The improvement of efficiency and effectiveness of Occupational Therapy Intervention for Patients with Stomal Prolapse and Parastomal Hernia: An inter-disciplinary project between Occupational Therapy Department and Wound & Stoma Care Service

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Introduction
Parastomal hernia or stoma prolapse are common complications after stoma construction. Patients having these complications may experience stoma care problems including frequent pouch leakage, peristomal skin damage or stoma ulceration. Therefore, individualized and tailor made abdominal binder helps to prevent the protrude of stoma and worsening of the parastomal hernia condition. Since November 2014, Occupational Therapy Department (OT) has started collaborating with the Wound and Stoma Nurse on providing comprehensive stoma management program. Before the collaboration, stoma patients need referral from surgeon for OT intervention which required a longer waiting time and may also cause increased in surgery caseload in Out-patient department. With the collaboration, Wound and Stoma Nurse can refer patient to OT directly in Stoma Nurse Clinic, hence OT can provide timely intervention for patients. Besides, tailor made newly designed binders were jointly developed to improve effectiveness of the services. Moreover, the design of newly tailor made abdominal binder were developed in accordance with the feedback from the patients as well as the Wound and Stoma team, which enhanced the compliance and effectiveness of the treatment in patients with parastoma hernia or stoma prolapse.

Objectives
• To study the effectiveness of stoma binder for improvement of well-being for patients with parastomal hernia or stoma prolapsed
• To investigate the patient satisfaction to the new binder designs
• To enhance the efficiency and effectiveness of service with inter-disciplinary collaboration

Methodology
Patient suffered from parastomal hernia or stoma prolapsed follow-up in the Stoma Nurse Clinic were recruited for the project. However, patients planned for operative repair of parastomal hernia or unable to follow instruction were excluded from the study.

Initial assessment (SF12 to assess the physical and psychological well-being) was conducted by Wound and Stoma Care Team.

During OT initial assessment, the new designed tailor made binder was prescribed and fabricated.

Mid-way and final outcome assessment (SF12 and 5-items patient satisfactory survey to assess patients' satisfaction to the new binder designs) were conducted by OT at 1 month and 4 months intervals.

**Result**

The patients joined the project were reviewed retrospectively. From November 2014 to November 2017, there were a total of 74 patients referred to OT by the Wound & Stoma Nurse Care Team. 27 patients fit the selection inclusion criteria were selected for the project. Among the patients in the project, most of them (61%) were 60-65 year old, 39% of them were beyond 66 years old. Repeated measures ANOVA were conducted for data analysis. Participants reported a significant improvement (p ≤ 0.05) in physical health in terms of physical functioning and reduced limitation in daily activities after the OT intervention shown in SF 12. From the results of the satisfactory survey during the interval assessment, it showed that there were significant improvements in the items of “Enhance comfort in daily activities” (p ≤ 0.05) and “Effectiveness of binder” (p ≤ 0.05).

The result is encouraging and showed that patients received new designed binders were satisfied and thus improved their physical health.

In conclusion, the present collaboration model between Wound & Stoma Care service and OT department can facilitate the efficiency and effectiveness of intervention for patients in needs of stoma binder. The project also revealed that patient was satisfied with the effect of the binder which enhances independence of daily activities performance.