Multidisciplinary Program on Physical Capacity, Comorbidity, Diet Compliance and Self-Management Efficacy on Post-Bariatric Patients

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Introduction
Bariatric surgery for morbidly obesity patients was launched in PWH since 2002. Morbid obesity is a multi-factorial disease which requires input from various healthcare professions. Since the establishment of the Multidisciplinary Clinic of Metabolic & Bariatric Surgery (MBS) in PWH in September, 2014, a multidisciplinary personalized management program for surgical management of obesity patients, including surgeon, dietitian, specialty nurse, physiotherapist and other professionals is currently provided. This is a one-stop service which enhance patients’ attendance.

Objectives
To evaluate the effect of allied-health and nursing profession of multidisciplinary supervised management program on weight loss, comorbidity improvement, dietary compliance, and physical capacity.

Methodology
Between January and December 2015, all patients undergoing bariatric surgery in PWH were invited to participate in our multidisciplinary program. The contributions from the allied-health professions were recorded preoperatively and postoperatively 1 and 3 months. Physiotherapists assessed the patients’ cardiovascular capacity (Incremental Shuttle Walk Test, ISWT) and body fitness (flexibility); Dietitian advised patients’ diet. All patients received personalized self-exercise program, nutritional intervention from physiotherapist and dietitian respectively, and specialty nurse provided general education and trouble-shooting technique.

Result
In the study period, 34 patients underwent bariatric surgery. 6 patients (5 males, 1 female, mean age 39.5) completed our multidisciplinary program. At baseline, their mean body weight and BMI were 136.8kg and 47.4 respectively. At 3 months, all
patients showed reduction on their mean weight (17.0%) and BMI (16.8%). Upon physiotherapists’ input, improvement in cardiovascular capacity (ISWT 33.6%) and flexibility (Sit & Reach Test 62.8%) was observed by 3 months. The daily medium nutritional intake decreased at 1 month (energy: 1930kcal to 500kcal; protein: 80g to 23g), which was below the protein intake recommendation (60g). Upon dietitians input, their median protein intake increased to 50g by 3 months. All patients (100%) satisfied the one-stop multidisciplinary service from the post-service survey, confident in self-management to maintain the surgical effect and agreed that is crucial to have dietitian follow-up to ensure adequate protein intake during energy-restricted diet to prevent wasting of lean body mass. 67% reflected the program was effective in reinforcing their self-discipline on regular exercise. Conclusion: Multidisciplinary personalized management program is helpful in achieving weight loss and health aspects of obesity patients. It is recommended to all patients to improve their compliance and confidence in self-regular exercise and balance diet for long-term success.