mega-events have been specifically developed and delivered for the three target audiences:

1. Active Community Day ('Agita Galera') The programme, with help from the State Education Secretary, dedicates the last Friday in August to disseminating the programme's message throughout the 6,800 public schools in the state, to some 6 million students and 250,000 teachers. Each school receives a handbook, poster and flyers specifically prepared for this event. Students are encouraged to prepare materials of their own through writing, drawing and photography competitions that focus on the subject of physical activity. Schools are also encouraged to take their students to the community's parks, clubs and squares so that the students themselves can spread the programme's message with street demonstrations and by giving out leaflets and stickers. Ongoing actions are also suggested to schools, such as including the

topic of physical activity in classes other than physical education and creating library sections that have books, manuals and magazines on physical activity and health.

- 2. Active Worker Day ('Agita Trabalhador') The programme has traditionally taken part in an event conducted by the Brazilian federation of labour unions on 1 May, which is International Labour Day. In the city of Sao Paulo alone that event involves over one million people in a major demonstration. During the event, special attention is devoted to explain the programme message to the workers and their family members. The programme has also participated in events that corporations, governmental organisations and non-governmental organisations have put on, such as the Week to Prevent Work-Related Accidents and other activities that feature physical activity, sports and recreation.
- 3. Active Elderly Day ('Agita Melhoridade') The programme organises a walk on the National Day and the International Day of Older Persons, on 1 October. In this event, older adults and senior care centres mobilise each neighbourhood and encourage older people and their families to participate in a walking parade. The older people who join in the activities receive free branded T-Shirts, fans and hats.

Conducting a programme on this scale has not come without its challenges. The programme has had to be run on a restricted budget and with limited human resources, which has made developing a strong strategic partnership between multiple organisations essential to share financial and human resource demands. Despite the challenges, the programme has gone from strength to strength as more partners have been brought on board and more initiatives and events have been added to the programme.



One such additional event has been 'Agita Verão'. With the help of one partner institution, ACM (YMCA), the programme developed special festivals at beaches during the summer season, thereby reaching thousands of people on their holidays. This was coordinated with another partner (the State Road Department), so that over 100,000 car and truck drivers and their families would receive a promotional flyer at the petrol station on their way to the beach.

Another event that has been added with help from partners has been a dog walking event in São Paulo city, which saw 150 people participating with their dogs. Freebies were given out, including dog bandanas, and at the completion of the walk all dogs received a free rabies vaccination. The event emphasised how walking your dog can be beneficial for the health of both owner and pet.

It is not just the events that have been successful and expanded. In 1998 'Partners of the Future', a programme to enable greater access of sporting facilities through opening schools on the weekends, was launched. Initially approximately 40 schools were opened in regions with higher indices of violence. Gradually this expanded to 400 schools because of the high level of uptake reported by head teachers (83 per cent reported good and very good rates). Due to the programme's success it was again extended, this time to all 6,000 public schools in São Paulo state, under the new name 'Family School', which aims to reach all students, families and local neighbourhoods.

Nevertheless, because the Agita São Paulo programme has been running over a long period, it has had to deal with a number of unavoidable external factors which have had short-time impacts on the implementation of different aspects of the programme. For instance, the annual event Active Community Day ('Agita Galera') could not be implemented in 2010 because of the influenza epidemic affecting Brazil at the time.



The Agita São Paulo programme measures changes in physical activity levels and the recall of the programme's name and message through a yearly survey, which is compared to 1990 baseline data collected on sedentary lifestyle levels in the state. This survey has been conducted since 1999 with a representative sample of the State (approximately 2,000 people) and in the Metropolitan region of São Paulo city (approximately 650 people).

Annual survey results (2002 to 2008)

- The proportion of inactive individuals declined from 10 per cent in 2002 to 3 per cent in 2008
- The proportion of very active individuals grew from 7 per cent in 2002 to 16 per cent in 2008

- Increase in the proportion of active individuals and a reduction in the prevalence of irregularly active individuals
- The proportion of individuals with scores of 0 minutes per week of moderate-intensity physical activity reduced from 40 per cent in 2002 to 16 per cent in 2008
- The proportion of individuals with scores of less than 150 minutes per week of walking reduced from 75 per cent in 2002 to 54 per cent in 2008
- The proportion of individuals failing to reach 60 minutes of vigorous-intensity physical activity per week decreased from 78 per cent in 2002 to 62 per cent in 2008
- The only significant differences identified by sex was that increases in moderateintensity physical activity practice was stronger among women compared to men
- The only significant differences identified by socioeconomic status was that the greatest increases in levels of walking were found amongst those with lower incomes
- 37 per cent of the state's population was aware of Agita São Paulo in 2002, increasing to 60 per cent in 2008

Mega-events

The programme gathers data from megaevents in regards to numbers participating, alongside one-off surveys that measure their impact on physical activity levels.



Mega-Walk

This initiative, organised annually in the city of São Paulo, sees on average:

- Over 300 partners and institutions contributing on the day
- 800 events organised for the day
- Approximately 10,000 people take part

Active Community Day – 'Agita Galera' Research following the event in 2005 found that public schools (which take part in the event) had more favourable results for physical activity than private schools (which do not take part):

- Physical activity frequency was 74 per cent in public schools, compared to 31 per cent in private schools
- Physical activity duration was 80 per cent in public schools, compared to 32 per cent in private schools
- Physical activity intensity was 80 per cent in public schools, compared to 31 per cent in private schools
- Public school students were also less likely to be insufficiently active (56 per cent) compared to their counterparts from private schools (68 per cent)

Cost-effectiveness

In an analysis supported by the World Bank, CDC and CELAFISCS, a model was developed to assess the cost-effectiveness of the Agita São Paulo programme. The model incorporates multiple data, including: programme costs; state-wide physical activity surveys carried out from 1999 to 2003; medical costs from São Paulo and Brazilian national data sets; and relative risks and incidence of disease from the international scientific literature.

The intervention cost of the Agita São Paulo programme was found to be R\$640 per person per year. The increase in physical activity resulting from implementation of the community campaign targeting adults was 132 metabolic equivalent of task (MET) minutes per week, per person, for each year of the programme's delivery. As a result it has been concluded that the programme is a good public health investment in that it has achieved a costeffectiveness ratio of less than R\$50,000/QALY (Quality Adjusted Life Year), which is a rate many accept as demonstrating a cost effective public health intervention.



Working with the municipalities in Sao Paulo

The Agita São Paulo programme has found it highly effective to work with the municipalities in the state to promote physical activity in the general population. Because of the cultural, economic and social diversity of the 645 municipalities in the state, no single, rigid model for implementing health promotion efforts is appropriate. In addition, a diversity of approaches allows various effective solutions to the same problem.

The programme offers municipalities a range of suggested strategies that can serve as the basis for their activities, and has also made available educational materials and a programme handbook. Often, a letter of intent is signed during an official ceremony in the municipality, with Agita São Paulo representatives in attendance. Each municipality may select its own programme name, but most have chosen to name it Agita and the city's name. Creating a logo has been a very inventive process, involving the community through contests, especially in schools. As with the Agita São Paulo programme, many municipalities hold a monthly meeting for their programme, to plan, implement and monitor activities as well as to solidify local support. So far, the Agita São

Paulo programme has established more than 150 municipal committees, in small, medium and large cities throughout the state.



Promoting physical activity in the rest of Brazil

One noteworthy outcome of the Agita São Paulo programme has been the establishment of a national programme in Brazil for physical activity promotion.

The Ministry of Health (MoH) launched this programme in 2000 under the name of 'Agita Brasil'. As with Agita São Paulo, the national programme is primarily intended to promote health in the population by increasing people's physical activity level, and it also works with various sectors, including health, education and sports. The national programme is directed to the entire population, but especially to people who are at risk of non-communicable chronic diseases. To help ensure the implementation of the national efforts, the MoH has established alliances with both state and local managers of the Unified Health System, which is the public system that delivers health care throughout Brazil. The national Agita programme also

receives technical and scientific support from the CELFISCS.

Impact on Latin America and elsewhere The programme's impact has gone beyond the state of Sao Paulo and even beyond Brazil. Based on ideas from the programme and advice given by CELFISCS, similar initiatives have been established elsewhere in Latin America, including in Argentina, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela. These various efforts led to the establishment of the Physical Activity Network of the Americas (PANA) in October 2000, with strong support from the CDC and PAHO.

In 2002 the WHO chose physical activity as the theme for World Health Day. That year, Agita Sao Paulo was covered in multiple newspapers, radio shows and television programmes across Brazil and Latin America.

In April 2003, a nongovernmental organisation, named 'Agita Mundo Network', was officially launched with the support of over 180 international and national institutions. Its main purpose is to encourage physical activity around the world to promote people's biological, psychological and social health. To help achieve this, a mega-event, Agita Mundo – Move for Health Day, has been planned for 6 April of every year.



Lessons learned

Evaluation

The evaluation of the Agita São Paulo programme has used quantitative and qualitative indicators of initiatives developed and conducted by a range of partner institutions. This has created a number of challenges, including identifying appropriate indicators and tools for evaluation for the many different kinds of interventions, activities and strategies used by the programme.

Another challenge has been ensuring the evaluation process has been conducted systematically across all actions and activities developed by the programme. This requires high levels of management to ensure that partners understand how to evaluate the initiatives they implement, and to make sure they understand the importance of doing this correctly.

The surveys to evaluate the impact of the Agita São Paulo programme, namely changing physical activity levels and recall of the name and message of the programme, are vital for measuring success, despite being costly. It is therefore recommended that evaluation be included in strategic planning and be assigned a specific budget.

Partnership work and shared learning

Partnership has been essential for the Agita São Paulo programme. The programme has avoided inflexible, formalistic mechanisms for adding new partner organisations. A letter of intent may be signed by any group that is willing to contribute to the programme's objectives, without making a rigid commitment. The extent to which each partner commits itself and takes on new responsibilities may grow as it feels more motivated and able to help.

A number of aspects of the partnerships have contributed to the programme's success:

- The institution responsible for coordinating the programme is a research centre that was founded in 1974 and has built a strong national and international reputation for its sports sciences research activities
- The simplicity of the actions that are proposed are easy for partners to organise and the recommendation of physical activity for health is easy for the general public to understand
- The partnerships involve professionals from different areas (like health, sports, social services and community services), as well as different types of institutions (governmental, nongovernmental and private) that have a variety of purposes. This diversity of partners has provided a wide range of opportunities to reach target groups and the general population. The diversity has also encouraged innovation and a greater exchange of ideas among the partner institutions
- The programme's coordinators provide technical cooperation to the partners in the form of pamphlets, manuals and advertising tools, and of scientific information on how to promote physical activity with their employees and the communities they serve. Each partner institution can decide which strategies and materials to use