Evaluation of A Training Program Using Group-Based Acceptance and Commitment Therapy for Parents of Children with Asthma in Pediatric Clinics in Hong Kong: Child Outcomes

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Introduction
Childhood asthma imposes a substantial psychological burden on parents. Parental psychological distress also brings negative effects on asthma management. However, effective interventions in addressing parental psychological needs are lacking. Acceptance and Commitment Therapy (ACT) is a new form of psychotherapy that encourages individuals to better accept their psychological difficulties and to work towards their values-based goals. Previous studies have indicated the potential utility of ACT in enhancing parental management of children with acquired brain injuries, congenital heart disease, and diabetes.

Objectives
This report describes the efficacy of a parental training program using group-based ACT for asthma management in comparison with an asthma educational talk, as measured by the children's use of healthcare services due to asthma exacerbations at six months post-intervention.

Methodology
A two-arm randomized controlled trial was conducted. Parents and their children aged 3-12 years who had been diagnosed with asthma were consecutively recruited in a public hospital in Hong Kong from January to July 2016. They were randomly assigned either to a four-weekly group-based ACT combined with childhood asthma education (ACT group) or an asthma educational talk plus three weekly telephone follow-ups (Control group). The primary outcomes were the total number of visits to emergency departments (EDs), outpatient clinics, and hospital admissions due to asthma exacerbations in children over a 6-month period, measured at six months post-intervention based on parental reports. Changes in these outcomes between groups over time were examined using generalized estimating equations.
Result
One hundred and sixty-eight parents (age M = 38.4, 88.1% mothers) and their children with asthma (age M = 6.8) participated in this trial. When compared with the Control group, children whose parents in the ACT group had significantly fewer ED visits (adjusted IRR = 0.20, 95% CI [0.08, 0.53], p = .001), and fewer private practitioners clinic visits (adjusted IRR = 0.47, 95% CI [0.26, 0.85], p = .012) due to asthma exacerbations. The effect on the number of asthma-related hospital admissions between groups was non-significant (p = .455). In conclusion, group-based ACT may be a useful adjunct to parental asthma education for improving the asthma conditions of children.