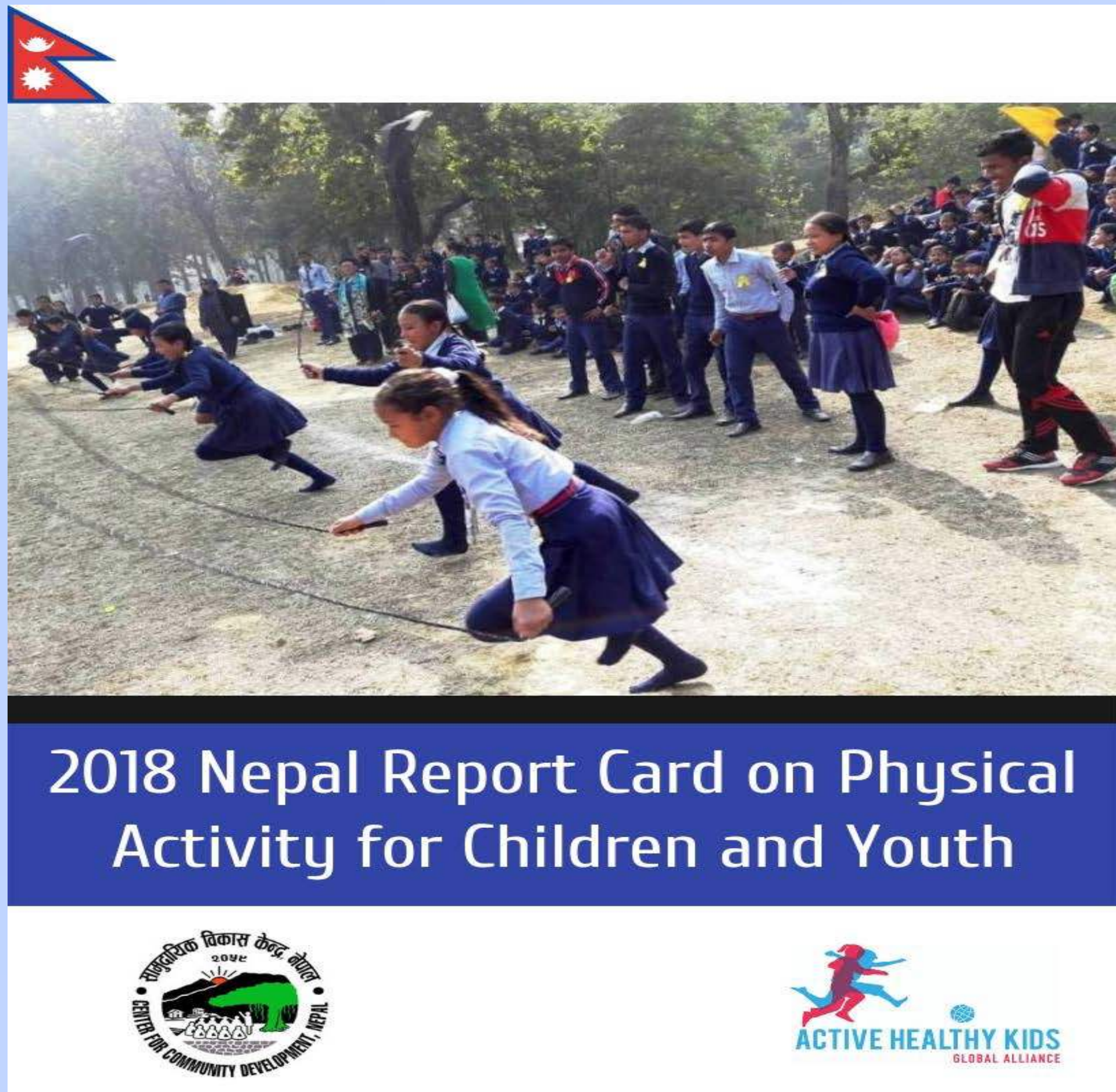


Nepal's Report Card on Physical Activity For Children and Youth, 2018

Narayan Subedi, Susan Paudel, Sudip Nepal, Ashmita Karki, Mahendra Magar, Suresh Mehata



Purpose

National survey in Nepal has indicated higher prevalence of physical activity among adults¹ however, consolidated evidence on the prevalence of physical activity of children is lacking.

The aim of this report card was to summarize the available physical activity data of children and youth (5-17 years of age), and identify the data and research gaps in Nepal.

Methods

A team of researchers reviewed and synthesized the available literature on physical activity of children and youth in Nepal.

Nepal's Report Card comprised the ten core PA indicators of the Global Matrix 3.0 (Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviours, Family and Peers, School, Community and Environment, and Government and Physical Fitness)². The team systematically searched for papers published between 2000 and February 2018 using different databases (Medline, EMBASE, PsycINFO, and CENTRAL). Manual search was also carried out to ensure that all the relevant papers are captured.

The grading of Global Matrix 3.0. indicators was done based on the provided grading scheme.

Results

The 2018 Report Card for Nepal is the first attempt to consolidate the available data of physical activity among children and youth in Nepal. This process has brought some researchers, interested in physical activity, together and it is expected to have a wider participation in the future.

The findings of Nepal's report card is based on summary of 6 relevant papers among 857 records identified through literature search.

Based on available data, overall physical activity of Nepalese children and youth was found quite low with less than 40% of children and youth engaging in at least 60 minutes of moderate- to vigorous-intensity physical activity per day³. Out of the ten indicators, role of family and peers⁴ and use of active transportation⁴ were found more than 80%. The summary of the grading is presented in table 1.

Table 1: Summary of Report Card Indicators and Grades of Nepal

Indicators	Grades
Overall Physical activity	D+
Organized Sport and Physical Activity Participation	INC
Active Play	INC
Active Transportation	A-
Sedentary Behaviors	B+
Family and Peers	A
School	INC
Community and Environment	C-
Government	INC
Physical Fitness	INC

Although data on indicators like sedentary behavior⁵ and community and environment⁶ were available through few studies, five of the ten indicators do not have it for grading.

Data on overall physical activity and other indicators were obtained from small-scale studies that were generally limited to certain geography or population groups so may not represent a national picture, considering the diverse settings of the country. In addition, physical activity was assessed using questionnaires only, and not by objective measurements.



Results contd...

Non-communicable diseases risk factors STEPS Survey 2013¹ is the primary source of data related to chronic diseases and their risk factors in Nepal. However, this study reported 15-29 years in a single age-category and was not considered for grading. This survey and another study⁴, which reported the outcome in MET-minutes/week, found that more than 95% Nepalese youths are physically active.

Based on these studies and the observation of the review team, Nepalese children and youth are quite active however; a large nationally representative sample is needed to validate this. This type of data gap applies to other indicators as well.

The primary issues identified in this review were: few number of studies, small sample size, inadequate data for the Global Matrix 3.0. indicators and poor quality of data.



Conclusion

Overall physical activity of Nepalese children was found to be low; however, it is important to note that this is based on a small number of studies with small sample size; thus, its generalizability is largely limited.

Lack of data on 5 out of 10 Report Card indicators undeniably highlights the gap and the need of nationally representative sample with objective measurements.

In the changing socio-political contexts, it is timely for local, state and federal governments to plan and develop strategies to encourage children and youth for active and healthy living.

References

1. Aryal KK, Neupane S, Mehata S, et al. Non communicable diseases risk factors: STEPS Survey Nepal 2013. Nepal Health Research Council (NHRC); 2014.
2. <https://www.activehealthykids.org/member-area/>. Core Physical activity indicators for Global Matrix 3.0.
3. Adhikari K, Jain V, Adak M, Gupta N, Koshy AK. Prevalence of risk factors of non-communicable diseases among adolescent in Parsa District of Nepal. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 2013;4(1):568-75.
4. Paudel S, Subedi N, Mehata S. Physical Activity Level and Associated Factors Among Higher Secondary School Students in Banke, Nepal: A Cross-Sectional Study. Journal of Physical Activity & Health. 2016;13(2):168-176.
5. Piryani S, Baral KP, Pradhan B, Poudyal AK, Piryani RM. Overweight and its associated risk factors among urban school adolescents in Nepal: a cross-sectional study. BMJ Open. 2016;6(5):e010335.
6. Paudel S, Subedi N, Bhandari R, Bastola R, Niroula R, Poudyal AK. Estimation of leisure time physical activity and sedentary behaviour among school adolescents in Nepal. BMC Public Health. 2014;14:637.