

Physical activity promotion among older adults: Short term effects of a neighbourhood environment internet-based intervention

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Purpose

Recent research suggests that internet-based physical activity interventions can be suitable and effective, even for older adults. Besides, neighbourhood environment internet-based interventions are currently considered as more effective than traditional motivational interventions. Therefore, the main purpose of this study was to explore the effects of a neighbourhood environment internet-based intervention on physical activity behaviours of older adults.

Methods

At baseline, 87 older adults (60.69 ± 7.85 years) from the same district were assigned to an intervention ($n = 41$) or a control ($n = 46$) group. The two months intervention was composed of a comprehensive physical activity promotion website, with an emphasis on neighbourhood environment contents, and a monthly personalized email based on the stage of change theory. Physical activity behaviours were assessed by the IPAQ short-form and the stage of change questionnaire at baseline, after one and two month of the intervention, and after one month follow-up.

Results

Significant improvements were observed for the stage of change questionnaire in the intervention group from baseline to the end of the intervention ($p = 0.003$), they remained at follow-up ($p = 0.012$) while the control group remained unchanged. Physical activity level declined progressively in the control group as it remained constant in the intervention group, with as significant difference between groups after two months intervention ($p = 0.027$).

Conclusions

These findings suggest that a neighbourhood environment internet-based intervention can improve physical activity behaviours in older adults. Further research on this topic is needed to examine longer term effects with larger sample.

Keywords

Physical activity; internet-based intervention; older adults; neighbourhood environment.

References

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