



# Enhancing Diabetes Self-Management: Evaluating changes in Knowledge, Attitudes and Behaviors after Patient Empowerment Program participation

Yan W. Y. LAU<sup>1</sup>, Rachel C. K. LEUNG<sup>2</sup>, Lili Y.L. TAM<sup>2</sup>, Doris P. S. LAU<sup>3</sup> <sup>1</sup>Senior Care co-ordinator <sup>2</sup>Registered Nurse <sup>3</sup>Project Co-Ordinator Kwun Tong District Health Centre Express (KTDHCE), Service Development Division, United Christian Nethersole Community Health Service (UCNCHS)

#### Introduction

Patient Empowerment Program (PEP) is an effective approach in enhancing self-care of patients with chronic diseases. Kwun Tong District Centre Health Express (KTDHCE) has been collaborating with Hospital Authority (HA) in organizing PEP for Diabetes Mellitus (DM) patients since 2022. Starting from 2024, DM patients diagnosed via the Chronic Disease Co-care (CDCC) scheme were also invited to join the PEP. PEP including sessions related to disease-specific knowledge, self-efficacy enhancement and lifestyle modification information aiming to enhance patients' knowledge and ability in self-management of chronic diseases and to prevent possible complications.



Fig. 1. DM PEP logbook

Fig. 2. DM PEP Lesson Plan

## **Methods**



Fig. 3. Group discussion during PEP

Twenty-nine groups of DM PEP have been held from June 2022 to Dec 2024 with a total of 298 participants enrolled. Knowledge-Attitude-Behavioural (KAB) questionnaire was programme evaluation. The KAB consist of three parts including DM knowledge, attitude towards beliefs in self-managing DM and behavioral change in lifestyle modification. Participants diagnosed with DM were identified and recruited from CDCC scheme or referred by HA. KAB questionnaires were distributed to participants before the first session and after the last session respectively. Participants with 70% of attendance or above were included in the analysis.

### Results

Paired samples t-test were used to compare the outcome parameters. Significant improvements were observed in all three aspects: knowledge scores improved from 64.0% to 83.8% (p< 0.01); attitude scores improved from 80.6% to 90.4% (p<0.01) and behavioural intention scores improved from 80.5% to 88.4% (p<0.01). Overall satisfaction on PEP was 89.6%.

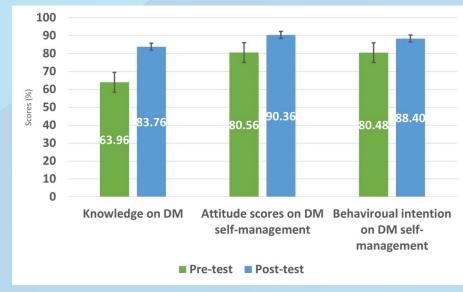


Fig. 4 Outcome measurements (KAB) results among DM PEP participants (n=198)

## **Conclusions**

Through participating DM PEP, patients are empowered in managing the chronic disease. The program significantly improved knowledge, attitudes, and behavioral intentions regarding disease self-management. Moving forward, KTDHCE will consider the adoption of online channels or technology-driven applications to facilitate services for working-class individuals, aiming to achieve similar effective results as observed in PEP participation. KTDHCE remains committed to providing various PEPs for patients with chronic diseases.





