

# STRENGTHENING THE EVIDENCE IN EXERCISE SCIENCES

The SEES Initiative

### **Journal Reports 2019**

The British Medical Journal

**Systematic Reviews with Meta-Analyses** 



### About SEES Initiative

We are a group of academics, including faculty, post-doctoral fellows, graduate, and undergraduate students, highly compelled to do meta-research in publications featuring interventions of exercise and physical activity applied to several health conditions.

Our primary goal is to promote surveillance of published evidence in exercise sciences, fostering a culture of respectful and critical appraisal for the published evidence in our field. We attempt to do so as transparently and collaboratively as possible.

Further, we ultimately aim to increase the awareness regarding the need for transparent and informative scientific reports that should be valued by a complete reporting, carefully designed methods, and well-reasoned claims on the pursued research question.

# About this collection

The present journal collection displays assessment reports generated by us as a result of continuous and systematic surveillance of published articles by the featured journal. Such publications reported either randomized clinical trials or systematic reviews with meta-analysis. All of our assessment reports were sent by email to the corresponding authors. Whenever requested by authors, we were prone to proceed required revisions and self-correction (whenever applicable), disseminating the corrected assessment reported.

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DOI: 10.17605/OSF.IO/NTW7D



### **Contents**



JJournal: The British Medical Journal

Editor in Chief: Fiona Godlee

Associated Professional Society: British Medical Association (BMA)

Website: <a href="https://www.bmj.com/">https://www.bmj.com/</a>

# Number of systematic reviews with meta-analyses assessed by the SEES Initiative

01 articles

### Information for individual publication reports

| Title  | Pack* | Links   |
|--|-------|---|
| Dose-response associations between accelerometry measured physical activity and sedentary time and all cause mortality: systematic review and harmonised meta-analysis |       | SEES link:<br>https://sees-initiative.org/pmid314<br>34697/ |

<sup>\*</sup>Pack: (place where each month's articles are archived).



# Strengthening the Evidence in Exercise Sciences Initiative (SEES Initiative)

#### **Assessment Report for Individual Study**

#### Study title

Dose-response associations between accelerometry measured physical activity and sedentary time and all cause mortality: systematic review and harmonised meta-analysis

#### DMID

31434697

Journal

The BMJ

#### Type of Publication and Period of assessment

Systematic Review with Meta-Analysis, SEES Pack 9

| Component               | Item   | SEES assessment   |
|-------------------------|--|---|
| Transparency            | Registration: Is the review registered in a public database?   | Yes - Registered in PR  |
| Transparency            | Protocol: Is there referral of a publicly available methodological protocol? (Note: if so, you must also use the protocol to consult information about the review)   | No  |
| Completeness            | Title: Is the study identified as a systematic review, meta-analysis, or both?   | Yes   |
| Completeness            | Abstract: Does the abstract list the data sources used in the review? (Note: if more than five databases were used, simplified or partial referral should be considered as "Yes")  | Yes   |
| Completeness            | Abstract: Does the abstract inform key eligibility criteria for study selection?   | Yes   |
| Participants            | Abstract: Is there a description regarding the population (participants) or main condition(s) addressed in the review?   | No  |
| Intervention / Exposure | Abstract: Is there a description regarding the interventions/exposures (or, broadly, independent variables) addressed in the review?   | Yes   |
| Completeness            | Abstract: Is there a description of the number of included studies?  | Yes   |
| Outcome                 | Abstract: Is there a result description for the main outcome of interest?  | Yes   |
| Completeness            | Introduction: Is there a description for the research question (with PICOS elements) or precisely stated objectives (with PICOS) ?   | No  |
| Transparency            | Methods: Is there at least one search query fully available? (Note: a full search query should allow complete replication)   | Yes   |
| Methodological rigor    | Methods: Did the search strategy include non-published evidence? ("grey literature")   | Yes   |
| Methodological rigor    | Methods: If the search is restricted for evidence generated after 1980, is there an indirect or direct justification related to the time range?  | The searches were carried out from the database inception (earliest date) |
| Methodological rigor    | Methods: How many languages were considered for study eligibility?   | 2   |
| Completeness            | Methods: Is there a detailed explanation of eligibility criteria for PICOS elements? (Note: detailed explanation should allow complete replication)  | Yes   |
| Methodological rigor    | Methods: Was the study selection carried out in duplicate?   | Yes   |
| Methodological rigor    | Methods: Was the data extraction carried out in duplicate?   | No  |
| Methodological rigor    | Methods: Is there a description of the assessment of risk of biases?   | Yes   |
| Methodological rigor    | Methods: Was the assessment of risk of biases carried out in duplicate?  | Yes   |
| Outcome                 | Methods: Is there a description of the statistical combination (meta-analysis) regarding the effect measure (e.g., relative risk or mean difference), statistical method (e.g., inverse variance), and effects approach (fixed or random)? | Yes   |
| Outcome                 | Methods: Is there a description regarding the assessment of statistical heterogeneity?   | Yes   |
| Completeness            | Results: Is there a full description regarding the numbers of references (retrieval, eligibility, synthesis)?  | Yes   |
| Completeness            | Results: Is there a description about the sample sizes of individual studies?  | Yes   |

| Participants, Intervention / Exposure | Results: Is there a full description of characteristics? (Note: the available PICOS elements should be considered)   | Yes                                     |
|---------------------------------------|--|---|
| Completeness                          | Results: Is there a description of study duration (follow-up lengths)?   | Yes                                     |
| Outcome                               | Results: Is there a minimally recommended description of meta-analytic summary estimates? (Note: binary outcomes as frequencies with and without the event (or as proportions such as 12/45); continuous outcomes as the mean, standard deviation, and sample size for each group) | Yes                                     |
| Outcome                               | Results: Is there a full description of individual results for studies composing the meta-analysis? (Note: effects size, imprecision measure and percentage weight should be considered)   | Yes                                     |
| Critical appraisal                    | Results: Is there a description of risk of bias within studies? (Note: your assessment should be based on the characteristic of the RoB tool)  | Yes (FULL description)                  |
| Critical appraisal                    | Results: Is there a description for non-planned modifications to the synthesis during the course of the review? (e.g.: change in eligibility criteria or RoB tools; please, what was changed and its justification [why] should be considered).                                    | No                                      |
| Critical appraisal                    | Discussion: Is there a potential spin bias based on a specific reporting strategy to highlight that the experimental treatment (or condition of interest) leads to the hypothesized result?  | No                                      |
| Critical appraisal                    | Discussion: Are the results discussed in light of the risk of biases in individual studies?  | No                                      |
| Critical appraisal                    | Discussion: Are limitations discussed at the study/outcome and/or at the review level?   | Yes, BOTH for study and review levels   |
| Transparency                          | Is there a statement regarding the data availability (data sharing plan)?  | Yes                                     |
| Completeness                          | Is there a statement regarding the sources of funding? (Note: funding for the review itself)   | Yes                                     |
| Completeness                          | Did the review authors declare whether they had any conflicts of interest (COI)?   | Yes, authors declare non-financial COIs |

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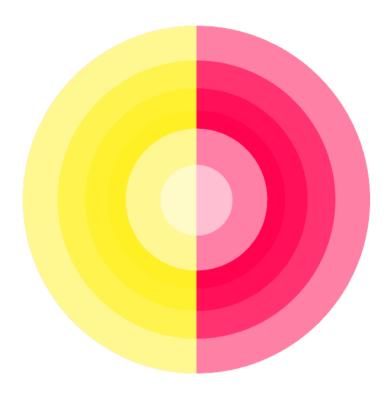
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