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Introduction

- ❖ For children and adolescents, participation in regular physical activity is associated with several health benefits including but not limited to better adiposity profiles, academic performance and cognition, improved physical and mental health, and improved cardiometabolic health [1].
- ❖ International surveillance data [2,3], systematic review evidence [4] and our previous data syntheses [5,6] have consistently shown concerning levels of insufficient physical activity.
- ❖ Insufficient physical activity contributes to many non-communicable diseases including type 2 diabetes mellitus, cardiovascular disease, stroke, certain types of cancers etc. [7].
- ❖ Due to its pervasiveness, insufficient physical activity, especially among children and adolescents has become a global public health priority [8] and is now included in global action plans
- ❖ Since 2016, and as part of Active Healthy Kids Global Alliance (AHKGA)'s international effort, Active Healthy Kids Zimbabwe (AHKZ), a not-for-profit organization established in 2015, has developed and summarized Zimbabwe Report Cards following AHKGA's Global Matrix methodology as part of a global response to the insufficient physical activity crisis.

Purpose

The main purpose of the 2022 Zimbabwe Report Card was to synthesize and summarize the best available data and assign grades on 10 common indicators of physical activity for children and adolescents. The secondary objective was to compare Report Grades across three Global Matrix initiatives.

Materials and Methods

- ❖ The development of the Report card as part of the Global Matrix initiative is an international harmonized endeavor dating back to 2014, involving teams of physical activity experts from participating countries, synchronously developing national Report Cards.
- ❖ The 2022 Zimbabwe Report Card was developed by a team of national experts (n=12) working in various sectors of physical activity using Active Healthy Kids Global Alliance's Global Matrix benchmarks and grading rubric, to assign Report Card grades on 10 indicators of physical activity among 5-17-year-old children and adolescents in Zimbabwe.
- ❖ The 10 common indicators for Global Matrix 4.0 were Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviours, Physical Fitness, School environment, Family, Community and Environment, and Government.
- ❖ In addition to the 10 common indicators for Global Matrix 4.0, the 2022 Zimbabwe Report Card also included Nutritional Status as an additional indicator, given its importance in the Zimbabwean context.
- ❖ Available published and unpublished studies, graduate theses as well as policy documents from 2015 onwards informed grade assignment for each indicator.
- ❖ An unweighted average of all studies with data for an indicator was used to inform the grade assignment.
- ❖ Where data were unavailable or insufficient to provide accurate estimates, an incomplete grade was assigned.

Global Matrix 4.0 benchmarks

Grade	Interpretation	Corresponding number for analysis
A+	94%–100%	15
A	We are succeeding with a large majority of children and youth (87%–93%)	14
A-	80%–86%	13
B+	74%–79%	12
B	We are succeeding with well over half of children and youth (67%–73%)	11
B-	60%–66%	10
C+	54%–59%	9
C	We are succeeding with about half of children and youth (47%–53%)	8
C-	40%–46%	7
D+	34%–39%	6
D	We are succeeding with less than half but some children and youth (27%–33%)	5
D-	20%–26%	4
F	We are succeeding with very few children and youth (<20%)	2
INC	Incomplete—insufficient or inadequate information to assign a grade	No grade

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Results

2022 Zimbabwe Report Card Grades on physical activity for children and adolescents for Global Matrix 4.0

Indicators	Global Matrix 4.0: 2022	
	Grades	
Overall Physical Activity	C+*	
Organized Sport and Physical Activity participation	B-	
Active Play	C+	
Active Transportation	B	
Sedentary Behaviours	C	
School	C	
Family and Peers	INC	
Community and Environment	C-	
Government	D	
Physical Fitness	INC	
Nutritional Status	B+	

Note: The grade for each indicator is based on the percentage of children and adolescents meeting a defined benchmark; INC = Insufficient or no available data to inform the grading of that indicator; Nutrition is not a common indicator for the Global Matrix 4.0; * indicates that the grade was informed by device-measured as well as self-reported data.

Zimbabwe Report Card Grades on physical activity for children and adolescents for Global Matrices 2.0 – 4.0

Indicator	Grades		
	GM 2.0	GM 3.0	GM 4.0
	2016	2018	2022
Overall Physical Activity	C+	C+	C+*
Organized Sport and Physical Activity participation	B	B	B-
Active Play	D+	D+	C+
Active Transportation	A-	A-	B
Screen-based and non-screen-based behaviors	B	B	C
Infrastructure, policy, and programs	D	C	C
Support and behaviour	INC	INC	INC
Infrastructure, policy, programs, safety	F	D	C-
Strategies and investments	D	C-	D
Physical Fitness	Not graded	INC	INC
Nutritional Status	Not graded	B	B+

Note: The grade for each indicator is based on the percentage of children and adolescents meeting a defined benchmark; INC = Insufficient or no available data to inform the grading of that indicator; GM = Global Matrix; Nutrition is not a common indicator for the Global Matrix 4.0; * indicates that the grade was informed by device-measured as well as self-reported data.

Conclusions

- ❖ Robust surveillance data with large sample sizes are required to provide accurate estimates of physical activity participation among children and adolescents in Zimbabwe.
- ❖ However, based on the limited available data, overall, the levels of physical activity among children and adolescents in Zimbabwe are lower than recommended.
- ❖ Policies and initiatives that promote healthy eating and physical activity among children and adolescents in Zimbabwe are urgently needed.
- ❖ Noticeably higher prevalences of short stature, thinness, overweight and obesity are concerning and reflect the presence of the double burden of malnutrition in children and adolescents, highlighting the potential of epidemiologic transitions in diets and activity, thus, require appropriate multisectoral responses.