The Lancet Global Health: Globally, more than 1.4 billion adults are at risk of disease from not doing enough physical activity

- **No improvement in global levels of physical activity since 2001.**
- **Worldwide, around 1 in 3 women and 1 in 4 men do not do enough physical activity to stay healthy.**
- **Levels of insufficient physical activity are more than twice as high in high-income countries compared to low-income countries, and increased by 5% in high-income countries between 2001 and 2016.**
- **The highest rates of insufficient activity in 2016 were found in adults in Kuwait, American Samoa, Saudi Arabia, and Iraq where more than half of all adults were insufficiently active. Comparatively, around 40% of adults in the USA, 36% in the UK, and 14% in China were insufficiently active.**

More than a quarter (1.4 billion) of the world’s adult population were insufficiently active in 2016, putting them at greater risk of cardiovascular disease, type 2 diabetes, dementia, and some cancers, according to the first study to estimate global physical activity trends over time. The study was undertaken by researchers from the World Health Organization (WHO) and published in The Lancet Global Health journal.

Together, these estimates demonstrate that there has been little progress in improving physical activity levels between 2001 and 2016. The data show that if current trends continue, the 2025 global activity target of a 10% relative reduction in insufficient physical activity will not be met.

“Unlike other major global health risks, levels of insufficient physical activity are not falling worldwide, on average, and over a quarter of all adults are not reaching the recommended levels of physical activity for good health,” warns the study’s lead author, Dr Regina Guthold of the WHO, Switzerland. [1]

In 2016, around one in three women (32%) and one in four men (23%) worldwide were not reaching the recommended levels of physical activity to stay healthy – ie, at least 150 minutes of moderate-intensity, or 75 minutes of vigorous-intensity physical activity per week.

The new study is based on self-reported activity levels, including activity at work and at home, for transport, and during leisure time, in adults aged 18 years and older from 358 population-based surveys in 168 countries, including 1.9 million participants.

Among the study’s main findings were:
- In 2016, levels of insufficient activity among adults varied widely across income groups – 16% in low-income countries compared to 37% in high-income countries.
- In 55 (33%) of 168 countries, more than a third of the population was insufficiently physically active.
- In four countries, more than half of adults were insufficiently active – Kuwait (67%), American Samoa (53%), Saudi Arabia (53%), and Iraq (52%).
- Countries with the lowest levels of insufficient physical activity in 2016 were Uganda and Mozambique (6% each).
- Women were less active than men in all regions of the world, apart from east and southeast Asia. In 2016, there was a difference in levels of insufficient activity between women and men of 10 percentage points or more in three regions: South Asia (43% vs 24%), Central...
Asia, Middle East and north Africa (40% vs 26%), and high-income Western countries (42% vs 31%).

- Across regions, many individual countries recorded large differences in insufficient activity between women and men. Examples include Bangladesh (40% vs 16%), Eritrea (31% vs 14%), India (44% vs 25%), Iraq (65% vs 40%), Philippines (49% vs 30%), South Africa (47% vs 29%), Turkey (39% vs 22%), the USA (48% vs 32%), and the UK (40% vs 32%).

“Addressing these inequalities in physical activity levels between men and women will be critical to achieving global activity targets and will require interventions to promote and improve women’s access to opportunities that are safe, affordable and culturally acceptable,” said co-author Dr Fiona Bull from WHO, Geneva [1].

From 2001-2016, substantial changes in insufficient physical activity levels were recorded in multiple regions. Key findings include:

- The regions with the highest increase in insufficient activity over time were high-income Western countries (from 31% in 2001 to 37% in 2016), and Latin America and the Caribbean (33% to 39%). Countries from these regions driving this trend include Germany, New Zealand, the USA, Argentina, and Brazil.
- The region with the largest decrease in insufficient activity was east and southeast Asia (from 26% in 2001 to 17% in 2016), which was largely influenced by uptake of physical activity in China, the most populated country in the region.
- There has been an increase of 5% in prevalence of insufficient activity in high-income countries, from 32% in 2001 to 37% in 2016. In comparison, there has been an average rise of just 0.2% amongst low-income countries (16.0% to 16.2%).

In wealthier countries, the transition towards more sedentary occupations, recreation and motorised transport could explain the higher levels of inactivity, while in lower-income countries, more activity is undertaken at work and for transport, according to the authors. While declines in occupational and domestic physical activity are inevitable as countries prosper, and use of technology increases, governments must provide and maintain infrastructure that promotes increased walking and cycling for transport and active sports and recreation.

“Regions with increasing levels of insufficient physical activity are a major concern for public health and the prevention and control of noncommunicable diseases (NCDs),” says Dr Guthold [1].

“Although a recent NCD policy survey showed that almost three quarters of countries report having a policy or action plan to tackle physical inactivity, few have been implemented to have national impact. Countries will need to improve policy implementation to increase physical activity opportunities and encourage more people to be physically active. Governments have recognized the need for action by endorsing the WHO Global Action Plan on Physical Activity (2018-2030),” says Dr Bull. [1][2]

The action plan, titled *More active people for a healthier world*, launched in June 2018, recommends a set of 20 policy areas, which, combined, aim to create more active societies through improving the spaces and places for physical activity as well as increasing programs and opportunities for people of all ages and abilities to do more walking, cycling, sport, active recreation, dance and play. The plan is a road map for the actions needed by all countries to reduce insufficient physical activity in adults and adolescents. [3]
The study’s release comes ahead of the Third United Nations General Assembly High-level Meeting on NCDs and their risk factors, including physical inactivity, being held on 27 September 2018 in New York.

Writing in a linked Comment, Dr Melody Ding from the University of Sydney in Australia discusses the important policy implications of the study, and says: “The gender gap in physical activity, particularly in central Asia, Middle East and North Africa and South Asia reveals a health equity issue where women face more environmental, social and cultural barriers to participate in physical activity, particularly in their leisure time... Although high-income countries have a higher prevalence of insufficient physical activity, it is important to note that low- and middle-income countries still bear the larger share of the global disease burden of physical inactivity. Furthermore, economic development and urbanisation lead to lifestyle and epidemiological transitions, characterised by increasing prevalence of physical inactivity and subsequent burdens from chronic diseases, as observed in China and Brazil. While declines in occupational and domestic physical activity are inevitable, it is essential to incentivise transport and leisure-time physical activity in emerging economies through improving public and active transportation infrastructure, promoting social norms for physical activity through mass sports and school-level participation, and implementing sustainable programs at scale that could yield economic, environmental, and social co-benefits while promoting physical activity.”

NOTES TO EDITORS:

[1] Quotes direct from authors and cannot be found in the text of the Article.

The estimates will be made available in the WHO Global Health Observatory where they can be downloaded http://www.who.int/gho/ncd/risk_factors/physical_activity/en/

The labels have been added to this press release as part of a project run by the Academy of Medical Sciences seeking to improve the communication of evidence. For more information, please see: http://www.sciencemediacentre.org/wp-content/uploads/2018/01/AMS-press-release-labelling-system-GUIDANCE.pdf if you have any questions or feedback, please contact The Lancet press office pressoffice@lancet.com

Full study https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(18)30357-7/fulltext

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