Abstract

Background: Generalized anxiety disorder (GAD) is a common mental disorder that causes a significant health burden to both the sufferers and society in general. Existing psychological therapies are effective but the associated cost affects their accessibility to a large part of the GAD population. Attentional bias modification training (ABMT) is a branch of computerized treatment methods that are based on models of cognitive processing of anxiety symptoms. ABMT as a form of therapy has the advantage of being simple and requires less clinical contact. Some initial studies have shown that ABMT may be effective in reducing anxiety symptoms in GAD patients. Yet existing empirical evidence on ABMT suffers from poor quality and a significant knowledge gap exists. Given the potential of ABMT, a stringent, randomized controlled trial is warranted to investigate its clinical efficacy on the local clinical GAD population.

Objectives: We aimed to investigate the effect of a brief attentional bias modification program on the anxiety symptoms, depressive symptoms, level of worry and rumination and health-related quality of life of adults suffering from GAD who are seeking treatment from psychiatric outpatient clinics. We also explored the relationship between change in attentional bias and anxiety symptoms.

Method: This was a parallel-group, double-blinded, randomized controlled trial. Participants were allocated into either the intervention group or the control group randomly. Participants in the intervention group received 4 weekly sessions of ABMT in addition to their usual psychiatric care, while the control group received 4 weekly sessions of sham ABMT in addition to their usual psychiatric care. Changes in outcome measurements in the two groups

after undergoing their assigned training were compared statistically for significant differences. Mediation analysis was carried out.

Results: 33 subjects were recruited from two specialist psychiatric clinics to the study. 17 of these subjects were allocated to the intervention group and 16 were allocated to the control group. The subjects showed statistically significant improvement in anxiety symptoms, depressive symptoms and level of worry, but no significant difference between the changes in the two groups was found. There was also no significant change in subjects' attentional bias after ABMT.

Conclusion: The results of the current study demonstrate the non-specific treatment effect of ABMT on anxiety, depression, level of worry and level of rumination in GAD patients from specialist clinics. However, no specific clinical efficacy of ABMT was detected. Further good quality, hypothesis-driven research is needed to establish the usefulness of ABMT in clinical GAD patients.

Key words: attentional bias modification, generalized anxiety disorder