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Effectiveness of a Malaysian Workplace Intervention Study on Physical Activity Levels

Authors: M. Z. Bin Mohd Ghazali, N. C. Wilson, A. F. Bin Ahmad Fuad, M. A. H. B. Musa, M. U. Mohamad Sani, F. Zulkifli, M. S. Zainal Abidin

Abstract: Physical activity levels are low in Malaysia and this study was undertaken to determine if a four week work-based intervention program would be effective in changing physical activity levels. The study was conducted in a Malaysian Government Department and had three stages: baseline data collection, four-week intervention and two-month post intervention data collection. During the intervention and two-month post intervention phases, physical activity levels (determined by a pedometer) and basic health profiles (BMI, abdominal obesity, blood pressure) were measured. Staff (58 males, 47 females) with an average age of 33 years completed baseline data collection. Pedometer steps averaged 7,102 steps/day at baseline, although male step counts were significantly higher than females (7,861 vs. 6114). Health profiles were poor: over 50% were overweight/obese (males 66%, females 40%); hypertension (males 23%, females 6%); excess waist circumference (males 52%, females 17%). While 86 staff participated in the intervention, only 49 regularly reported their steps. There was a significant increase (17%) in average daily steps from 8,965 (week 1) to 10,436 (week 4). Unfortunately, participation in the intervention program was avoided by the less healthy staff. Two months after the intervention there was no significant difference in average steps/day, despite the fact that 89% of staff reporting they planned to make long-term changes to their lifestyle. An unexpected average increase of 2kg in body weight occurred in participants, although this was less than the 5.6kg in non-participants. A number of recommendations are made for future interventions, including the conclusion that pedometers were a useful tool and popular with participants.

Keywords: pedometers, walking, health, intervention

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