Explaining socioeconomic inequalities in self-rated health: A systematic review of the relative contribution of material, psychosocial and behavioural factors

<u>Protocol</u>
(Published after the study was conducted, changes during the review process are marked)

Review question(s)
Objective:
This review focuses on explaining socioeconomic inequalities in self-rated health. From previous research, it is well known that those with a lower socioeconomic status have worse health compared with those in higher socioeconomic status groups. We aim to analyse the relative contribution of material, psychosocial and behavioural factors to the explanation of socioeconomic inequalities in self-rated health. To our best knowledge, there is no systematic review summarizing the existing evidence of studies comparing the relative contribution of material, psychosocial and behavioural factors in order to prioritize strategies for tackling health inequalities.

Questions:
The aims of this study are to
1) summarize the evidence of observational studies analyzing material, psychosocial and behavioral pathways for explaining social inequalities in self-rated health (<u>note/revision: The decision to focus on self-rated health was made after a first pre-test search)</u> and
2) to assess the independent (direct) and the shared (indirect) effect of the different explanatory approaches in addition to their relative contribution.

Searches
The following (meta-)databases will be searched: Pubmed and ICI Web of Science. In addition, reference lists of relevant studies will be screened. No restrictions will be made regarding the language if the abstract is in English and the study is considered as a relevant. Search terms include different combinations and a variety of measurement of socioeconomic status, material, psychosocial and behavioural factors (see table 1 in the manuscript).

Inclusion and exclusion criteria
Inclusion: All studies which focus on explaining socioeconomic inequalities in self-rated health including at least two of the three main pathways (material, behavioural or psychosocial factors) and analyse the relative contribution of these approaches in separate and joint models. Studies with a cross-sectional or a longitudinal study design using quantitative data will be included.

Exclusion: Studies will be excluded if they were not empirical studies or if they focus on selected population such as patients with diseases (case-control studies). No randomized control trials will be included. Further, studies will be excluded if they do not include the relevant outcome (self-rated health, <u>note/revision:</u> the decision was taken later in the process) or because of methodological reasons.

Condition or domain being studied
Health inequalities
Explanatory approaches
Mediation analyses

Participants/population
Studies that include the general population in order to analyse the contribution of material, psychosocial and behavioural factors for explaining socioeconomic inequalities in self-rated health.

Intervention(s), exposure(s)
Mediation analysis is applied to explain the underlying process through which independent variables (material, psychosocial, behavioural factors) affect dependent variables (self-rated health). We aim to assess the unequal contribution of material, psychosocial and behavioural factors (exposures) and their relative explanatory power regarding socioeconomic inequalities in self-rated health.

Comparator(s)/control
Not applicable.

Context
Not applicable.

Outcomes:
Health, morbidity and mortality (note/revision: after a pre-test of our search and having a rough overview of relevant studies, we narrowed our focus on self-rated health, as most of the studies analyzed self-rated health, which is a good indicator in public health surveys; in addition, we aim to reduce heterogeneity between the studies by focusing on one outcome).

Data extraction (selection and coding)
Extraction of relevant information such as study characteristics (N, country, study design), indicator of socioeconomic status and explanatory approaches (note/revision: after screening the studies, we found that the measurement of the explanatory factors varied between the studies and therefore we decided to describe which variables were included to define each pathway (see table 2)).

Risk of bias (quality) assessment
The risk of bias will be assess based on the STROBE statement.

Strategy for data synthesis
A narrative synthesis is planned due to the topic of this review.

Analysis of subgroups or subsets
A subgroup analysis (narrative) regarding different SES-indicators and a gender-specific analysis.

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Anticipated date (start)
January 2015

Anticipated completion date
December 2015 (<u>note/revision:</u> completion end of March 2016)

Conflicts of interest
None known

Language
English

Country
Germany

Stage of review
Completed