
【Review Article】

The Lancet Physical Activity Observatory : Monitoring a 21st Century Pandemic

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ABSTRACT Over the last decades, physical inactivity has reached pandemic proportions worldwide, and therefore became a public health priority. Despite its importance, there was no observatory dedicated exclusively to monitor physical activity surveillance, research and policy worldwide. In 2012, The Lancet Physical Activity Observatory was launched in response to this urgent call for action.

Purpose: To describe the work conducted by The Lancet Physical Activity Observatory in order to track physical activity surveillance, research and policy worldwide.

Methods: The Observatory has a website, directed and managed by physical activity epidemiologists and public health researchers. The main Observatory's product are the country cards, which are country profiles from 219 countries that include general country data in addition to common surveillance, policy and research indicators. All the information was gathered using a standardized methodology.

Results: The Observatory will be able to reach local experts in 219 countries and therefore create a global collaborative network to monitor physical activity. Each of the countries will have a page in the website that will include local data, contact information and the translated card. The country cards will help countries to determine which are their needs and opportunities to initiate or improve standardized data collection, surveillance systems, policy making, program development and evaluation in the area of physical activity.

Conclusion: The Observatory's expectation is that these country cards become an evaluation and advocacy tool helping governments, researchers and society to improve their health status through physical activity.

Key words: Physical activity, health, observatory, policy, surveillance, research

Introduction

Disregarding the area of interest and the geographical location, health observatories monitor, produce and deliver current health information¹⁾. Social determinants of health, communicable and non-communicable diseases (NCDs) and their risk factors are often included as topics of interest¹⁻³⁾. Nowadays, non-communicable diseases contribute greatly to the burden of disease, and physical inactivity is one of the leading risk factors for NCDs, making its promotion a global health priority^{2,3)}. Over the last decades, physical inactivity has rapidly

reached pandemic proportions both in high and low and middle-income countries. Therefore, tracking this risk factor and making efforts to improve the population's physical activity levels was established as a worldwide priority⁴⁾.

Despite its importance there was no observatory dedicated exclusively to monitor physical activity worldwide. In 2012, a physical activity observatory was launched in response to this urgent call for action: The Lancet Physical Activity Observatory⁵⁾.

What is The Lancet Physical Activity Observatory?

The Lancet Physical Activity Observatory as a council of the International Society of Physical Activity and Health (ISPAH), is an initiative launched in 2012 after the physical inactivity pandemic was

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described in the 2012 Lancet Series of Physical Activity⁴). It was created as a website and is directed and managed by physical activity epidemiologists and public health researchers. This website includes adult physical activity data and statistics from 219 countries around the world (the World Bank's countries list in addition to Palestine, Scotland, Wales and Northern Ireland).

Why a worldwide physical activity observatory?

A worldwide response to a worldwide problem. The rationale of creating a physical activity observatory was to provide information that allowed countries to determine which were their needs and opportunities to initiate or improve standardized data collection, surveillance systems, policy making, program development and evaluation in the area of physical activity. This will allow the countries to react determining their strengths and will assist in setting the action plan to improve their weaknesses. It is not enough to determine each of the country's physical activity status, but it is mandatory to observe and follow them closely to encourage improvements and obtain results in the population's physical activity level.

What are the goals of The Lancet Physical Activity Observatory?

The Observatory defined four primary goals to be achieved by 2016. As defined in The Lancet editorial that was published when the Observatory was launched⁵):

- 1) Reduce the global prevalence of inactivity in adults from 31% to 28%.
- 2) Increase the prevalence of adolescents who engage in at least 60 min per day of moderate-to-vigorous intensity physical activity from 21% to 24%.
- 3) Reduce by 10% the proportions of coronary heart disease, type 2 diabetes, breast cancer, colon cancer, and premature deaths worldwide that are attributable to physical inactivity.
- 4) Increase by 10% the proportion of peer-reviewed

scientific publications on physical activity that come from low-income and middle-income countries among the total number of publications worldwide.

Specific research, policy and surveillance objectives were also established. In research, the focus will be on increasing the number of indexed articles and studies in the area of physical activity promotion and about the association between physical inactivity and non-communicable diseases in low- and middle-income countries, using other study types besides cross sectional studies.

Policy goals include increasing the number of countries with a formally adopted and functional plan or strategy to improve physical activity at the regional, urban, and town level and reduce sedentary behavior patterns. Increasing government funding opportunity and multi-sectorial partnerships steering the implementation physical activity strategies.

In relation to surveillance, the focus will be on using standardized measurements of physical activity like questionnaires and accelerometers.

What are the physical activity country cards?

To meet its purpose, during 2014, the Observatory using a standardized methodology gathered physical activity data and statistics from 219 countries.

In order to present the information in an organized fashion, country specific physical activity profiles were created and called: the country cards of physical activity.

The cards have the same sources of information like the World Health's organization Global Health Observatory Data, World Bank, CIA's World Factbook, United Nations, The Lancet 2012 Physical Activity Series and PubMed among others. Besides the sources of information, in order to ensure comparability among countries the cards include a common set of indicators. See table 1.

Also from these data, a ranking comparing the countries was built to show each of the countries position in relation to contribution to physical activity research (publications and researchers) in the year of interest.

Therefore, the Observatory will provide each of the

Table 1 Country cards indicators

General information	Country capital
	Inhabitants
	Life expectancy
	GINI inequality index
	Human development index
	Literacy rate
	Deaths by non-communicable diseases
	Deaths related to physical inactivity
Policy	Availability of a national or sub-national physical activity plan
Surveillance	Existence of a national survey that includes physical activity questions and the first, most recent and next survey
	Prevalence of physical inactivity among adults (18+years)
Research	Number of articles related to physical activity and public health - PubMed search in 2013
	Number of active researchers in the field - PubMed search in 2013
	Average connections among authors (shared authorship in papers)
	Articles per million people
	Researchers per million people
	Identified publishing groups
	Country contribution to physical activity publications - PubMed search in 2013

countries with a full set of carefully selected and comparable indicators, including the most recent local data per year starting in 2013 and with a new set of cards released every 2 years.

The cards are meant to be a dynamic tool that can be transformed and adjusted in order to help countries meet their goals in physical activity promotion. Therefore, consultation periods will be conducted to plan and decide the need for improvements in each set of cards. It is important to mention that the fundamental indicators won't change in order to ensure comparability between the sets of cards over time.

The cards were developed by the Observatory team and then submitted for public online consultation during one month. The cards were posted in the Observatory's website www.lancetphysicalactivity-observatory.com in August 2014. After the consultation period ended the cards were revised according to the comments received from over 50 people representing more than 20 countries. As soon as the

2013 cards are launched a new consultation period about the indicators and layout for the second round of cards will start.

The Observatory's expectation is that these country cards become an evaluation and advocacy tool helping governments, researchers and society to improve their health status through physical activity. The complete set of country cards and the general summary will be launched annually as: the World's physical activity statistics.

How does The Lancet Physical Activity Observatory review each of the country cards information validity?

After the standardized draft of the country cards for every country around the world was finished, a potential contact in every country was identified and invited to be the country contact using a formal invitation. This invitation mentions that the contacts

will be acknowledged in the website as contact person for their countries, and that they will own the cards with the Observatory. They are all invited to translate the card into their languages and use it for research and advocacy purposes. There are no costs associated with taking part in the Observatory.

For the Observatory it is very important to have local experts to critically review the card in order to determine if the most recent and accurate information available is presented. Also, contacts are free to engage other representatives from their country and create working groups in order to meet the goal of reflecting the country's physical activity status as best as possible. The period to review the card is 21 days and after the review the cards are ready to launch.

How can The Lancet Physical Activity Observatory assist in physical activity promotion?

The annual set of country cards is the main Observatory's tool to assist the countries in physical activity promotion. The country cards bring together general demographic data and main physical activity indicators and statistics compiled using a standardized methodology.

Through its 219 country cards contacts, a worldwide network will be created. This collaborating network will be able to provide countries technical support in order to improve surveillance, policy and research indicators locally. Therefore all the countries will receive support and will be able to develop skills around context-specific needs (local capacity building). Also the successful experiences and lessons in physical activity promotion, surveillance, policy, measurement methods and research will be shared among members, creating global and regional partnerships.

This dynamic will encourage the country contacts to become physical activity advocates. The goal is that every country gets the required tools to be able to produce and provide physical activity information according to standardized methodologies and with validated tools.

The Observatory as the manager of the country cards will be able to summarize worldwide physical

activity information in order to place physical activity promotion higher in the public health agenda. Also, many training, research and collaboration opportunities will be provided. The Observatory's contacts are encouraged to assist to a session on the country cards in the Thailand ISPAH meeting in 2016.

Who is the target audience of The Lancet Physical Activity Observatory?

The country cards were designed to be understood at all levels. Therefore, the audience of the Observatory includes any person or organization interested in physical activity, from general public to policy makers, surveillance and government leaders, researchers, academic institutions, professional associations and international agencies.

Which are the preliminary results of The Lancet Physical Activity Observatory?

In 2.5 months of active contact search, the Observatory was able to get 116 confirmed contacts corresponding to 52% of the countries. From this collaboration 57 cards are ready to launch. Also the cards are available in 16 languages (English, Spanish, Portuguese, German, French, Arabic, Japanese, Chinese, Rumanian, Polish, Dutch, Greek, Czech, Swedish, Macedonian, Greenlandic).

The cards will be launched in the Observatory's website which was also adjusted to be able to provide as much information of the Observatory as possible and also to complement the cards. Each of the countries will have a page in the website that will include local data, contact information and the translated card.

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