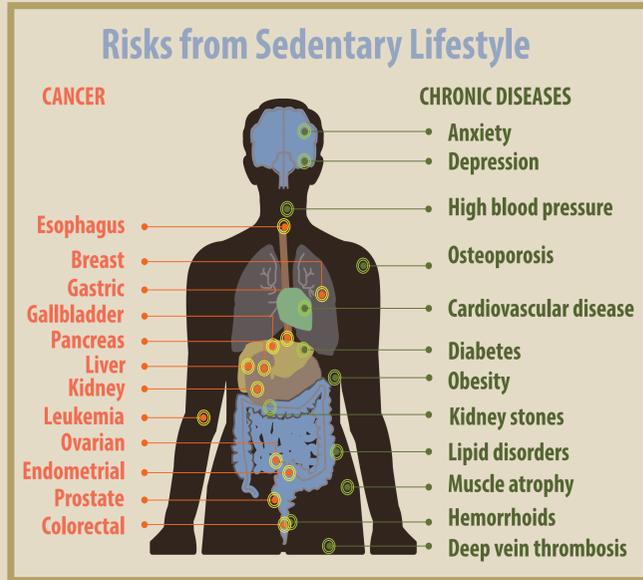


BACKGROUND

Recent evidence suggests that sedentary behaviour (SB) is linked to multiple poor health outcomes, independent of physical activity level (Thorp et al., 2011).



Office workers spend up to 75% of the working day sedentary, often in prolonged periods extending 30 minutes (Evans et al., 2012, Neuhaus et al., 2014).

Using sit-stand workstations has been shown to be acceptable and feasible by office workers (Chau et al, 2014) and contributes to reductions in sitting in the short term (Alkhaja et al., 2012, Neuhaus et al., 2014).

PURPOSE

The long term effectiveness and sustainability of sit-stand workstation use as well as any potential 'novelty effect' in new users has not been described.

In addition there is little information on the patterns of desk use and interruptions to sitting which may be more important for health outcomes (Chinapaw et al., 2014).



To date sit-stand workstations use has been determined by self-report diary, and their effectiveness has been attributed to the objectively measured SB of the desk user.

Self-report of desk use is subject to social desirability and recall bias and objective measurement of SB among desk users assumes that reductions in sitting are a result of sit-stand workstation use.

Objective monitoring of the desk height/movement married to objectively measured SB in users may overcome this methodological problem.

► The findings of the study will provide useful information on the pattern and sustainability of sit-stand desk use and inform interventions to reduce SB in the workplace.

METHODS

measurement tools

- Sedentary behaviour will be objectively measured using an accelerometer (activPAL, PAL Technologies Ltd, Glasgow, UK) worn for 7 days pre-intervention and at 2 weeks, 2, 5, 8 and 12 months following desk installation.

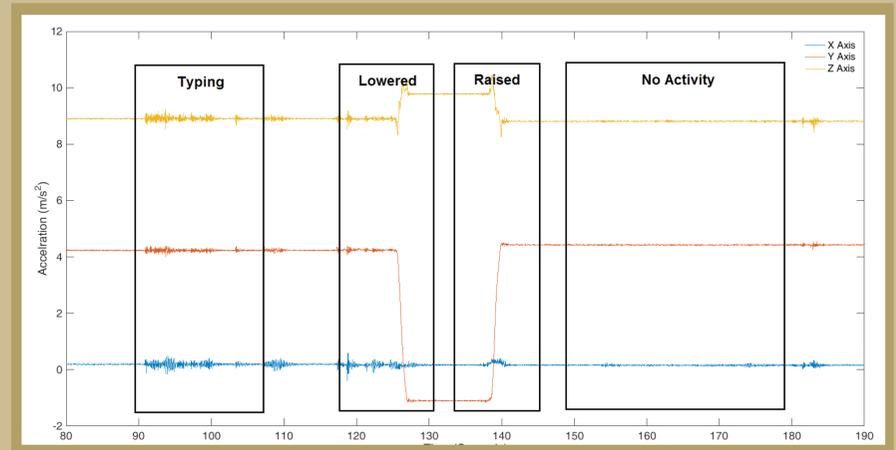
- Desk height/movement/usage will be monitored objectively throughout the 12-month period using the Java Sun Spot wireless sensor network which will be attached to the top shelf of the desk.

- Participants will complete self-report workstation use which will be related to the objective measure of its use.

activPAL™



Java Sun Spot



Data from accelerometer attached to the standing desk. The activities of lowering/raising and typing on the desk, along with non-use can clearly be seen.

intervention

The proposed RCT will examine the effects of providing a sit-stand workstation on SB in office workers over a 12-month period.

cohort

40 office-based university staff aged 18-65 years will be randomized into

- control group (SB in usual environment) or
- intervention group (SB and sit-stand workstation).

UP TO

76%

Percentage of working day that office workers spend sedentary



Ergotron WorkFit sit-stand desks and stands allow manual adjustment from sitting to standing height throughout the work day.

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