



2016 NIGERIAN REPORT CARD

ON PHYSICAL ACTIVITY
FOR CHILDREN AND YOUTH



Prepared and Produced by



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Acronyms

AHN: African Heart Network

IDRC: International Development Research Center

INC: Incomplete

MVPA: Moderate-to-Vigorous Physical Activity

NAFDAC: National Agency for Food and Drugs Administration and Control

NCDC: Nigeria Centre for Disease Control

NDCs: Non-communicable diseases

NHF: Nigerian Heart Foundation

NIMR: Nigerian Institute of Medical Research

WAHO: West African Health Organization

PE: Physical Education

WHF: World Heart Foundation

WHO: World Health Organization

INTRODUCTION

The Nigerian Report Card on Physical Activity for Children and Youth is a document that resulted from the collaboration between researchers from the Active Healthy Kids Canada and Healthy Active Kids Kenya since 2013. The Physical Activity Report Card initiative was developed by Active Healthy Kids Canada in 2005, with updated versions produced annually over the past 10 years. Since 2014, several countries worldwide have produced similar documents, and thus the Physical Activity Report Card has become a unique tool for promoting physical activity among children and youth globally.

The physical activity report card is recognized to be a pooling of knowledge that provides available evidence on physical activity and sedentary behaviours of children and youth and the associated influences, strategies and investments that may affect these behaviours. In addition to promoting awareness of the importance of physical activity, it has been useful for formulating new policy change and advocacy by government and civil society organizations, and for developing research proposals by scientific institutions.

Nigeria launched its first Physical Activity Report Card in 2013 and it was modelled after the Canadian reports. The main results of the first Nigerian Report Card showed that Nigerian children and youth engaged in relatively high levels of active transportation, moderate level of physical activity and low level of sedentary behaviours. The report also revealed that data is scanty on organized sports, physical activity with family and peers, physical activity in schools, the community and built environment, and for government strategies and investments. The report showed that urban resident Nigerian children and youth were more overweight and/or obese compared with their rural counterparts; however the available data was not representative of the entire nation.

The Nigerian Physical Activity Research Working Group produced the second edition of the Nigerian Report Card on Physical Activity for Children and Youth, learning from the experience of the maiden edition, so that Nigeria is informed and updated on physical activity as well as factors affecting physical activity at the policy, environment and social levels. It is expected that the Nigerian Report Card will be a leading physical activity advocacy document informing policy changes and decision-making to increase physical activity, reduce sedentary activities, and reduce overweight and obesity; all of which are risk factors for non-communicable diseases (NCDs). It is anticipated that the report card will further place physical activity in the forefront of public health policies and programmes for the prevention and control of NCDs.

NIGERIAN HEART FOUNDATION

The Nigerian Heart Foundation (NHF) is a national charity inaugurated in July 1992. It is affiliated to the World Heart Federation, Geneva and is a founding member of the African Heart Network. The NHF is a non-government organization concerned with the promotion of the socio-economic well-being of Nigerians, especially in the area of heart diseases. Pursuant to its objectives, the NHF promotes public health education on the prevention of risk factors for heart diseases, such as high blood pressure, unhealthy diet, physical inactivity, as well as tobacco and alcohol consumption.

The Executive Board oversees the affairs of the Foundation and its objectives are geared towards achieving the following goals:

- Prevention of heart diseases
- Promotion and support of research on heart diseases
- Public enlightenment and promotion of heart health
- Advocacy on heart issues

The functions of the NHF are as follows:

1. Holds communal, national and societal conferences, seminars and workshops on topics related to heart issues
2. Disseminates up-to-date information on heart and other related issues
3. Collaborates with relevant national and international bodies to prevent heart diseases, e.g. World Health Organization (WHO), World Heart Federation, (WHF), International Development Research Centre (IDRC) Canada, West African Health Organisation (WAHO), African Heart Network (AHN), Nigerian Cardiac Society, Nigerian Hypertension Society, the Nigerian Institute of Medical Research (NIMR), Nigeria Centre for Disease Control (NCDC) and the National Agency for Food and Drugs Administration and Control (NAFDAC).
4. Establishes and administers research funds
5. Creates awareness, enlightens and educates the public on behavioural modification for the prevention of heart diseases.

THE GRADING SYSTEM

The current report card is an update of the 2013 edition of the Nigerian Report Card on Physical Activity for Children and Youth, hence for consistency, the same scoring protocol previously used was retained. The grades assigned to each of the sections and sub-sections were based on a comprehensive analysis and synthesis of available data on physical activity among Nigerian children and young adults (aged 5-25 years) since the last publication in 2013. Additional data, which for one reason or the other could not be accessed at the time of write-up of the 2013 edition, were also considered. Similar to the previous edition of the report card, the current report focuses on the following broad themes: Physical activity, Sedentary behaviour; Obesity and Overweight; School settings; Family and Peers; Community and built environment; and Policy.

The various updates were collated and reviewed through a rigorous process by a panel of experts. The review process covered multiple sources of data including peer-reviewed journal publications, unpublished graduate students' theses/dissertations, and data from other organizations and agencies such as the federal ministries of Health, Education and Youth, Sports and Social Development. The data obtained for each of the themes of interest were thereafter assigned grades based on a set of specific criteria and existing grading schemes from similar report cards produced in Kenya, Mexico, South Africa, Canada and the United States of America. A description of the grades is provided below:

Grade	Description
A	Majority of Nigerian children and youth are engaging in health enhancing activities (=80%)
B	Over half of Nigerian children and youth are engaging in health enhancing activities (60% to 79%)
C	About half of Nigerian children and youth are engaging in health enhancing activities (40% to 59%)
D	Less than half of Nigerian children and youth are engaging in health enhancing activities (20% to 39%)
F	Very few Nigerian children and youth are engaging in health enhancing activities (<20%)
INC	Incomplete data (There is insufficient data for grading)

OVERALL PHYSICAL ACTIVITY

D

Summary

As emphasized in the 2013 report card, nationwide data using similar definitions and cutpoints for physical activity levels are needed to provide a detailed picture of Nigerian children and youth, and should be an important priority focus for public health investment in Nigeria.

Overall physical activity level was assigned a grade D, a step lower than the grade C that was reported in the 2013 report card. This change was necessitated by the new evidence reported for a group of Nigerian adolescents (Oyeyemi et al, 2016). While earlier studies reported that about 30% - 75% of children and youth in Nigeria engage in different forms of physical activity daily (Healthy Active Kids Kenya 2011; Active Health Kids Canada 2013; WHO 2013), the current data (Oyeyemi et al, 2016) shows that only 37% of a representative sample of 1006 secondary school adolescents in urban North-East Nigeria appeared to meet the international guidelines of engaging in at least 60 minutes of moderate-to-vigorous physical activity (MVPA) daily, based on self-reported physical activity (Oyeyemi et al, 2016). It was observed that gender disparities in physical activity, as seen in the *2013 Nigerian Report Card* (58.4% of boys and 29.0% of girls) (Senbanjo and Osikoya, 2010), continue to exist with 54.3% of the boys being more physically active compared to 45.7% of the girls (Oyeyemi et al, 2016).

Organized Sport and Physical Activity Participation

INC

Similar to the first edition of the Nigerian report card, this section is assigned the grade “incomplete” because of lack of data. Although based on general observation, it can be said that Nigerian children and youth do engage in one sport or the other in their respective schools, no empirical data is available to support this. There is no information regarding the duration and frequency of the sports to determine if Nigerian children and youth meet the international recommendations for health benefits. Also, there is a lack of national representative data examining organized sport and physical activity participation in Nigeria.



Active Play and Leisure

C

This indicator was assigned grade C, which is a slight improvement over the C minus in the 2013 report card. The frequency of active play and leisure physical activity among Nigerian children and youth still varied between 12% and 70% (Omuemu and Omuemu, 2010; Adeniyi et al, 2014), for a duration of about one hour daily (Oyeyemi et al, 2016). Also, there is now evidence of gender and socioeconomic disparities in active play and leisure among Nigerian children and youth, with boys and young people from high socioeconomic status families more likely to engage in active play and leisure than girls and young people from low socioeconomic status families (Oyeyemi et al, 2016). Despite this improvement, there is still a lack of national representative data on this topic in Nigeria.



Active Transportation

B

Nigerian children and youth perform relatively better on the indicator for active transportation based on international comparisons (Tremblay et al, 2014) and as observed in the previous Nigerian report card. The majority (61% to 80%) of Nigerian children and youth engage in some form of active transportation, mostly in the context of transport to and from school (Ahmadu et al, 2012; Adeomi et al, 2015). Walking is the most common mode of active transportation among Nigerian children and youth (Adeomi et al, 2015; Oyeyemi et al, 2016), who spend about 30 minutes daily walking to and from school (Oyeyemi et al, 2016). Notable urban and rural disparities exist, suggesting that active transportation among Nigerian children and youth may decline as the population transits from predominantly rural to predominantly urban settings within Nigeria (figure 1).

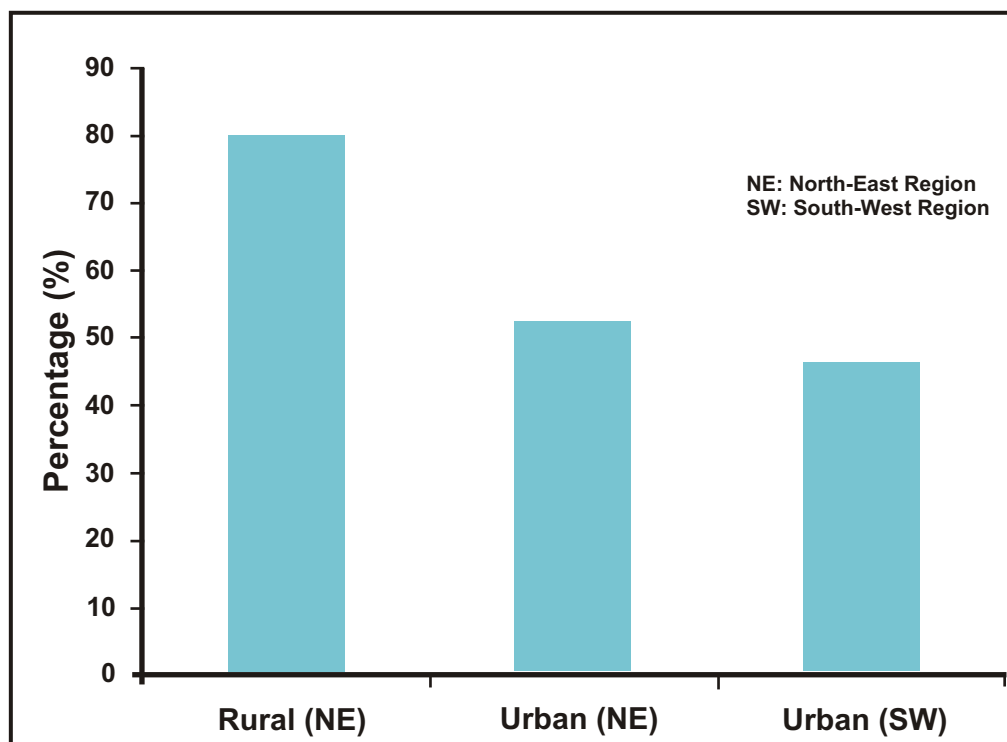


Figure 1. Frequency of active transportation of children and youth in different areas in Nigeria (graph is based on data from different studies).

SEDENTARY BEHAVIOUR

Sedentary behaviour was assessed based on screen-based sedentary behaviour and non-screen-based sedentary behaviour as was previously done in the 2013 report card.

Screen-Based Sedentary Behaviour

F

Summary

There is no change from the 2013 edition of the Nigerian Report Card in the grading of screen-based sedentary behavior, due to lack of recent and sufficient data.

The 2013 edition of the Nigerian report card graded screen-based sedentary behaviour as “F” because children and youth in rural and urban areas of Nigeria spend over three hours on screen time daily. The most common screen-based sedentary behaviour was television viewing and playing video games (Omuemu and Omuemu, 2010). Currently, the situation appears to be the same as there are no recent data to suggest or conclude otherwise. The lack of recent representative data suggests the need for more research in the area of screen-based sedentary behaviour among Nigerian children and youth.



Non Screen-Based Sedentary Behaviour

D

Summary

There is no change in the grading of non-screen-based sedentary behaviour due to paucity of nationally representative data on non-screen-based sedentary behaviour among children and youth in Nigeria.

In the 2013 Nigerian Report Card, non-screen-based sedentary behaviour was also graded “D”. The situation appears not to have changed. More than 95% of 11-19 year old Nigerian children and youth spend an average of 3 hours and 15 minutes on sedentary activities like sitting down, chatting and playing board games with friends. The most common non screen-based sedentary behaviour still remains sitting down while reading magazines and books for pleasure, listening to music, playing board games and use of motorized transportation (Omuemu and Omuemu, 2010).

OVERWEIGHT AND OBESITY

A

Summary

- Prevalence of obesity and overweight is between 2-12% among Nigerian children.
- There is a paucity of data from population-wide studies to substantiate the claim of prevalence of childhood obesity in Nigeria

Overweight and obesity has been assigned a grade A, the same grade it was given in 2013. No new findings were available to inform any change in grading. Existing studies reveal that between 1.8% - 15.5% of children and youth aged 5-24 in Nigeria are overweight, and between 0.2% - 4.3% are obese (Senbanjo and Osikoya 2010; Adegoke and Oyeyemi 2011; Ahmadu et al 2012; Maruf et al 2012). In the South-West region of Nigeria, the prevalence of overweight and obesity was higher among adolescents resident in urban centres (6.9%) than among their counterparts in the rural areas (3.2%) (Ben-Bassey et al 2007).

A recent review by Eke et al (2015) on childhood obesity in a developing economy showed that there is a wide disparity in childhood obesity between the northern and southern parts of Nigeria. Opara et al (2010) reported an obesity prevalence of 11.3% among primary school children in Uyo, southern Nigeria, while Yusuf et al (2013) found a prevalence of obesity and overweight of 0.84% and 1.98% respectively among adolescents in Kano metropolis, in the northwestern part of Nigeria. A study in Benue State, north central Nigeria reported a prevalence of 1.8% for obesity and 9.7% for overweight (Musa et al, 2012), while a prevalence of 2.5% for obesity among children aged 2-15 years was reported in Lagos, in the south-western part of Nigeria (Akodu et al, 2012).

Obesity is a condition which is influenced by a wide range of genetic, metabolic, cultural, environmental, socioeconomic, and behavioral factors. Maternal obesity is however one of the strongest and most reliable predictors of obesity for children in later life (Eke et al, 2015).

PHYSICAL ACTIVITY IN SCHOOL SETTINGS

C-

Summary

- Physical activity remains an important aspect of the Nigerian educational curriculum, however adherence to stipulated standards remains a major challenge.
- Wide variations exist in the implementation of school-based programmes to promote physical activity within school settings.

The importance of the school environment in promoting physical activity and exercise among children cannot be overemphasized as children spend a considerable amount of time within the school environment. Grade C minus was assigned for physical activity within school settings as most schools in the country offer physical education (PE) as part of their educational curriculum. It is however not clear whether the time spent on physical education within the school environment actually translates into increased physical activity time. It is stipulated that the Nigerian school setting should make provisions for physical education programmes but wide variations still exist in the amount of space and time devoted to physical activity. More effort is needed to ensure that opportunities for physical activity within the school environment are enhanced. There is also a need to ensure that all schools adhere to the guidelines for the inclusion of physical activity sessions within the school setting.



FAMILY AND PEERS

INC

Summary

- There is inadequate data on the influence of the family on the physical activity of Nigerian children and youth.
- More research has been carried out on peer influence on the physical activity of youth than on family influence.

Peers

Peer influence has been observed to play a pivotal role in determining adolescents' level of physical activity. The promotion of cooperative, group physical activities (cycling, walking) as well as organized activities and sports may positively influence physical activity in the youth (Adesina, 2012). Unpublished sources report that active commuting to and from school among Nigerian youth is mainly influenced by their friends, as parents are more comfortable when their children commute to school in the company of their peers. Up to 37.7% of participants in a study by Adeniyi et al (2014) reported peer influence as the main facilitator for their active commuting to and from school.

Family

As the first contact for any child, the family plays a key role in youth participation in physical activity. Parental influence is therefore a contributory factor in promoting physical activities among the youth. Available data however indicate that youth from high-income families may have more financial leverage to engage in leisure-time sporting activities and use motorized transportation to school compared to less-privileged adolescents who may have fewer opportunities to participate in formal sports but commute actively to school, more out of a lack of choice (Oyeyemi et al, 2016).

COMMUNITY AND BUILT ENVIRONMENT

INC

Summary

- There is no change in the current grade and the 2013 grade assigned for community and built environment due to insufficient data on this scale.
- Although literature on the influence of the community and built environment on the physical activity of children and youth in Nigeria is sparse, a few studies have identified the community and built environment as a barrier to physical activity.
- The extensive interaction of children and youth with their environment calls for a suitable layout of the community and built environment as it has a potentially high likelihood of positively influencing their physical activity.

The duo of the community and built environment is a significant factor in the physical activity of the general population, but it applies even more in the case of children and youth. Most of the physical activity options that are available to children and youth, such as recreational parks and gardens, roadside walks and opportunities for intra-city cycling are situated within the communities. Unfortunately, many of these opportunities are consistently being taken away due to community and environmental safety concerns. Parents, particularly those in the urban areas, are more reluctant than ever to allow children play freely within their communities due to safety concerns on issues such as kidnapping and the fear of road mishaps occasioned by highly congested roads that lack proper delineation for pedestrians. Up to 60.8% of a group of Nigerian adolescents attending secondary schools in Ibadan, South-west Nigeria, reported that their parents had mandated them to avoid active commuting options to school because of safety issues (Adeniyi et al, 2014). In view of the perceived lack of safety in the community, parents would rather provide an enabling environment for their children to stay indoors thereby increasing their sedentary time. Some of the incentives usually provided by parents to keep their children engaged indoors include television sets with multi-channel subscriptions, armchair games and other minimally physically-tasking gadgets. While it may be possible to achieve sufficient physical activity within the home environment, the reality is that many homes do not have the facilities required to keep children and youth physically active in terms of space and exercise.

A study conducted among a population of youth in a university in South-west Nigeria reported close to half of the population (47.5%) using passive commuting to and within their university campus, with the availability of sidewalks playing a significant role in their physical activity levels (Adedoyin et al, 2014). In a similar presentation, the adolescents in a study by Adeniyi et al (2014) could not consider walking as an important source of physical activity because of chaotic traffic that is largely unsafe for active commuting (54.2%), fear of roadside crimes (27.6%) and lack of sidewalks (67.4%). For these reasons of safety and lack of a conducive environment, only 6.1% of the adolescents in their study said they would prefer to commute actively to school. The figure increased to 30.7% when their health was linked to physical activity. In the South-south region of Nigeria, dangerous driving and kidnapping were reported as the significant challenges that children face en route to school (Ipingbemi and Aiwo, 2013) and this has serious implications for physical activity among the children. The impact of the community and built environment on the physical activity of children and youth is therefore immense.

The previous edition of the Nigerian report card graded the community and built environment as “incomplete” because of the dearth of studies on the community and built environment as it affects the physical activity of children and youth in Nigeria. Currently, the situation appears to be the same as there are still very few new empirical data on the community and built environment. However, anecdotal evidence has shown that there is a gradual rise in the number of recreation

Parks and shopping malls, providing a substantial amount of walking area for children and youth. Studies are needed to verify how much these facilities and other issues related to the community and built environment contribute to the physical activity of the target population in Nigeria.

GOVERNMENT, NON-GOVERNMENT ORGANISATIONS AND PRIVATE SECTOR (STRATEGIES AND INVESTMENTS)/POLICY

B

Summary

- Policies exist for both the teaching of physical and health education in schools, as well providing an enabling environment for participation in sporting activities for children and youth in Nigeria.
- National representative data on the effectiveness of the implementation of these policies in Nigeria is, however, non-existent.

In the National Policy on Education (FGN, 2004), the Federal Government of Nigeria states that physical and health education shall be emphasized at all levels of the education system. In order to facilitate achievement of this goal, a physical education curriculum was provided to ensure that the knowledge and skills acquired from the subject produce individuals that are:

- a. Physically fit and health conscious;
- b. Functional and rational members of the community;
- c. Favourably disposed to meet societal needs;
- d. Beneficiaries from the numerous career opportunities; and
- e. Adequately prepared for further studies in the field of physical and health education.

The revised edition of the National Policy on Education in 1981 introduced the 6-3-3-4 system of education and directed that physical education should be a teaching subject in junior secondary schools and as well as an examinable subject in the West African School Certificate examinations.

In order to reduce the nonchalant attitude towards physical education (PE) activities at the school level, the National Sports Development Policy (FRN, 1989), revised under article 8 sub-sections 9, made the following provisions:

- i. Participation in sports shall be compulsory in primary and secondary schools, and institutions of higher learning.
- ii. The Federal Government through the Federal Ministry of Education shall provide facilities and funding for sports in institutions of learning at all levels.

While these policies are desirable for promoting physical activity in schools, there is a dearth of information on their effective national implementation, while only a few published studies exist on regional implementation. There is an urgent need for the institution of a process for evaluating the effectiveness of implementation of policy objectives nationally.

In a study on the status of physical education in public primary schools in Benin metropolis (Edo State, Nigeria), based on the established status, team sports/games and track field athletics rated high only in the 400m x 100m track, while sports equipment and sports personnel rated low; only NCE/ OND personnel rated moderate (Aluko, 2009).

RECOMMENDATIONS FOR ACTION

Based on the findings of this report card, it is recommended that:

- Nationally representative data on active transportation and sedentary behaviour among Nigerian children and youth are needed.
- National guidelines on physical activity levels and sedentary behaviour for Nigerian children and youth should be formulated.
- The policy of incorporating physical and health education activities in the curriculum for all Nigerian schools (both private and public) should be adequately implemented.
- Advocating and promoting a healthy lifestyle from an early age will help to prevent obesity and overweight among children and youth.
- Partnerships should be forged between the government; CSOs in Heart, Cancer, Diabetes, Nutrition, Tobacco and Alcohol; the Nigeria Centre for Disease Control; and research institutes, to prevent and control NCDs.
- There is a need for networking with African and other international institutions and experts to implement best practices for research, surveillance and public health interventions.
- There is a need for the establishment of a national report card scientific advisory and implementation panel, composed of researchers, exercise and sports specialists, nutritionists, media personalities, policy makers, medical doctors, and other key stakeholders based in the Ministry of Health.
- Parents should be engaged to regulate the amount of sedentary time their children and youth spend within the home. For example, they could limit the time their children spend watching television, playing video games or on other sedentary activities to about two hours a day.
- The urban development of towns and cities should take into account the creation of space for leisure and active transportation.
- In both urban and rural areas, spaces should be built for the public to use for safe practice of physical activities and sports.

TARGET AUDIENCE FOR THE NIGERIAN REPORT CARD

This document will be useful for government, public and private organizations, national and international institutions and individuals interested in the promotion of physical activity among children and youth in Nigeria. Below are a few of the institutions that will also benefit from the Nigerian Report Card.

1. Government, non-government organizations, health and education authorities and sports organizations responsible for the development of policies, implementation and enforcement.
2. The Federal Government, state governments, local governments, and urban development agencies charged with the responsibility of building an environment that is supportive of healthy active living.
3. Food manufacturers, companies and organizations that may be in a position to use their corporate social responsibility to support or collaborate on future programmes and initiatives of the Nigerian Heart Foundation.
4. Research institutions whose interests lie in childhood physical activity, overweight/obesity, and nutrition.

OPPORTUNITIES FOR SPONSORSHIP AND COLLABORATION

The Nigerian Heart Foundation welcomes collaborators, sponsors and partners interested in the Foundation's efforts to promote a healthy lifestyle among children and youth in Nigeria. Support for the Foundation may include:

- Donations to support research on physical activity and body weight status of children and youth in Nigeria
- Support for the development and dissemination of an annual Nigerian report card on physical activity and body weight of children
- Support for lobbying activities to influence the development of a national strategy/ policy against overweight and obesity and a complimentary functional policy to enhance physical activities among children and youth in Nigeria
- Donations for equipment acquisition

Potential partners may contribute via cash donations, product contributions, and in-kind contributions such as expertise, corporate donations and support.

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