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Evidence Updated: No new evidence
Bottom Line: No change
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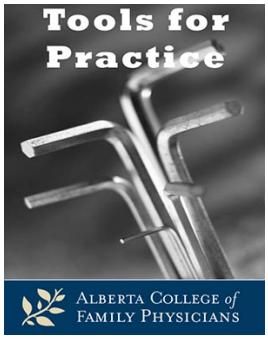

Motivating Patients to Move: A Light at the End of the Couch?

Clinical Question: How do I motivate my patients to participate in regular physical activity?

Bottom-line: Pedometers, used with specific exercise goals, provide an inexpensive, tangible measure of a patient's physical activity, and have been demonstrated to increase physical activity levels.

Evidence:

- 2007 systematic review[1] (26 studies, 2767 patients) assessed the use of pedometers to increase physical activity levels and improve health over a mean of 18 weeks:
  - Pedometers significantly increased physical activity by ~2500 steps/day.
  - Having a "step goal" (most commonly working up to 10,000 steps/day) predicted increased activity.
- Another meta-analysis from 2009[2] and newer randomized controlled trials (RCT)[3,4] demonstrated similar results, including sustained results for up to one year.[4]

Context:

- Multiple studies show that increased activity is associated with reduced mortality. Two examples are:
  - A prospective study[5] (252,925 patients) found that regular moderate (e.g. brisk walking ≥30 minutes most days) was associated with a 27% relative decrease in mortality compared to no activity.
  - In a prospective cohort[6] (9777 men), the mortality rate of active men was a third of that of inactive men (40 vs. 122 deaths per 10,000 patient-years, respectively).
- In patients with chronic disease, the most successful interventions to increase physical activity are those that involve specific behavioural strategies and encourage self-monitoring.[7]
  - Use of a pedometer fulfills both.
- Other benefits of pedometers include:
  - Weight reduction of 1.3 kg in 16 weeks.[8]
  - Reductions in systolic blood pressure of 3.8 mmHg over 18 weeks.[1]

- Improved blood glucose (BG) levels in patients with impaired glucose tolerance up to 12 months later (i.e. fasting BG reduced by 0.31 mmol/L, two-hour BG reduced by 1.3 mmol/L.[4]

Implementation:

- Providing patients with a written, goal-oriented exercise program has been previously demonstrated to increase physical activity levels.[9] A sample "prescription" for activity with a pedometer might look like:
  1. Wear your pedometer every day for one week.
  2. Calculate your daily steps (feel free to average to the closest 1000-step increment).
  3. Add 500 steps per day to your daily average. Walk that each day for the next week.
  4. Repeat step three, adding 500 steps to last week's daily goal and walk that each day for the next week.
  5. Continue to your target of 10,000 steps per day.

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Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at http://bit.ly/signupfortfp to be added to the distribution list. Archived articles are available on the ACFP website.