

Abstract

Effectiveness of an adapted physical activity programme to improve fitness and blood pressure in adolescents with intellectual disability in Hong Kong: A cluster randomized controlled trial (Report 2)

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Children today are becoming fatter and less fit than previous generations, mainly due to insufficient physical activity and unhealthy eating. Compared to those typically developing, children with intellectual disability (ID) may be at higher risks for those health problems. However, few studies have been focused on this special population. We previously investigated 524 ID children in Hong Kong (age range: 6-21 years, mean age: 12.2 years). The study found that 31.3% of them were overweight and obese and 24.8% were hypertensive, much higher than their general local peers. Almost all participants (94.5%) were insufficiently active (less than 60 min moderate to vigorous physical activity per day). We therefore developed a 9-month adapted physical activity (APA) intervention programme, aiming primarily to reduce obesity and secondarily to improve fitness and blood pressure in this population. It is a cluster RCT and still ongoing. Sixty-two overweight and obese children with ID (aged 12-18 years) have been recruited and assigned into intervention (n=30) and control (n=32) groups. Fitness-related measures included 9-minute run test (cardiorespiratory fitness), sit-up (muscular endurance), handgrip strength test (muscular strength), and sit and reach (flexibility). Blood pressure was measured following standard procedures and the Chinese classification criteria of pediatric hypertension were adopted. A generalized linear mixed model (GLMM) will be performed to compare between-group differences in the changes. This study will be end in June 2019. We will report the study results in this presentation.

Conduct evaluation related to programs, research, and other areas of practice Public health or related research

