

Association between depression and physical activity in type 2 diabetes, 2000-2018: a systematic review

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Citation

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Review question

Which instruments of depression and physical activity have been used in studies over the review period?
What were the settings and designs of the studies?
What was the association between physical activity and depression in type 2 diabetes?

Searches

Concepts included in the search were: diabetes and depression and physical activity, using thesaurus terms appropriate for each database and terms in title or abstract. Searched MEDLINE (Ovid), Embase (Ovid), CINAHL (EBSCO), and PsycINFO (EBSCO) through July 25, 2018, limiting to English.

Types of study to be included

Cross-sectional study OR Longitudinal study.

Condition or domain being studied

The outcome of the study is depression. Depression is either a major depressive disorder or a clinical disorder, it is a mood disorder affecting activities, feelings, and thoughts of people with depressive symptoms.

Participants/population

Persons diagnosed with type 2 diabetes,

Intervention(s), exposure(s)

Physical activity is defined as bodily movement enhancing the health of people such as walking, dancing, exercising yoga.

Comparator(s)/control

Not applicable.

Context

Primary outcome(s)

Association between depression and physical activity in type 2 diabetes.

Timing and effect measures

Secondary outcome(s)

Instruments of depression and physical activity that have been used in studies.
Settings and designs of studies.

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Timing and effect measures

Data extraction (selection and coding)

We developed a data extraction form in an Excel spreadsheet that was subsequently tested and refined by all authors. One investigator conducted data extraction from included articles and entered into the finalized table. The extracted information includes 1) author/year/country, 2) sample size/gender/age, 3) Study design/setting, 4) physical activity/depression measurements, 5) Follow-up (longitudinal study only), and 5) results. Another investigator independently went over the extracted information. Two investigators discussed and resolved by consensus if there was disagreement.

Risk of bias (quality) assessment

The quality assessment will be done using the JBI (Joanna Briggs Institute) Critical Appraisal Tools. Given that cross-sectional and longitudinal studies are included for the review, we are going to use an appraisal tool specific for each study design. Two reviewers independently assessed included studies using the appropriate appraisal tools. After the initial assessment, two investigators discussed the assessments and achieved consensus in cases of any disagreement.

Strategy for data synthesis

We will use aggregate data to provide a narrative synthesis.

Analysis of subgroups or subsets

We separate studies into before 2011 and from 2011 to examine patterns in the use of instruments and association.

We present findings, such as frequency and association by instruments, settings, and designs.

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05 February 2018

Anticipated completion date

31 December 2018

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None.

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Conflicts of interest

Language

English

Country

United States of America

Stage of review

Review_Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Depression; Depressive Disorder; Diabetes Mellitus, Type 2; Exercise; Humans

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Details of any existing review of the same topic by the same authors

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	No
Risk of bias (quality) assessment	Yes	No
Data analysis	No	No

Versions

11 September 2018

PROSPERO

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