

Abstract

Background

There were important limitations in the conventional treatments for depression, and overseas research found that exercise was effective and could be considered a treatment option. This study investigated if an aerobic exercise programme would be a beneficial adjunct treatment for Chinese patients on treatment for depression at public specialist psychiatric clinics in Hong Kong.

Method

We used a single blind randomized controlled trial of 12 weeks' duration. We recruited into our study 34 adult patients (age between 18 and 65) suffering from major depressive disorder who were attending 2 psychiatric outpatient clinics in Hong Kong. All participants had an initial Hamilton Depression Rating Scale (HAM-D) score of at least 14. They were randomly assigned to receive an aerobic exercise programme in addition to usual psychiatric care (intervention group), or to continue with usual psychiatric care alone (control group). We performed assessments before and 12 weeks after the randomization. We measured outcomes including depression severity, subjective sleep quality, health-related quality of life, anxiety level, and somatic distress.

Results

Seventeen participants were randomly allocated to the intervention group and control group respectively. Both groups showed statistically significant reduction in the mean HAM-D scores, with greater reduction in the intervention group (18.5 to 9.8) than the control group (19.5 to 14.5). There was statistically significant main effect for time ($p < 0.001$, partial eta squared = 0.70), main effect for group ($p = 0.047$, partial eta squared = 0.12), and time*group interaction effect ($p = 0.020$, partial eta squared = 0.16). There was also statistically significant difference in the subjective sleep quality measure ($p = 0.031$),

favouring the intervention group. There was no statistically significant difference in other outcome measures.

Conclusion

This study provides suggestive, but by no means conclusive, evidence that aerobic exercise might be a beneficial adjunct treatment for outpatients suffering from depression attending public psychiatric care in our locality. We identify limitations in our study and make recommendations to enhance participants' adherence in future exercise programmes.

Keywords: Depression, exercise, aerobic, trial