



## Joyce Lok Yan Poon

Pamela Youde Nethersole Eastern Hospital  
Hong Kong

### **Preoperative home visits by occupational therapists and higher pre-morbid activities of daily living independence level are associated with shorter length of hospital stay in primary total knee replacement patients: A retrospective study**

#### **Abstract:**

The study aimed to identify preoperative patient-related sociodemographic factors that predict prolonged length of stay (LOS) following primary Total Knee replacement (TKR) at Pamela Youde Nethersole Eastern Hospital (PYNEH) in Hong Kong. 484 patients underwent primary TKR at PYNEH from July 2021 to October 2023 was retrospectively reviewed and 15 preoperative patient-related sociodemographic factors were recorded. The results showed that age, depression, and anxiety were positively correlated with LOS, while factors of accessibility of direct lift landing flat, availability of caregivers, provision of preoperative home visits by occupational therapists, and pre-morbid independence in activities of daily living (ADL) were negatively correlated with LOS. Multivariable linear regression analysis revealed that advanced age, absence of caregivers upon discharge, absence of preoperative home visits by occupational therapists, higher dependence in pre-morbid ADL, and higher depression scores accounted for 10.1% of the variance in LOS. Evaluating preoperative sociodemographic factors related to patients can help in preoperative assessments and discharge planning conducted by occupational therapists. Identifying high-risk patients who may require longer hospitalization enables proactive discharge planning using a multidisciplinary approach. Patients with higher pre-morbid ADL independence levels and those who receive preoperative home visits by occupational therapists tend to have shorter LOS. Yet, controlled clinical trials are needed for establishing causal relationships. In conclusion, understanding the preoperative patient-related sociodemographic factors that predict LOS can facilitate discharge planning. Maximizing patients' pre-morbid ADL independence through pre-habilitation and preoperative home visits by occupational therapists may help reduce LOS following primary TKR.

#### **Biography**

**Poon** is an Occupational Therapist, working in an acute public hospital setting. She obtained her Bachelor of Science in Occupational Therapy from The Hong Kong Polytechnic University in Hong Kong in 2021. She is now studying at her final year of Master of Science degree in Stroke and Clinical Neurosciences from the Chinese University of Hong Kong. Her expertise lies in assisting patients to overcome physical challenges and improve daily living skills. Committed to holistic care, she works holistically to tailor rehabilitation plans that promote independence and well-being.