Efficacy of weight control program in Kwai Chung Hospital

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Introduction
Cross-sectional survey suggested that patients with severe mental illness were at a higher risk of obesity. Research suggests that weight loss, even modest, could reduce the mortality and morbidity for them. Weight loss is generally achieved through dieting and physical activity. Evidence has demonstrated that diet treatment plays an important role in achieving weight loss among obese patients. Hence a pilot weight control program for combating obesity was implemented in Kwai Chung Hospital (KCH).

Objectives
To evaluate the effectiveness of the weight control program conducted by the dietitian in the Psychiatric Intensive Care Unit (PICU) wards.

Methodology
A longitudinal study of diet intervention was conducted at two PICU wards of KCH from November 2012 to October 2014. All newly admitted patients were screened and referred to the dietitian for participating in the program if their BMI >27 kg/m2. Nutrition assessment and diet intervention (including in-hospital weight reducing diet, individualized diet counseling and meal plan design) were provided for patients concerned. All patients were followed-up by the dietitian at least once per month before their discharge. The weight of every patient was recorded during each visit. Paired t test was used to compare the results.

Result
1514 patients were admitted to two PICU wards and 286 out of them (19%) with BMI >27 kg/m2. Among these 286 patients, 22 had a length of stay < 5 days and 8 refused to participate in the program, and thus 256 patients received diet intervention. For patients with the length of stay more than 1 month (n=79, 31% of patients received...
intervention), they had $1.67 \pm 0.33$ kg* weight lost at the first month follow-up when compared with their admission weight. The weight drop for patients with the length of stay more than 2 months ($n=38$, 15% of patients received intervention), 3 months ($n=23$, 9% of patients received intervention), and 4 months ($n=15$, 6% of patients received intervention) were $2.62 \pm 0.94$ kg*, $3.33 \pm 1.97$ kg* and $4.71 \pm 0.85$ kg* respectively when compared with their admission weight. The result exhibits that the mean weight of all groups of patients is significantly smaller than their mean admission weight (*$p<0.01$) with diet intervention. This study reveals that the weight control program for patients in PICU wards is significantly effective.