



**Service Priorities and Programmes**  
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**NEW MODEL OF INTEGRATED PREHABILITATION CLINIC FOR TOTAL KNEE REPLACEMENT IN TSEUNG KWAN O HOSPITAL – THE ROLE OF PHYSIOTHERAPY IN PREHABILITATION AND PATIENT ENGAGEMENT FOR JOINT ARTHROPLASTY**

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**Introduction**

Prehabilitation was proved to promote recovery with pre-operative optimization of individual's physical and psychological conditions. Integrated Prehabilitation Clinic-Knee (IPC-Knee) with multidisciplinary approach was established in 2011. The aims of the program are to optimize patients' physical fitness, reduce anxiety and enhance patients & carer empowerment before Total Knee Replacement (TKR) surgery; to predict patient's risk of extended in-patient rehabilitation after TKR and facilitate early discharge to Physiotherapy Out-patient Department (PT OPD)

**Objectives**

To evaluate the efficacy of the Integrated Prehabilitation Clinic for TKR in TKOH

**Methodology**

This was a retrospective, pre and post-test study. From November 2011 to November 2012 all patients underwent TKR in Tseung Kwan O Hospital (TKOH) were recruited to join IPC-Knee in Day Medical Centre (DMC) and followed the standard Physiotherapy Management Program for TKR in TKOH: Pre-operative Phase: Patients attended IPC-Knee 8 weeks before surgery. A 90 minutes Physiotherapy Workshop included exercise training and patient & carer empowerment was provided. Assessment of pre-op physical condition, gait, fall risk and risk of extended stay was assessed by using Risk Assessment Prediction Tool (RAPT). Post-operative Phase: Intensive in-patient physiotherapy and direct discharge to PT OPD upon discharge. Pain measured by Numeric Pain Rating Scale (NPRS), knee function measured by Oxford Knee Score (OKS) and Health related QoL SF12 score were collected at pre-operative in IPC-Knee and post-operative week 12-16. Data were compared and analysed by paired T-test using SPSS version 19

**Result**

Thirty-two patients attended IPC-Knee with twelve sets of complete data collected. NPRS reduced by 75 % ( $p<0.05$ ). OKS improved by 50 % ( $p<0.05$ ). SF-12 was similar to the norm of HK elderly with Physical Component Score (PCS) & Mental Component Score (MCS) were 42.7 and 48.5 respectively. Score of RAPT >6 and all patients direct discharge home smoothly with average reduced LOS by 24% compared with 2010 and no readmission reported. All patients were highly satisfied with IPC-Knee. Physiotherapy Prehabilitation Workshop showed positive to enhance patient empowerment and optimize patient's function before surgery.