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**Material suplementario / Supplementary material / Material supplementar**

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**Supplementary material to:**

de Sá TH, Rezende LFM, Borges MC, Nakamura PM, Anapolsky S, Parra D, et al. Prevalence of active transportation among adults in Latin America and the Caribbean: a systematic review of population based studies. *Rev Panam Salud Publica.* 2017;41:e35.

This material formed part of the original submission and has been peer reviewed.  
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## SUPPLEMENTARY MATERIAL APPENDIX

### Methodological quality and risk of bias: a) results and b) assessment protocol

#### a) Results for studies retrieved in systematic review, São Paulo, 2016

First author	Active transportation construct	Active transportation defined as an objective	Target population well defined / described	Sampling strategy well defined / described	Data Collection well defined / described	Statistical analysis well defined / described	Total population reported	Analysis reported 95% CI or SE	Subgroup analysis	Response rate described (%)
Secretaria de Transporte de la Nación <sup>1</sup>	no	yes	yes	no	no	no	yes	no	yes	NA
De Belaustégui <sup>2</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
PTUMA <sup>3</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
PTUMA <sup>4</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
PTUMA <sup>5</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
PTUMA <sup>6</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
PTUMA <sup>7</sup>	no	yes	yes	yes	yes	no	yes	no	yes	NA
De Belaustégui <sup>8</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	NA
IBGE <sup>9</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	99.90 %
Madeira <sup>10</sup>	no	yes	yes	yes	yes	yes	yes	yes	yes	no
Ministério da Saúde <sup>11</sup>	no	yes	NR*	yes	yes	yes	yes	yes	yes	yes (from 70.3 % to 74.3 %)
Hallal <sup>12</sup>	no	no	NR*	NR*	yes	yes	no	no	yes	yes (from 71.1 % to 76.5 %)
Mielke <sup>13</sup>	no	yes	no	yes	yes	yes	no	no	yes	yes (from 90.9 % to 94.2 %)

Florindo <sup>14</sup>	no	no	no	NR*	yes	yes	yes	yes	yes	71.10 %
Pitanga <sup>15</sup>	no	yes	yes	yes	yes	no	yes	yes	no	87.10 %
Reis <sup>16</sup>	no	yes	yes	yes	yes	yes	no	no	yes	66.40 %
Kienteka <sup>17</sup>	no	yes	no	yes	yes	no	yes	yes	yes	66.40 %
Hino <sup>18</sup>	no	yes	yes	NR*	yes	yes	yes	no	yes	NR* yes (from 60.5 % to 75.2 %)
Reis <sup>19</sup>	no	yes	yes	NR*	yes	yes	yes	yes	no	NR* yes (from 60.5 % to 75.2 %)
Parra <sup>20</sup>	no	yes	no	NR*	yes	yes	yes	no	yes	NR*
Corseuil <sup>21,22</sup>	no	yes	yes	yes	yes	yes	yes	yes	yes	89.20 %
Del Duca <sup>23</sup>	no	yes	no	no	yes	yes	yes	yes	yes	85.30 %
Cunha <sup>24</sup>	no	yes	NR*	NR*	yes	yes	yes	yes	yes	73.10 %
Tribess <sup>25</sup>	no	no	no	no	yes	no	no	no	no	no
Mourão <sup>26</sup>	no	yes	yes	yes	yes	yes	yes	no	yes	no
Simões <sup>27</sup>	no	yes	no	NR*	yes	yes	yes	no	yes	64.50 %
Teixeira <sup>28</sup>	no	yes	yes	yes	yes	no	yes	no	yes	81.70 %
Mendes <sup>29</sup>	no	yes	yes	yes	yes	yes	yes	yes	yes	86.40 %
Martinez-Gomes <sup>30</sup>	no	yes	yes	yes	yes	yes	no	no	yes	no
Amorim <sup>31</sup>	no	yes	yes	yes	yes	yes	yes	yes	yes	90.70 %
Tribess <sup>32</sup>	no	no	no	no	yes	no	no	no	no	no
Bicalho <sup>33</sup>	no	no	NR*	yes	yes	yes	yes	yes	yes	92.60 %
Salvador <sup>34</sup>	no	yes	yes	yes	yes	no	yes	yes	yes	no yes (from 72.0 % to 81.7 %)
Sá <sup>35</sup>	no	yes	yes	NR*	yes	yes	yes	no	yes	NR* yes (from 72.0 % to 81.7 %)
Florindo <sup>36</sup>	no	yes	yes	NR*	no	yes	yes	no	no	NR*
Ministerio de Salud <sup>37</sup>	no	yes	yes	yes	yes	yes	no	no	no	85.00 %
Sarmiento <sup>38</sup>	no	yes	yes	yes	yes	yes	yes	no	no	66.70 %
Cervero <sup>39</sup>	no	yes	yes	yes	yes	yes	yes	yes	yes	66.70 %
Dugas <sup>40</sup>	no	yes	no	no	yes	no	no	no	no	no

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NR: Not reported. NA: Not applicable. PTUMA: Proyecto de Transporte Urbano para Areas Metropolitanas. IBGE: Instituto Brasileiro de Geografia e Estatística.

NR\*: Not reported in the study, but may be reported in previous publications.

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## **b) Assessment protocol**

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### *Active transportation construct defined*

- Did the study present a construct for active transportation?

### *Active transportation set as an objective*

- Did the study describe the prevalence of active transport as a main objective of the study?

### *Target population well defined/described*

- Did the study describe the target population of the study?

“A sample provides the means to obtain information about a larger group, called the target population. The target population must be defined by shared characteristics assessed and measured accurately. Some of these characteristics include age, sex, language, ethnicity, income, and residency. Invariably, subsets of the target population are too expensive or difficult to enlist because, for example, they live in places that are inaccessible to surveys (eg, remote areas, native reserves, military bases, shelters) or they speak languages not accommodated by data collection. These excluded individuals need to be described and their number estimated as a proportion of the target population. The requirements to define the target population and to identify systematic exclusions are necessary to give research consumers a basis for judging the applicability of a study to their question.”

Boyle M. Guideline for evaluating prevalence studies. *Evidence-Based Mental Health*. 1998;1(2):37-39.

### *Sampling strategy well defined / described?*

- Did the study well describe/define the sampling strategy performed?

“Probability sampling relies on the principle of randomization to ensure that each eligible respondent has a known chance of selection; it requires that members of the target population be identified through a sampling frame or listing of potential respondents. This listing must provide access to all members of the defined target population except for exclusions acknowledged by the study authors.”

Boyle M. Guideline for evaluating prevalence studies. *Evidence-Based Mental Health*. 1998;1(2):37-39.

### *Data Collection Well Described*

- Did the study comprehensibly describe the protocol of the data collection in order to be a reliable method?

Boyle M. Guideline for evaluating prevalence studies. *Evidence-Based Mental Health*. 1998;1(2):37-39.

### *Statistical Analysis Well Defined/ Described*

Did the study comprehensibly describe statistical analysis to estimate active transportation such as the use of weight in studies with complex sampling?

### *Overall Prevalence Active Transportation Estimative*

Did the study include descriptive values in absolute numbers (n) AND/OR the prevalence (%) of active transportation?

Magliano ES, Guedes LG, Coutinho ESF, Bloch KV. Prevalence of arterial hypertension among

Brazilian adolescents: systematic review and meta-analysis. BMC Public Health. 2013;13:833.

*Analysis included 95% CI*

- Did the study include confidence intervals (e.g. 95% CI) for the prevalence of active transportation?

“Confidence intervals quantify this closeness by telling us the chance, for example 95%, that the unobserved target population value will fall within a certain range of the observed sample value. Estimates in prevalence studies must be accompanied by confidence intervals or the information needed to calculate them.”

Boyle M. Guideline for evaluating prevalence studies. Evidence-Based Mental Health. 1998;1(2):37-39.

*Subgroup Analysis*

Did the study provide descriptive values in absolute numbers (n) **AND/OR** the prevalence (%) of active transportation in subgroups such as sex OR age OR race?

*Sample matched target population (Response rate)*

- Did the study provide the sample matched target population (response rate)? If yes, what was the final response rate?

“Non-response is the failure to enlist sampled individuals. If non-response is extensive and influenced by variables central to study objectives, it can lead to selection bias and estimates that deviate systematically from population values. When information is available on non-respondents, methods exist and should be used to evaluate selection bias. In the absence of such information, sample representativeness must be evaluated by comparing the socio-demographic characteristics.”

“The threshold for minimally acceptable response in prevalence studies should be set at 70% as long as the report shows that respondents and non-respondents, and/or the study sample and the target population, have similar important socio-demographic characteristics.”

Boyle M. Guideline for evaluating prevalence studies. Evidence-Based Mental Health. 1998;1(2):37-39.