Innovative Action Against Non-Communicable Diseases

A Case Study on Agita São Paulo: Defeating NCDs through Physical Activity
NCDs, which stand for non-communicable diseases and include cardiovascular disease, diabetes, cancers and chronic lung diseases, are the 21st century’s greatest health challenge. Two out of three deaths today are caused by NCDs, with 80% of these occurring in developing countries. The prevalence of NCDs is rapidly rising and outstripping communicable diseases in most regions. By 2030, NCDs are projected to cause nearly five times as many deaths as communicable diseases worldwide. NCDs are also a major development concern, as these diseases increase poverty, and increased poverty results in rising rates of NCDs. All people, rich and poor, are affected by the NCD epidemic, but none more so than the poorest populations in developing countries.

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Fortunately, NCDs are largely preventable. According to the WHO, eating a healthy diet, increasing physical activity and avoiding tobacco use can prevent:
- 80% of premature heart disease,
- 80% of type 2 diabetes cases, and
- 40% of cancers

According to the series “Chronic Disease and Development” from The Lancet, physical inactivity and poor diet together cause about half of the deaths (up to 17 million) from NCDs worldwide. But changing behavior – such as getting people to exercise – is one of the hardest challenges in chronic disease prevention. That is why Arogya World has chosen to highlight the story of Agita São Paulo and how they have been able to get millions to increase their physical activity level, transforming the behavior of entire communities in the state of São Paulo, Brazil. The brilliantly simple framework and methodology, and its remarkable success in a developing country, make the Agita method relevant and adaptable in other countries and high-risk populations. Not only is it a good idea, but an extraordinary example of effective implementation of a large-scale public health intervention.

This is Arogya World’s first Case Study on NCD Prevention, Treatment and Care Approaches that Work. Look for more case studies this year at www.arogyaworld.org.

The Context in Brazil
Since the 1970s, Brazil has experienced rapid economic growth and major socio-economic shifts, which in turn have resulted in striking lifestyle changes. Unfortunately, these shifts led to significantly higher levels of NCDs. "In 2004, chronic diseases were estimated to cause 70.1% of all deaths in Brazil, approximately 30% of which were premature" (3). Additionally, an estimated $49.2 billion (2.5% of Brazil’s GDP) has been lost due to disability or death from chronic disease (3). As Brazil continues to develop, it is imperative to contain and prevent the
incidence of NCDs before the country’s economic and societal growth are severely and negatively impacted.

**The Agita São Paulo Initiative**

In 1996, the Agita São Paulo initiative began in response to the growing level of physical inactivity in Brazil and increasing number of deaths due to chronic disease, especially within the state of São Paulo. The visionary work of the Secretary of Health at the time, Dr. José Guedes, and a research center with a track record of success, the Studies Center of the Physical Fitness Research Laboratory of São Caetano do Sul, played a major role in the creation and success of Agita São Paulo. The word “agita” means to move the body, or to move the crowd; it also represents changing ways of thinking and becoming more active (1). With this in mind, the initiative sought to achieve two objectives: increasing the public’s knowledge of why physical activity is important, and increasing the physical activity levels of the citizens of São Paulo. Additionally, they sought to establish partnerships with governmental and nongovernmental organizations to ensure the program’s success, and currently work with over 350 partner institutions.

Fundamentally, the initiative promotes simple behavior changes that add 30 minutes of moderate physical activity to each day. Simple messages and effective marketing have been key. A smiling clock mascot was created, the “half hour man,” in order to graphically remind the citizens of São Paulo that very little time is needed to achieve their health goals. The Agita approach is effective, especially because of its focus on moderate as opposed to vigorous activity, and because it championed the concept that physical activity can be accumulated throughout the day – for example, 10 minutes of activity 3 times per day = the daily requirement of 30 minutes of physical activity. By framing the daily physical activity requirements as moderate activities that can be accumulated in small portions throughout the day, people believed that physical activity goals were achievable and more manageable. This especially appealed to the women of São Paulo who traditionally disliked vigorous exercise. The initiative targets three specific groups, students, workers, and the elderly, reaching large numbers of individuals through mega events conducted with partner organizations and networks that help take the program message deep into communities. These mega events take place in major cities or involve at least one million citizens. One such event, Agita Galera, is held each year in partnership with the Department of Education. On the last Friday of August, 6,000 public schools in the state of São Paulo are mobilized, regular classes are replaced by Agita classes, and students (7-18 years old) take part in walks, sports and other creative activities that increase students’ levels of physical activity as well as their awareness of the benefits. When compared with private schools, which do not participate in Agita Galera, physical activity levels in the public schools were 33% higher. Additionally, since the Agita São Paulo initiative began, it has been able to greatly increase the levels of physical activity among the citizens of São Paulo, as measured by multiple surveys and studies. A few examples of results obtained:

- One group of elderly women reported that their physical activity was increased from 3.5 to 5 days per week, and from 40 to 120 minutes per day (1).
- In one school the initiative led to an increased number of students obtaining the proper amount of exercise each week, with the level for males rising from 20% to 40% and the level for females rising from 4% to 42% (1).
- A health insurance company applied the Agita method and realized an increase in physical activity among diabetes and hypertension patients from 23% to 53% (1).

**Bring Agita to Your Community**

The Agita São Paulo Initiative applies equally well at local, state, national, or global levels. Its key to success is simplicity, and the following actions can lead to a successful movement for physical health in your community:

- Promote 30 minutes of physical activity per day and remember the inclusion principle, that physical activity can be practiced by anyone, at any age, anywhere.

Largely attributed to Agita, during 2002-2008, the proportion of insufficiently active people in São Paulo dramatically declined from 43% to about 11% of the population, whereas those involved in moderate physical activity increased from about 50% to 70% of the population (2).
• Build governmental and nongovernmental partnerships to disseminate the message of physical activity’s importance.
• Adapt your initiative to the culture, beliefs, and values of your community to create public value and ensure sustainable success.
• Utilize the multisectoral approach to reach as many people and institutions as possible.
• Provide information on the scientific evidence and benefits of physical activity for reducing and preventing the incidence of chronic disease.
• Hold annual mega events or health days to raise awareness and spread the message.

Agita São Paulo’s work with local municipalities and their focus on fitting the initiative to the socioeconomic and cultural standards of a community, as well as their ability to coordinate efforts between the health, education, sports, governmental, and nongovernmental sectors, has played a great part in the Agita movement’s continued success.

Looking Forward
Preliminary data indicate that NCDs have a staggering global price tag estimated to be around $35 trillion in economic output loss over 25 years, suggesting that the cost of inaction against NCDs is astronomically higher than the cost of action. Agita São Paulo offers an excellent model for effective and cost-effective large-scale public health intervention for chronic disease prevention.

However, a persistent challenge lies in the social perception of the risks associated with chronic disease. The head of Agita São Paulo, Victor Matsudo, puts it eloquently. “Social perception of risk equals relative risk times indignation. In the case of HIV, the relative risk is quite low but because indignation is so high, the social perception of risk is extremely high. In the case of NCDs, relative risk from sedentary lifestyles is quite high, but because indignation is low, the social perception of the risk is low. I pray that policy makers move into the real world and work to increase this indignation factor in the public. Without this we will never win the war against NCDs.”

This case study was prepared in collaboration with Global Health Council.

References

“Arogya is a US-based non-profit 501 (c) 3 organization. The organization does business as Arogya World. See www.arogyaworld.org for more information.”