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# Physical activity levels in Bangladeshi adults: results from STEPS survey 2010

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## Abstract

**Objectives—**Physical inactivity is an established risk factor for non-communicable diseases (NCD) and identified as the major public health concern worldwide. However, nationally representative and internationally comparable data on physical activity (PA) are lacking in Bangladesh. The objective of this paper was to determine nationally representative prevalence of PA levels among Bangladeshi adults.

**Study design—**Cross-sectional survey.

**Methods—**Data, on PA for this paper, were analysed from the NCD risk factors survey 2010 in Bangladesh. A standardized approach known as STEPS (STEPSwise approach to Surveillance for NCD risk factors) was followed for this survey. A total of 9275 adults (aged ≥ 25 years) were interviewed. Data on PA were processed and analysed according to Global Physical Activity Questionnaire (GPAQ) version 2 analysis framework.

**Results—**Of total 9275 respondents 4312 were men and 4963 women with a mean age of 42.4 (±13.5) years. Median MET-minutes of total PA in a typical week was double in rural areas (3360) than urban (1680) areas. The overall country wide prevalence of low PA was 34.5% (95%



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***Ethical approval***

Obtained from Bangladesh Medical Research Council.

***Competing interest***

The authors alone are responsible for views expressed in this article and they do not necessarily represent the views, decisions or policies of the institutions with which they are affiliated.

***Authors' contributions***

M: Carried out data processing, treatment and analyses on physical activity and write up the manuscript.
MMZ: Designed the main survey, conceptualized the manuscript and critically review it. He is the guarantor of the study.
MSI: Involved in designing, guided data management and interpretation of data.
HAMNA: Implemented the survey, trained the field team and involved in drafting the manuscript.
HK: Implemented the survey, oversaw the quality control measure and involved in the final draft of manuscript.
RY: Implemented the survey and involved in drafting the manuscript.


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confidence interval, 33.5–35.5), urban 37.7% (36.3–39.1) and rural 31.6% (30.3–32.9). Women in general were more inactive (women, 53.6% [52.2–55.0], men 15.4% [14.9–17.1]). The main contributions to total PA were from work (urban 47.0%, rural 61.0%), and active commuting (38.0%, 30.0%) domains. Leisure-time PA represented only a small proportion (15.0%, 9.0%).

**Conclusions—**Insufficient physical activity is highly prevalent among the Bangladeshi adult population. Promoting overall PA at leisure-time and commuting considering country context can be feasible options with special attention to the women.

### Keywords

Physical inactivity; Metabolic equivalent tasks (MET); Global physical activity questionnaire (GPAQ); Physical activity; Bangladeshi adults

## Introduction

Physical activity (PA) is now a topic of global discussion in the contemporary healthcare market, specifically in the context of non-communicable diseases (NCDs) prevention and health promotion because of its very vital role in both primary and secondary prevention.1–3 A large number of epidemiological studies show the evidence that regular PA is associated with decreased risk of coronary heart disease,3–7 hypertension,4,8,9 stroke,10 type 2 diabetes mellitus,4,11,12 certain cancer,4,13,14 chronic obstructive pulmonary diseases15 and obesity.4,16–18 PA helps to enhance the quality of life for people of all ages and abilities.19 Physical inactivity, on the other hand, is indicated as the major public health concerns all over the world.20–25 It has been identified as the independent and fourth leading risk factor for global mortality which accounts 6.0% (3.2 million) of deaths in 2008.26 However, recent evidence shows that physical inactivity causes 9.0% (5.3 million) of annual deaths worldwide and 6–10.0% of deaths caused by non-communicable diseases are attributed to physical inactivity.27 Physical inactivity levels are rising in both developed and developing countries with major implications for increases in the prevalence of non-communicable diseases and the general health of the population worldwide.28–34 Recent estimates indicate that the worldwide prevalence of physical inactivity in adults is 31.0%.29,35,36 Data from 76 countries, most of which were from developing countries, showed that the prevalence of physical inactivity among individuals aged 15 years or older ranged from 2.6% to 62.3%.31 The existing data suggests that physical inactivity is already a global public health problem and increasing rapidly in developing countries. However, many developing countries have a lack of data on PA levels in their population.37 Bangladesh is one of the developing countries where nationally representative and internationally comparable data on PA levels are still inadequate. Therefore, the objectives of this paper were to provide nationally representative prevalence of PA levels in Bangladesh, and explore difference in PA levels between adults living in urban vs rural settings in Bangladesh.

## Methods

Data, on PA for this paper, were analysed from the NCD risk factors survey 2010 in Bangladesh. This national survey was conducted by standardized approach devised by WHO known as STEPS (STEPwise approach to Surveillance) for NCD risk factors.38 Details of





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the methods have been described elsewhere.39 Briefly, this survey was conducted among a Bangladeshi adult population aged 25 years or older. A total of 9275 (response rate 93.3%) individuals were interviewed. Samples were drawn from 398 randomly selected primary sampling units from rural and urban areas of Bangladesh. People of eligible age who stayed in the household the night before the day of survey were listed. One individual per household was recruited by using Kish method.40 The STEPS questionnaire for the survey was translated into Bengali and entered to a personal data assistant for electronic collection. Data were transferred to the National Data Center through secured system of file transfer protocol server on daily basis.

## Measurement of PA

Data on PA were collected through a face-to-face interview by using the Global PA Questionnaire Version 2 (GPAQ: 2). It was developed by the World Health Organization for PA surveillance and is used for measuring PA levels. The GPAQ-2 contains 16 questions on frequency (days) and duration (minutes/hours) of moderate and vigourous intensity PA in three settings (or domains: work, transportation, and recreation) and on sedentary behaviour; questions are asked in terms of behaviour in a typical or usual week.41 The GPAQ-2 analysis protocol was followed for all data collection and processing and analysis.41

**Conversion of PA data to estimated energy expenditure—**METs (Metabolic Equivalent Tasks) are commonly used to express the intensity of PA. A MET is the ratio of specific PA metabolic rates to the resting metabolic rate, with one MET defined as the energy cost of sitting quietly (equivalent to a caloric consumption of 1 kcal/kg/hour).41

For this study, energy expenditure was estimated based on the duration, intensity and frequency of PA performed in a typical or usual week. The unit for measuring PA energy expenditure, Metabolic Equivalent (MET), was applied to PA variables derived from the GPAQ-2.

MET values and formulas for computation of MET minutes are based on the intensity of specific PA. It is estimated that, compared to sitting quietly, a person's caloric consumption is four times higher when being moderately active, and eight times higher when being vigorously active.

Therefore, when calculating a person's overall energy expenditure using GPAQ-2, moderate-intensity activities during work, commuting and recreation are assigned a value of 4 METs; vigorous-intensity activities are assigned a value of 8 METs. The total PA score is computed as the sum of all MET/minutes/week from moderate-to vigorous-intensity PA performed in work, commuting and recreation.41

So for the calculation of a person's overall energy expenditure using GPAQ-2 data, the above mentioned MET values were used.41

**Procedures of classifying PA levels—**For the calculation of a categorical indicator, the total time spent in PA during a typical week, the number of days as well as the intensity of the PA was taken into account. A person's normal level of PA was classified as low,

moderate, and high as defined by the GPAQ analysis framework.41 The criteria of these levels are shown below-

High: A person reaching any of the following criteria:

- **(a)** Vigorous-intensity activity on at least three days and accumulating at least 1500 MET-minutes/week OR
- **(b)** Seven or more days of any combination of walking, moderate- or vigorous-intensity activities accumulating at least 3000 MET-minutes/week.

Moderate: A person not meeting the criteria for the 'High' category, but meeting any of the following criteria is classified in this category:

- **(a)** Three or more days of vigorous-intensity activity of at least 20 min per day OR
- **(b)** Five or more days of moderate-intensity activity and/or walking of at least 30 min per day OR
- **(c)** Five or more days of any combination of walking, moderate- or vigorous-intensity activities accumulating at least 600 MET minutes/week.

Low: A person not meeting any of the above mentioned criteria falls in this category. No activity is reported or some activity is reported but not enough to meet high and moderate categories.

### Data analysis

The prevalence of PA levels and other categorical variables are reported as proportions with 95% confidence interval (CI). Continuous variables, such as time spent in PA, are summarized with means, medians and inter-quartile ranges. Data were analysed using SPSS version 16.0.

### Ethical considerations

Before the interview, written (or thumb impression) was obtained as appropriate. International ethical guidelines for biomedical research involving human subjects were followed throughout the study.42

## Results

### Sociodemographic characteristics

Of the 9275 respondents (urban − 4629, rural − 4646), 4312 (46.5%) were men. The mean age of respondents was 42.4 (±13.5) years. They had median three years of schooling. One-quarter of men were farmers, another quarter were labourers (agriculture, industrial or otherwise), and one-tenth was salary men in non-public sectors. In women, 83.0% were home makers. Almost 90.0% of the participants were Muslim. Detailed descriptions have been mentioned elsewhere.39

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### Time (in minutes) spent by the respondents in work, transport and recreation-related PA in a typical week

Based on quartile distribution, at least 50.0% of the respondents spent less than 150 min PA in each work, transport and recreation domain in a typical week expect work domain in rural areas. Counting all domains, on an average a person's total PA time was found more in rural areas (1242 min) than the amount found in urban areas (931 min). In general younger and productive age groups were found to spend relatively more time for work related PA and the trend is persistent across other domains (Table 1).

### Sex specific time (in minutes) spent by the respondents of urban and rural areas in doing PA in a typical week

In general, on average men were found to spend three-fold more time doing PA than women in both urban and rural areas. Based on quartile distribution, at least 25.0% of women were found doing no PA in both urban and rural areas. Overall both sexes in rural areas spent more time in PA than their counter part in urban areas (Table 2).

### Distribution of total PA MET-minutes in a typical week by area of residence

Based on quintile distribution, the median MET-minutes of total PA per week was double in rural areas than urban areas, and inter-quartile rage found wider in rural areas than urban areas (Fig. 1).

### Composition of total PA in urban and rural areas

Work and transportation domains were the major contributors to the composition of total PA in both urban and rural areas. About two-thirds of the total activity in rural areas was contributed by work-related activity (61.0%) followed by commuting (30.0%) and recreational activity (9.0%), whereas in urban areas the composition was work-related activity (47.0%), commuting (38.0%) and recreational activity (15.0%) as shown in Fig. 2.

### Prevalence of PA levels (low, moderate and high) in urban and rural areas

According to the GPAQ-2 classification, the prevalence of low PA level was found more in urban areas (37.7%) than rural areas (31.6%). The prevalence of moderate level of PA was found more in rural (52.4%) than urban areas (39.2%). However, the prevalence of high PA level was higher in urban areas (23.1%) compared to the prevalence found in rural areas (16.0%).

The country wide prevalence of PA levels was low 34.5% (95% CI, 33.5–35.5), moderate 46.0% (45.0–47.0) and high 19.5% (18.7–20.3) (Table 3).

## Discussion

This is the first ever nationally representative and internationally comparable data on PA in Bangladesh which stands limited in many developing countries. Policy makers are currently interested in addressing PA as one of the priority intervention strategies to achieve nine voluntary global targets for prevention and control of NCDs by 2025.43 Although this

survey was done in 2010, the national benchmark for Bangladesh is yet to be set out for achieving targets on PA indicator.

This paper also caries high importance for many developing countries especially those who are passing through epidemiological transition having impact on lifestyles. PA data using GPAQ are yet to be made available in many of these countries. This report will help them conceptualizing PA measurements that would be internationally comparable. This study has set an example that GPAQ is a feasible option in low resource settings.

In this study, our estimate for prevalence of physical inactivity among Bangladeshi adults is 34.5%, which is similar to global estimate (31.0%).29,35,36 This estimate is also comparable and found similar to many other low- and middle-income countries that participated in large scale multinational prevalence studies.30,31,33,37

Because the population in Bangladesh is large, one-third of whom are physically inactive accounts a huge number. Therefore it has merited not only increased health risk but also social burden as well as developmental issues. This increased prevalence can be explained by the shifting towards urbanization and industrialization in lower income countries from agricultural labour. It implies a reduction in energy expenditure with changes in lifestyle to sedentary pattern44 and thus changes occur in PA patterns. Moreover, currently the developing countries like Bangladesh have been experiencing rapid changes in the social and economic landscapes with profound effects of urbanization, workforce structure and lifestyle patterns.45–47

Changes in the socio-economic environment have also resulted in the overall shifting of the population from active work-related PA and commuting to sedentary lifestyle.47–49 On the other hand, participation in recreational activity is not yet common in many developing countries which substantially have further increased the prevalence of overall physical inactivity.32,50

In this study, in general men are more active in doing physical activities compared to women in both urban and rural areas (Tables 2 and 3). This finding is the case in most countries (80.0%) of WHO Regions.29,31 PA at work and transport domains are the main contributors to total PA among study populations (Fig. 2). Leisure-time activity contributed only 9.0% in rural and 15.0% in urban areas. These findings are also in line with many low- and middle-income countries where work and transport-related activities are the prime contributors to overall PA.30–33,51 Nonetheless, in some developed countries leisure-time PA is a major component of total PA instead.30,52 This may be due to favourable infrastructure and accessibility to sports or recreational facilities and a history of long term promotion of exercise.

Many people in Bangladesh spend a significant amount of time and energy doing hard PA for their livelihood. This leads to a very thin body mass.53 In our sample, one-quarter of people were thin (body mass index <18.5 $kg/m^2$). Leisure time PA is not popular in Asian culture in many countries especially in rural settings.33 Therefore it is a challenge to design pragmatic strategies for them to promote leisure time PA in Bangladesh. However, promoting PA at leisure time and commuting can be a feasible intervention for urban

dwellers especially for women and richer segments of the society. In this study, women reported more than three-fold physical inactivity compared to men. Therefore an innovative strategy for uplifting PA of women without conflicting with social and religious norms is required. Non-health sectors have a major role in promoting PA in such cases. Collaboration with local governments (city corporations, and municipalities), ministry of education, mass transportation, roads and highways etc. is necessary to promote PA. Removal of environmental barriers (such as lack of play grounds, parks, walkable footpaths, safe roads for bicycles, etcetera) to PA will play a critical role.

We acknowledge that a recall bias might have influenced the findings of this study. This includes categorization of vigorous and moderate activities, and the duration of such activities they had. Therefore chances of under- or over-reporting of PA level cannot be over ruled with certainty.

To conclude, low level of PA is highly prevalent among Bangladeshi adult population. One in three adults is insufficiently physically active. The results of this paper, at national level, will focus the necessity of PA intervention at population level for the primary prevention of NCDs and will give the baseline information about the PA levels of adult population in Bangladesh. It will help the policy-makers at national level to develop the national guideline for PA. Promoting overall PA level at leisure-time and commuting can be feasible options with special attention to the women.

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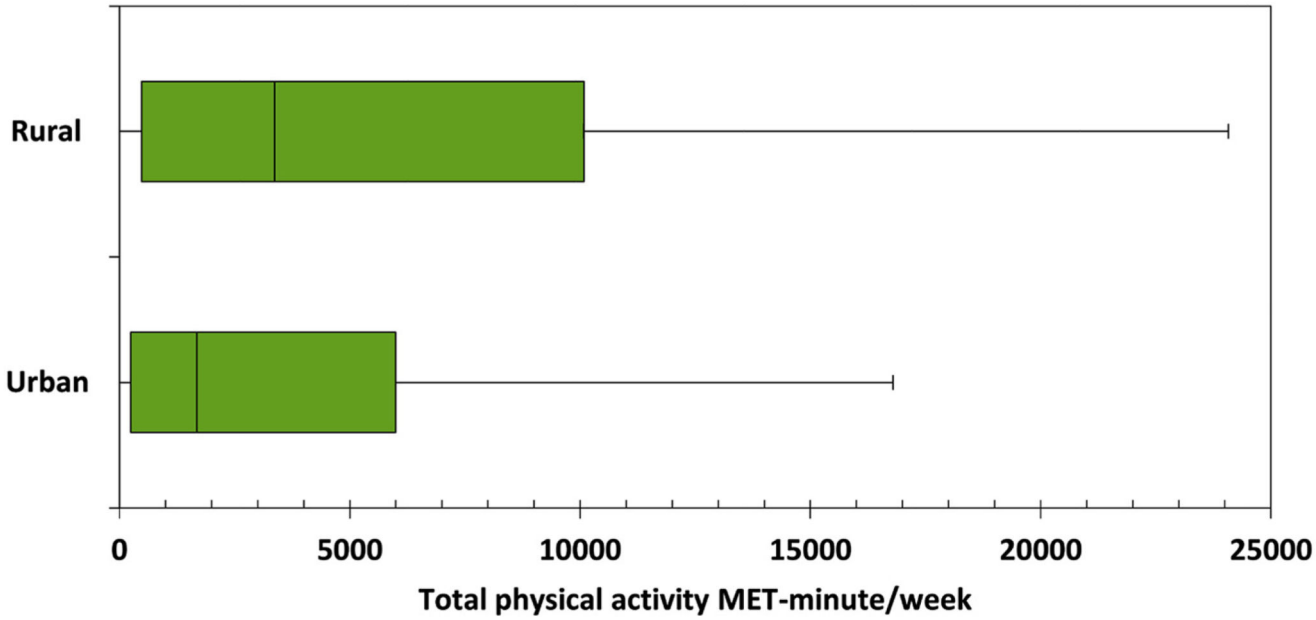


**Fig. 1. Distribution of total physical activity MET-minutes in a typical week by area of residence.**

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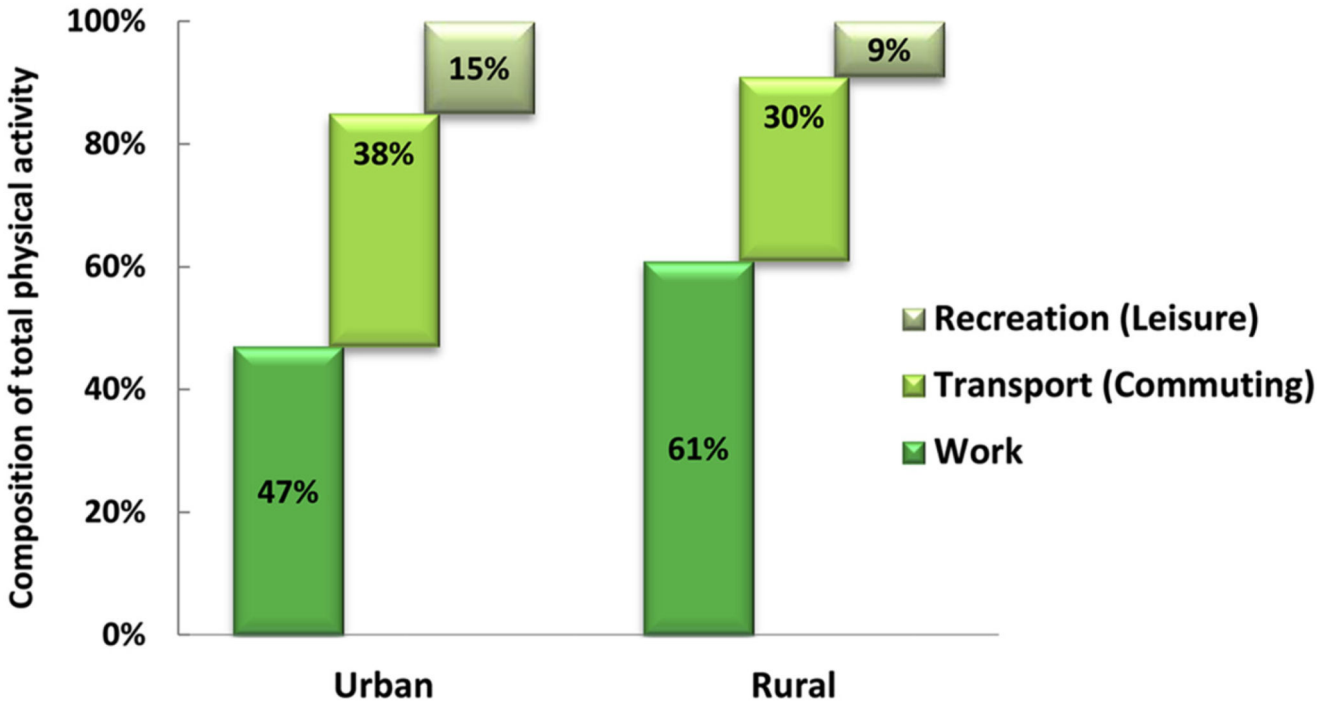


**Fig. 2. Composition of total physical activity (%) in urban and rural areas.**

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**Table 1**

**Time (in minutes) spent by the respondents of urban and rural areas in work, transport and recreation-related physical activity in a typical week.**

| Domains | | Urban areas | | | | | | Rural areas | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Age groups (yrs) | 25–34 | 35–44 | 45–54 | 55–64 | ≥65 | All ages | 25–34 | 35–44 | 45–54 | 55–64 | ≥65 | All ages |
| | | (*n* = 1694) | (*n* = 1291) | (*n* = 887) | (*n* = 479) | (*n* = 278) | (*n* = 4629) | (*n* = 1470) | (*n* = 1240) | (*n* = 960) | (*n* = 536) | (*n* = 407) | (*n* = 4646) |
| Working | Mean | 712 | 695 | 753 | 549 | 280 | 672 | 962 | 1003 | 1128 | 828 | 541 | 952 |
| | Median | 0 | 0 | 30 | 0 | 0 | 0 | 300 | 420 | 480 | 165 | 0 | 300 |
| | (25th, 75th) | (0, 1050) | (0, 960) | (0, 1080) | (0, 600) | (0, 60) | (0, 900) | (0, 1680) | (0, 1725) | (0, 2100) | (0, 1440) | (0, 600) | (0, 1680) |
| Transport (commuting) | Mean | 190 | 221 | 229 | 232 | 216 | 209 | 221 | 240 | 301 | 301 | 261 | 255 |
| | Median | 70 | 80 | 80 | 50 | 15 | 70 | 40 | 60 | 120 | 140 | 90 | 70 |
| | (25th, 75th) | (0, 300) | (0, 360) | (0, 420) | (0, 420) | (0, 360) | (0, 360) | (0, 420) | (0, 420) | (0, 622) | (0, 622) | (0, 420) | (0, 420) |
| Recreation (leisure) | Mean | 43 | 51 | 62 | 55 | 125 | 49 | 34 | 37 | 33 | 41 | 33 | 35 |
| | Median | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | (25th, 75th) | (0, 0) | (0, 0) | (0, 45) | (0, 0) | (0, 0) | (0, 0) | (0, 0) | (0, 0) | (0, 0) | (0, 0) | (0, 0) | (0, 0) |
| All domains | Mean | 945 | 958 | 1044 | 836 | 522 | 931 | 1216 | 1279 | 1462 | 11,691 | 835 | 1242 |
| | Median | 360 | 420 | 450 | 385 | 180 | 390 | 600 | 755 | 885 | 695 | 350 | 720 |
| | (25th, 75th) | (45, 1440) | (80, 1350) | (120, 1470) | (16, 980) | (0, 720) | (60, 1290) | (89, 1920) | (140, 2160) | (180, 2520) | (90, 1897) | (0, 1080) | (105, 2070) |

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**Table 2**

**Sex specific time (in minutes) spent by the respondents of urban and rural areas in doing physical activity in a typical week.**

| Sex | | Urban areas | | | | | | Rural areas | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Age groups (yrs) | 25–34 | 35–44 | 45–54 | 55–64 | ≥65 | All age | 25–34 | 35–44 | 45–54 | 55–64 | ≥65 | All age |
| | | (*n* = 1694) (m = 635, w = 1059) | (*n* = 1291) (m = 582, w = 709) | (*n* = 887) (m = 480, w = 407) | (*n* = 479) (m = 286, w = 193) | (*n* = 278) (m = 192, w = 86) | (*n* = 4629) (m = 2175, w = 2454) | (*n* = 1470) (m = 537, w = 933) | (*n* = 1240) (m = 494, w = 746) | (*n* = 960) (m = 491, w = 469) | (*n* = 536) (m = 299, w = 237) | (*n* = 407) (m = 316, w = 124) | (*n* = 4646) (m = 2137, w = 2509) |
| Women | Mean | 509 | 518 | 462 | 374 | 214 | 483 | 613 | 777 | 692 | 480 | 387 | 653 |
| | Median | 140 | 180 | 180 | 75 | 0 | 150 | 210 | 360 | 225 | 120 | 0 | 210 |
| | (25th, 75th) | (0, 530) | (0, 545) | (0, 500) | (0, 420) | (0, 180) | (0, 490) | (0, 840) | (45, 1080) | (0, 930) | (0, 600) | (0, 217) | (0, 870) |
| Men | Mean | 1673 | 1493 | 1538 | 1147 | 660 | 1436 | 2264 | 2037 | 2197 | 1715 | 1010 | 1934 |
| | Median | 1100 | 870 | 840 | 600 | 360 | 840 | 2100 | 1842 | 1920 | 1340 | 630 | 1675 |
| | (25th, 75th) | (420, 2880) | (307, 2355) | (363, 2572) | (240,1800) | (0, 840) | (310, 360) | (867, 3407) | (757, 3247) | (840, 3360) | (600, 2700) | (142, 1502) | (720, 3105) |
| Both | Mean | 945 | 958 | 1044 | 836 | 522 | 931 | 1216 | 1279 | 1462 | 11,691 | 835 | 1242 |
| | Median | 360 | 420 | 450 | 385 | 180 | 390 | 600 | 755 | 885 | 695 | 350 | 720 |
| | (25th, 75th) | (45, 1440) | (80, 1350) | (120, 1470) | (16, 980) | (0, 720) | (60, 1290) | (89, 1920) | (140, 2160) | (180, 2520) | (90, 1897) | (0, 1080) | (105, 2070) |

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**Table 3**

**Prevalence of physical activity levels in urban and rural area,% (95% CI).**

| Sex | Age (yrs) | Urban | | | | Rural | | | | Overall | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *n* | Low | Moderate | High | *n* | Low | Moderate | High | *n* | Low | Moderate | High |
| Men | 25–34 | 635 | 12.6 (10.0–15.2) | 66.1 (62.4–69.8) | 21.3 (18.1–24.5) | 537 | 7.8 (5.5–10.1) | 82.5 (79.3–85.7) | 9.7 (7.2–12.2) | 1172 | 10.4 (8.7–12.1) | 73.6 (71.1–76.1) | 16.0 (13.9–18.1) |
| | 35–44 | 582 | 16.3 (13.3–19.3) | 62.7 (58.8–66.6) | 21.0 (17.7–24.3) | 494 | 11.3 (8.5–14.1) | 76.3 (72.6–80.0) | 12.3 (9.4–15.2) | 1076 | 14.0 (11.9–16.1) | 69.0 (66.2–71.8) | 17.0 (14.8–19.2) |
| | 45–54 | 480 | 13.5 (10.4–16.5) | 63.1 (58.8–67.4) | 23.3 (19.5–27.1) | 491 | 7.1 (4.8–9.4) | 82.7 (79.4–86.0) | 10.2 (7.5–12.9) | 971 | 10.3 (8.4–12.2) | 73.0 (70.2–75.8) | 16.7 (14.4–19.0) |
| | 55–64 | 286 | 21.0 (16.3–25.7) | 50.3 (44.5–56.1) | 28.7 (23.5–33.9) | 299 | 12.7 (8.9–16.5) | 71.9 (66.8–77.0) | 15.4 (11.3–19.5) | 585 | 16.8 (13.8–19.8) | 61.4 (57.5–65.3) | 21.9 (18.5–25.3) |
| | ≥65 | 192 | 37.5 (30.6–44.3) | 34.9 (28.2–41.6) | 27.6 (21.3–33.9) | 316 | 30.1 (25.0–35.2) | 47.2 (41.7–52.7) | 22.8 (18.2–27.4) | 508 | 32.9 (28.8–37.0) | 42.5 (38.2–46.8) | 24.6 (20.9–28.3) |
| | ≥25 (Crude) | 2175 | 17.1 (15.5–18.7) | 59.7 (57.6–61.8) | 23.2 (21.4–25.0) | 2137 | 12.4 (11.0–13.8) | 74.4 (72.5–76.3) | 13.1 (11.7–14.5) | 4312 | 14.8 (13.7–15.9) | 67.0 (65.6–68.4) | 18.2 (17.0–19.4) |
| | ≥25 (age standardized)[a] | 2175 | 18.5 (16.9–20.1) | 57.9 (55.8–60.0) | 23.6 (21.8–25.4) | 2137 | 12.4 (11.0–13.8) | 74.4 (72.5–76.3) | 13.1 (11.7–14.5) | 4312 | 15.4 (14.9–17.1) | 66.1 (64.6–67.4) | 18.5 (17.3–19.7) |
| Women | 25–34 | 1059 | 53.5 (50.5–56.5) | 24.6 (22.0–27.2) | 21.9 (19.4–24.4) | 933 | 46.8 (43.6–50.0) | 34.3 (31.3–37.3) | 18.9 (16.4–21.4) | 1992 | 50.4 (48.2–52.6) | 29.1 (27.1–31.1) | 20.5 (18.7–22.3) |
| | 35–44 | 709 | 50.2 (46.5–53.9) | 25.2 (22.0–28.4) | 24.5 (21.3–27.7) | 746 | 39.0 (35.5–42.5) | 41.3 (37.8–44.8) | 19.7 (16.8–22.6) | 1455 | 44.5 (41.9–47.1) | 33.5 (31.1–35.9) | 22.1 (20.0–24.2) |
| | 45–54 | 407 | 51.8 (46.9–45.7) | 28.8 (24.4–33.2) | 23.3 (19.2–27.4) | 469 | 47.3 (42.8–51.8) | 35.6 (31.3–39.9) | 17.1 (13.7–20.5) | 876 | 49.4 (46.1–52.7) | 30.6 (27.5–33.7) | 20.0 (17.4–22.6) |
| | 55–64 | 193 | 63.7 (56.9–70.5) | 17.6 (12.2–23.0) | 18.7 (13.2–24.2) | 237 | 56.1 (49.8–62.4) | 27.0 (21.3–32.7) | 16.9 (12.1–21.7) | 430 | 59.5 (54.9–64.1) | 22.8 (18.8–26.8) | 17.7 (14.1–21.3) |
| | ≥65 | 86 | 77.9 (69.1–86.7) | 5.8 (0.9–10.7) | 16.3 (8.5–24.1) | 124 | 72.6 (64.7–80.5) | 16.9 (10.3–23.5) | 10.5 (5.1–15.9) | 210 | 74.8 (68.9–80.7) | 12.4 (7.9–16.9) | 12.9 (8.4–17.4) |
| | ≥25 (Crude) | 2454 | 54.0 (52.0–56.0) | 23.6 (21.9–25.3) | 22.5 (20.8–24.2) | 2509 | 46.8 (44.8–48.8) | 35.1 (33.2–37.0) | 18.2 (16.7–19.7) | 4963 | 50.3 (48.9–51.7) | 29.4 (28.1–30.7) | 20.3 (19.2–21.4) |
| | ≥25 (age standardized)[a] | 2454 | 57.4 (55.4–59.4) | 21.9 (20.3–23.5) | 21.5 (19.9–23.1) | 2509 | 50.1 (48.1–52.1) | 32.7 (30.9–34.5) | 17.2 (15.7–18.7) | 4963 | 53.6 (52.2–55.0) | 27.1 (25.9–28.3) | 19.3 (18.2–20.4) |
| Both | 25–34 | 1694 | 38.2 (35.9–40.5) | 40.1 (37.8–42.4) | 21.7 (19.7–23.7) | 1470 | 32.6 (30.2–25.0) | 51.9 (49.3–54.5) | 15.5 (13.6–17.4) | 3164 | 35.6 (33.9–37.3) | 45.6 (43.9–47.3) | 18.8 (17.4–20.2) |
| | 35–44 | 1291 | 34.9 (32.3–37.5) | 42.1 (39.4–44.8) | 22.9 (20.6–25.2) | 1240 | 28.0 (25.5–30.5) | 55.2 (52.4–58.0) | 16.8 (14.7–18.9) | 2531 | 31.5 (29.7–33.3) | 48.6 (46.7–50.5) | 19.9 (18.3–21.5) |
| | 45–54 | 887 | 31.1 (28.1–34.1) | 45.5 (42.2–48.8) | 23.3 (20.5–26.1) | 960 | 26.8 (24.0–29.6) | 59.7 (56.6–62.8) | 13.5 (11.3–15.7) | 1847 | 28.9 (26.8–31.0) | 52.9 (50.6–55.2) | 18.2 (16.4–20.0) |
| | 55–64 | 479 | 38.2 (33.8–42.6) | 37.2 (32.9–41.5) | 24.6 (20.7–28.5) | 536 | 31.9 (28.8–35.8) | 52.1 (47.9–56.3) | 16.0 (12.9–19.1) | 1015 | 34.9 (32.0–37.8) | 45.0 (41.9–48.1) | 20.1 (17.6–22.6) |
| | ≥65 | 278 | 50.0 (44.1–55.9) | 25.9 (20.8–31.0) | 24.1 (19.1–29.1) | 440 | 42.0 (37.4–46.6) | 38.6 (34.1–43.1) | 19.3 (15.6–23.0) | 718 | 45.1 (41.5–48.7) | 33.7 (30.2–37.2) | 21.2 (18.2–24.2) |
| | ≥25 (Crude) | 4629 | 36.6 (35.2–38.0) | 40.6 (39.2–42.0) | 22.8 (21.6–24.0) | 4646 | 31.0 (29.7–32.3) | 53.2 (51.8–54.6) | 15.9 (14.8–17.0) | 9275 | 33.8 (32.8–34.8) | 46.9 (45.9–47.9) | 19.3 (18.5–20.1) |
| | ≥25 (age standardized)[a] | 4629 | 37.7 (36.3–39.1) | 39.2 (37.8–40.6) | 23.1 (21.9–24.3) | 4646 | 31.6 (30.3–32.9) | 52.4 (51.0–53.8) | 16.0 (14.9–17.1) | 9275 | 34.5 (33.5–35.5) | 46.0 (45.0–47.0) | 19.5 (18.7–20.3) |

[a]Standardized to the age distribution of the new WHO world standard population (2000–2025).