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Multimedia Patient Empowerment Program Conducted by Physiotherapist for Post-surgical Total Knee Replacement
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Introduction
Approximately 30% of cases admitted to Kowloon West Cluster Orthopedic Rehabilitation Centre in Caritas Medical Centre are with total joint replacement operation and about half of the cases are total knee replacement. Most elderly are often needed to carry on post-surgical care and rehabilitation after discharge from hospital that necessitates the importance of empowering the patients and caregivers for the transition of care from hospital to home. Therefore, the use of multimedia empowerment program constitutes a convenient and effective way for the physiotherapists to complement conventional treatment. As patient satisfaction is one of the key indicators to reflect the effectiveness of the program, a survey was used to critically review the level of patient satisfaction and its relationship with the components of the physiotherapist-led empowerment program.

Objectives
To evaluate the patient empowerment program after total knee replacement using multimedia based instruction to complement conventional patient education by a physiotherapist for both patients and caregivers.

Methodology
Patients with total knee replacement operation from November 2015 to Feb 2016 were invited to attend an empowerment program once admitted to rehabilitation orthopedic wards in Caritas Medical Centre. The program included the use of multimedia education materials in the form of auto-play slideshow and pamphlet and an interactive practical section. The multimedia materials provided information on the knee anatomy, pathophysiology of knee osteoarthritis, management of symptoms, post-surgical precautions, patient handling and transfer technique, fall prevention and home exercises. In the interactive practical part, the physiotherapist discussed with the patient and/or caregiver about the rehabilitation condition and taught the patient mobility skills. All participants will be invited to fill in a patient satisfaction survey comprised of 9 self-administered items (6-points Likert Scale) and categorized into 3 components of (1) program content; (2) program organization and (3) patient engagement. Linear Regression model was used for statistical analysis.
Result
Total 20 patients were surveyed at the first stage. The pooled mean of overall patients satisfaction was 5.37 ± 0.53; the mean of 3 components; namely program content, program organization and patient engagement, were 5.27 ± 0.54; 5.42 ± 0.54 and 5.42 ± 0.50 respectively. The results implied that consistently high patient satisfaction was expected by using physiotherapy patient empowerment program. There was also a significant correlation between the overall satisfaction and the patient engagement component ($r = 0.41, p < 0.01$) that implied there was a high chance for the patients to follow the physiotherapist’s advice after the empowerment program. More patients will be recruited as the following and this study would be expected to constitute as a continuous quality improvement program.