EDITORIAL

Sedentary behaviour is bad for your mental health

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CHRISTMAS IS A TIME FOR SITTING BY AN OPEN FIRE TO READ OR WATCH TELEVISION. HOWEVER, before we curl up with a good book we should consider the results of a recent crossover study which suggest that sitting down has a detrimental effect on our mental health.[1]

A total of 43 healthy, physically active individuals, aged 18-35, were recruited from staff and students at London University. They were all non-smokers with a normal BMI and none were taking any regular medication.

Participants were randomly assigned to a sedentary intervention or normal activity. Those in the intervention group were told to stop exercising and to sit down as much as possible. Daily activity was measured with an accelerometer.

After two weeks, the participants were asked to complete mood questionnaires and undergo psychophysiological testing. They were then switched to the other group (normal or sitting) for a further two-week period followed by repeat testing.

Compared with the control group, the sedentary group spent an additional 32 minutes a day sitting down. Adjusted comparisons showed significant mean increases in the General Health Questionnaire (GHQ-28) and Profile of Mood States (POMS-SF) scores following the sedentary intervention (Δ GHQ = 6.23, Δ POMS = 2.80, $P \leq 0.0001$).

Psychophysiological testing was carried out by asking participants to complete two standardised stress tests. Blood pressure, heart rate, cortisol and inflammatory markers were measured before and after the test.

Contrary to expectation, the sedentary intervention was not associated with an increased physiological response to stress. However, participants with greater mood disturbances did have an increased interleukin-6 response to stress.

The GHQ-28 is a 28-item measure of emotional distress. There are subscales of anxiety/insomnia, depression, somatic symptoms and social dysfunction. The total possible score ranges from 0 to 84. It was designed as a screening tool and the minimal clinically important difference has not been established.

The POMS-SF is a 37-item questionnaire to gauge emotional distress. There are subscales of depression, tension/anxiety, anger, fatigue, vigour and confusion. The total possible score ranges from 0 to 148. Again, it is unclear whether the observed difference in scores (2.8/148) is clinically significant.

Sedentary behaviour is defined as sitting or lying down (with the exception of sleeping) e.g. when reading, watching television, travelling or working at a desk or computer.

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It is increasingly recognised as an independent risk factor for all-cause mortality, cardiovascular disease, diabetes and depression.[2,3]

We are advised to:

- Walk or cycle instead of driving
- Take regular breaks from extended periods of sedentary behaviour
- Reduce total screen time[4]

As GPs we spend long periods of time sitting at our consultation desks and we should recognise that this may be having a detrimental effect on our health.

Possible strategies might be to switch off patient call systems and walk to home visits.

May I also suggest that this Christmas we switch off our television sets and go out for a winter walk.

REFERENCES

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