Author's response to reviews

Title: Follow-UP in healthy schoolchildren AND in adolescents with DOWN syndrome: psycho-environmental and genetic determinants of physical activity and its impact on fitness, cardiovascular diseases, inflammatory biomarkers and mental health. The UP&DOWN Study

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Author's response to reviews: see over
Dear Editor

Please find enclosed the manuscript entitled “Follow-UP in healthy schoolchildren AND in adolescents with DOWN syndrome: psycho-environmental and genetic determinants of physical activity and its impact on fitness, cardiovascular diseases, inflammatory biomarkers and mental health. The UP&DOWN Study” by Castro-Piñero et al. to be considered for publication in BMC Public Health.

This manuscript provides an overview on the design, procedures and methods used in the UP&DOWN study. The aims of this follow-up study are: i) to determine the patterns, interrelationships and impact on health indicators of objectively and subjectively measured physical activity, sedentary behaviours and health-related fitness (including fatness) in healthy primary and secondary schoolchildren, and in adolescents with down syndrome along a 3-yr follow-up; ii) to identify the main psychosocial and environmental determinants of physical activity and sedentary behaviours in healthy primary and secondary schoolchildren, and in adolescents with down syndrome along a 3-yr follow-up; iii) to investigate genotype-lifestyle interactions in healthy primary and secondary schoolchildren, and in adolescents with down syndrome along a 3-yr follow-up; and iv) to evaluate the association of physical activity, sedentary behaviours and health-related fitness with traditional and new cardiovascular disease risk factors in healthy primary and secondary schoolchildren, and in adolescents with down syndrome along a 3-yr follow-up.

The findings of the UP&DOWN study may help the Health Information Systems and policy makers to identify the target population for primary prevention and health promotion policies, and to develop and test preventive strategies. Moreover, these data will allow following the trends at population level, as well as to modify/adapt/create new evidence-based physical activity guidelines at national level. The findings will also serve as a scientific platform for interventional studies.

§ The authors have not published or submitted any related papers from the same study.
§ All the authors have approved the publication of the paper in its present form.
§ On behalf of all authors, I hereby confirm that this manuscript has been prepared in accordance with the BMC Public Health guidelines for authors, and that the manuscript meets the requirements as outlined in the checklist.
§ Ethical approval and funding approval documents has been sent as email attachments to the following email address: BMCSeriesEditorial@biomedcentral.com
§ The study has been funded by the Spanish Government (governmental funding): National Research & Development & Innovation, Plan of the Spanish Ministry of Education and Science, under the Strategic Line of Sport and Physical Activity (R+D+I 2008-2011, MICINN).
§ Study status is ongoing. Researchers are still collecting data until the end of December 2014, and analyzing data.
§ Some published or submitted publications containing results of this study:
  1. Izquierdo-Gomez R, Martínez-Gómez D, Acha A, Veiga OL, Villagra A, Diaz-Cueto M; UP&DOWN study group. Objective assessment of sedentary time and physical activity throughout the week in adolescents with Down
We believe that the present manuscript is within the scope of *BMC Public Health*, and is of high interest for its readers.

We hope that you will find this work of interest.

Sincerely and respectfully

Dr. Castro-Piñero on behalf of all co-authors

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