THE VENEZUELAN REPORT CARD ON

PHYSICAL ACTIVITY FOR CHILDREN & YOUTH

2016
Introduction

Venezuelan background

In Venezuela, the leading cause for death are cardiovascular diseases and the rates of type 2 diabetes and obesity have been increasing during the past decade. Venezuela is facing the rise in these noncommunicable diseases (NCD) while still dealing with undernutrition and communicable diseases. This has been a complex scenario when addressing the right interventions because at least ideally, the aim should be to provide care for those overweight and or obese, compensate those who are undernourished while attending the normal population.

Besides these challenges, the country is facing a relevant economic and social crisis in which the increase of poverty arises as an important factor of social disparities, which constitutes an obstacle for achieving the established international recommendations of physical activity (PA).

Information and figures about the physical activity status in children and youth in Venezuela are scarce and disorganized. International reports mention the fact that governmental and non-governmental actions for PA promotion are being taken, but lack on detailed description.

What is the Venezuelan Report Card on Physical Activity for Children and Youth?

The Venezuelan Report Card on Physical Activity for Children and Youth is the first assessment of information related to physical activity in Venezuela, within the context of the Active Healthy Kids Global Alliance initiative, provides the compilation of existing information throughout its territory, and assess how the country is doing at promoting opportunities for children and youth. The aim of this paper is to summarize the information available and to identify the areas where information is poor or nonexistent.
Researchers at Central University of Venezuela developed and produced the 2016 Report Card for Venezuela, by means of a cooperative program between the Center for Development Studies (CENDES), the bio-anthropology, physical activity and health unit (Bio An Unit) and the Bengoa Foundation for food and nutrition. In addition, Sucre County’s department of health provided input through the head of the department and epidemiology representatives. Also, a Major’s office representative was included.

All together the research working group (RWG) was constituted by a total of 12 experts from the above mentioned institutions. CENDES and Bio An Unit members had been mentored by the Epiandes research group leader from Colombia, a team with experience on developing the Colombian report card in previous years.

The first step was a systematic review of literature in order to check the published national data reports and peer-review journal papers. Parallel to this, an examination on the existing grey literature produced by major universities was performed with the aim to check the information contained in thesis and/or dissertations at all under graduate and graduate levels. National and local reports on physical activities, and public policy actions for quality exercise programs and sport, were equally reviewed for the development of this Report Card.

Evidence was summarized for 13 indicators classified into 3 categories according to associations with overall levels of PA. The first category comprised behaviors contributing to PA levels: 1) overall PA levels 2) active transportation 3) organized sport participation. The category active play was not included since neither national nor local information was available. The second category incorporated factors associated with elevated cardio metabolic risk: 1) time spent in sedentary behaviors (screen-time), 2) overweight (BMI-for age > 1SD and ≤ 2SD) 3) obesity (BMI-for age > 2SD) 4) below health fitness zone (low cardiorespiratory fitness) 5) body composition (body fat percentage above the 75th percentile reference by age and sex). The third category comprised factors that influence PA: 1) policy, the indicators of school, family and community and built environment were not assessed due to lack of national and/or local data.
Table 1: Summary of Report Card Categories, Indicators and Grades

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<th>Category</th>
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<th>Grade</th>
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<td>Behaviors that contribute to physical activity levels</td>
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<td>Organized Sport Participation</td>
<td>INC</td>
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<td></td>
<td>Active Play</td>
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</tr>
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<td></td>
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<tr>
<td></td>
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<td></td>
<td>Body Composition</td>
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<td>Levels of influence</td>
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<td>School</td>
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<td></td>
<td>Community and the Built Environment</td>
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<tr>
<td></td>
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<td></td>
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<td>C</td>
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<td></td>
<td>Nongovernment</td>
<td>B</td>
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Note. The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark: A is 81% to 100%; B is 61% to 80%; C is 41% to 60%, D is 21% to 40%; F is 0% to 20%; INC is Incomplete data.
An extensive review of national literature was conducted. According to the evidence, some indicators report incomplete information or lack of data. The following indicators were graded: overweight and obesity as A; body composition and NGO policies as B; municipal level policies as C; overall physical activity levels and national level policies as D.

Local peer review studies covered a broad extent of grades ranging from A to INC.
Table 2: Grades According to Physical Activity Indicators in the 2016 Venezuela Report Card on Physical Activity for Children and Youth

<table>
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<th>Findings</th>
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| Behaviors that                  | Overall Physical              | D     | - In a national sub-sample, the levels of physical activity (PA) for the age group between 3-17 years showed 63% of low PA; 30.8% moderate PA and 6.5% intense PA.  
- In the state of Lara and Barinas, 17.3% of boys and 4.8% of girls engaged in physical activity at least 60 min for 5 days or more.  
- Among 55.9% and 65.6% of preschool children (2-6 yrs.) of Caracas presented a level of moderate and vigorous physical activity.                                                                                                   |
| contribute to physical           | Activity Levels               |       |                                                                                                                                                                                                                                                                                                                                                                                             |
| activity                          | Active Transportation         | INC   | - Lack of national data.  
- In Lara 21.4% of boys and 16.8% of girls walk or bike to and from school for 3 or more days weekly.  
- A study in adolescents from the city of Maracay, it was found that only 17.24% walks daily to get to school.                                                                                                                                                                                                                                |
|                                 | Organized Sport Participation | INC   | - Lack of national data.  
- In Caracas and Mérida 11% of adolescents spent their leisure time in extracurricular sports activities.                                                                                                                                                                                                                     |
|                                 | Active play                   | INC   | - Lack of national and local data.                                                                                                                                                                                                                                                                                                      |
| Factors associated with          | Time spent in sedentary       | D/F   | - In a national sample of overweight children and adolescents (7-12 yrs.), it was found that 98.16% were not engaged in physical activity. The age group between 13 to 14 years with the same condition and obesity showed 47.14% and 48.15% of sedentary lifestyle respectively.  
- In the state of Lara and Barinas, on average 25% of adolescents spent 3 h or more of their leisure time sitting in front of the TV or computer in a normal school day.  
- In Valencia 87.5% and 79.2% of obese and healthy children respectively, watch TV, computer or video games for 4 h or more.  
- 69.5% of children between 2-5 yrs. from Caracas, reported using on a five typical day digital media such as TV, computer and video games; during the weekend this usage increased to 77.5%.                                                                                   |
| elevated cardiometabolic         |                              |       |                                                                                                                                                                                                                                                                                                                                                                                             |
| risk                            | Overweight                    | A     | - National studies proved a prevalence of overweight for boys and girls of 15.3% and 18.2% respectively.  
- Local studies in different zone of Caracas and others cities of Venezuela (Mérida, Maracaibo and Barquisimeto) reported prevalence of overweight among 9.5% and 32.1%.                                                                                     |
|                                 | Obesity                       | A     | - The National Institute of Nutrition reported obesity of 10.62% and 8.53% for boys and girls respectively. Nonetheless, others studies showed a prevalence of 31.4% for boys and 22.3% for girls.  
- Local studies showing prevalence of obesity in a range to 4.7% - 5.8% for boys and 2.4% - 2.8% for girls.                                                                                                           |
|                                 | Below health                  | INC   | - Lack of national data.  
- Some studies in Caracas and Merida, reported that adolescents presented a poor lifestyle (among 56% - 63.9%) according to the results for the Test Krece Plus (NAOS strategy).  
- Studies in adolescents from states Apure and Barinas reported that boys have a higher aerobic capacity than girls.                                                                                                    |
| fitness zone                     |                              |       |                                                                                                                                                                                                                                                                                                                                                                                             |

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| **Factors associated with elevated cardiometabolic risk** | Body composition           | B     | - A study conducted in 8 cities of Venezuela, it was found that 26.5% of the evaluated subjects have a fat percentage above the 75th percentile reference value according to age and sex.  
- In Caracas and Merida among 12.7% and 36.6% of adolescents have high fat reserves, especially boys in the area of Caracas.  
- In adolescents from state Barinas, the girls showed a marked superiority of the sum of skinfolds compared to boys with an average of 73.26 cm and 113.72 cm for male and female respectively. |
| **Levels of influence**                       | Family                     | INC   | - Lack of national data.  
- In a sample of school children from Barquisimeto 21.6% of children showed malnutrition by excess associated with some front-line family (parent or sibling) with obesity. |
|                                               | School                     | INC   | Lack of national and local data.                                                                                                                                                                                                                                                                                                     |
|                                               | Community and built environment | INC   | Lack of national and local data.                                                                                                                                                                                                                                                                                                     |
| **National Policy**                           | National Policy            | D     | The policies that promote PA at the national level:  
- Constitution of the Bolivarian Republic of Venezuela (article 111).  
- The Organic Law of Sports, Physical Activity and Physical Education.  
- National Fund for the Development of Sport, Physical Activity and Education Physics (FONADED for its acronyms in spanish).  
- Outdoor gyms has been a proposal adopted by the Ministry of Popular Power for Youth and Sports and implemented through the National Sports Institute (IND for its acronyms in spanish). At the national level for the first year of installation (2012-2013) there were 44 parks.  
- INPARQUES: The National Parks Institute is responsible for 43 national parks, 36 natural monuments and 65 recreational parks, which occupy about 16% of the national territory. |
| **Municipal**                                 | Municipal                  | C     | The five municipalities of the Capital District and the municipalities of Valencia and Barquisimeto, undertake initiatives to promote physical activity and recreation, most of them by the institutes of sport, that are responsible for planning sporting events, recovery and maintenance of spaces, as well as providing sports equipment. |
Table 2 (continued)

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| **Levels of influence**   | Nongovernment | B     | - Criollitos de Venezuela: It is a training institution of baseball for children, present in most part of Venezuela territory. Since 2005 the institution brought together more than 100,000 athletes between 5 and 19 years; for 2006, a census of 135 assigned leagues in twenty-four states and more than 5,220 teams participating in different categories at national level.  
-Empresas Polar Foundation allocates investments in various sports schools throughout the country, mainly promoting football, baseball and basketball. It also has community development programs for Recreation and proper use of leisure time which aims to develop the capacities of individuals, families and community organizations that allow cultivate good physical and spiritual health as well as social and family life. |
Conclusions

Low PA level was exhibited in 63% of children and youth. In consequence, Venezuela needs to undergo a process of articulation between the several existing initiatives and for said purposes, political will and a methodological effort is required. Investments, infrastructure and opportunities need to be more equal for all children and youth, more cooperation between institutions should be developed and better communication strategies ought to be implemented.
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