What do we know about brief interventions to increase physical activity?

A systematic review of reviews

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Background

- Low levels of physical activity (PA) are associated with significant disease burden (1)

- Primary care providers have access to large proportion of public BUT have time constraints

- PA interventions may be easier to integrate into routine primary care if they were brief

- Recent policy initiatives and guidance encourage use of brief interventions

- But, NO agreed definition of a brief intervention

Objectives

What do we know about brief interventions (BIs) to increase PA that could be delivered in a primary care setting?

- How are BIs defined?
- Do BIs increase physical activity levels, and compared to what?
- Which factors influence their effectiveness?
- Who are they effective for?
- Are they feasible and acceptable?
Standard systematic review methodology

**Criteria**
- PA interventions only
- Systematic review/Meta-analysis
- Adults, no PA rehabilitation
- PA outcome
- Individual level
- Findings/Discussion of BIs

**Data extraction**
- Double checked

Descriptive data

Narrative Synthesis
Results
Study selection

- Records identified from electronic databases: N=11993
- Records identified from authors collection: N=4
- Records after duplicates removed N=5803
  - For Title screening N=5803
    - Excluded: N=5561
  - For Abstract screening*: N=242
    - Excluded: N=88
  - For Full Text screening*: N=154
    - Excluded: N=145
  - For Synthesis N=10

* Double screened
1. Definitions of brief interventions

- 3/10 reviews gave definitions of BIs

- Agreed that BIs, at their most minimal, could include advice, verbal or otherwise, of a short duration

- One review specified a maximum duration (30 minutes), and two included interventions of up to 30 or 40 minutes
2. Effectiveness of brief interventions

- Reviews support the effectiveness of BIs on self-reported physical activity in the short-term (6 weeks-12 months)

- Lack of evidence/support for their effectiveness in the long term and their impact on objectively measured physical activity
3. Factors that impact on the effectiveness of brief interventions

- Reviews support the use of high quality supplementary written materials

- Lack of/inconclusive evidence for the impact of duration, type of provider, setting and theoretical basis
Inconclusive and limited evidence for the impact of targeting BIs at participants on the basis of various characteristics, e.g.:

- Age
- Gender
- Current activity level
- Health status
- Socio-economic status
5. Feasibility and acceptability of brief interventions

Reviews report that the following factors can impact feasibility and acceptability of BIs for patients and practitioners:

- practitioner
- patient
- intervention content
- structural factors (e.g. time constraints)
Key Conclusions

- 2/3 of the reported definitions of BIs include interventions too long for routine primary care consultations

- Future research should develop and evaluate very brief interventions (VBIs) that could fit into a routine primary care consultation

- More evidence is needed about the long–term effectiveness of BIs for objectively measured and self-reported physical activity
Thanks & Questions?

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