

EFFECTIVENESS OF 10 000 STEPS INTERVENTION AMONG THE COMMUNITY AT SECTION 3 BANDAR BARU BANGI

ABSTRACT

Walking 10 000 steps daily is associated with beneficial health outcomes. Recent systematic reviews have suggested that pedometers may be an effective motivational tool to promote walking. The aim of this study was to study the effectiveness of a 10-week, pedometer-based walking intervention on daily step-counts, self-reported knowledge, attitude, practice, weight and cardiometabolic risk factors in a sample of community in Bangi not meeting current physical activity recommendations. A total of 34 subjects (mean age: 46 ± 8 years) were selected by convenience sampling method. Measures for physical activity, knowledge, attitude and practice scores on physical activity, as well as weight, blood pressure, fasting glucose and body mass index (BMI) were taken at baseline and after 10 weeks. Subjects were instructed to achieve 10 000 steps daily or at least on some days of the week for 10 weeks. Significant increases were found in the scores of knowledge and practice after 10 weeks ($p < 0.001$). No difference in scores of attitude ($p = 0.373$) were observed mostly due to subjects having a positive attitude towards walking activity from the beginning. The average daily steps recorded during the 10-week intervention was 9350 ± 2375 steps per day. There were significant increases in daily step counts between Week 1 and Week 10 ($F = 3.256$, $df = 6.745$, $p < 0.003$, $\eta^2 = 0.090$). Subjects spent more time in heavy ($p = 0.002$) and moderate ($p = 0.001$) physical activities after the 10-week intervention. There was a reduction in time spent in sitting but it was not significant. On average, there was a reduction of 0.8kg in body weight after the intervention ($p = 0.010$). A significant improvements in body mass index (BMI) ($p = 0.008$), fasting blood glucose ($p = 0.029$) and systolic blood pressure ($p = 0.008$) were also observed. In conclusion, the 10-weeks pedometer-based walking intervention is effective in promoting physical activity and improving health outcomes in community-based individuals. It is with hope that these findings can serve as a useful platform and provide guidance for future physical activity intervention programs in the community.