The Impact of Conversation Map Tool on Self-efficacy and Diabetes-specific Health related Quality of Life in Chinese People with Type 2 Diabetes.

Leung SM(1), Kwan JYM(1), Chan ESK(1), Chan FTF(2), Leung SHS(1), Yu DSF(3)
(1) Centre for Diabetes Education and Management, Our Lady of Maryknoll Hospital, (2) Out-patient Department, Our Lady of Maryknoll Hospital, (3) The Nethersole School of Nur
Our Lady of Maryknoll Hospital

Keywords:
Conversation Map Tool
Type 2 Diabetes
Self-efficacy
Chinese

Introduction
Diabetic education remains the mainstay of strategy to enhance the self-care behavior of diabetic patients. However, there are inadequate standardized education tools in Hong Kong to empower diabetic patients to manage their disease effectively.

Objectives
To examine the effects of a programme using Conversation Map Tool (CMT) on self-efficacy and health-related quality of life of Chinese people with type 2 diabetes.

Methodology
This randomized control trial recruited total 113 participants. They were evenly randomized to receive the CMT program (test intervention) or the education program (control intervention). Both of the interventions comprised of four group-based face-to-face sessions (group size = 10) with two telephone follow-up sessions for each test intervention group. Outcome evaluation included HbA1c test, the Chinese version of Diabetes Management Self-Efficacy Scale (DMSES) for diabetic self-care, the Chinese version of Diabetes Empowerment Scale-Short Form (DES) for diabetic empowerment, and the EuroQol Five Dimension Scale-5 level (EQ5D-5L) for health-related quality of life (HRQL) at baseline (T0), by the end of the face-to-face session (T1) and at eight weeks thereafter (T2).

Result
The mean age of the sample were 62.310.1 (CMT) and 64.56.7 (Control), with 38.1% were male. The mean duration of being diagnosed type 2 diabetes were 18.67.7 (CMT) and 18.87.7 (Control). Both groups have comparable demographic and clinical profiles at baseline. There was no statistically significant different in total scores of DES among two study
groups at baseline (T0), by the end of the face-to-face session (T1) and at eight weeks thereafter (T2). An increasing trend in total scores of DMSES from T0 to T2 (158.122.4 vs 16921.1 vs 169.320.7) was addressed in CMT group. It may account for the on-going support to participants through two telephone follow-up sessions. In the CMT group, total scores of VAS in EQ5D-5L at T1 (84.710.6 vs 84.111.2, p=0.781) and T2 (82.99.9 vs 82.411.8, p=0.290) were higher than control group. However, there was no statistically significant difference was found. The overall total scores of EQ5D-5L (index value) in control group were higher than control from T0 to T2. But, there was no statistically significant difference was found. At the end of last session of the program (T1), the HbA1c level (8.21.2 vs 8.41.7, p=0.027) was significantly lower in the control group as compared with the CMT group. By using the generalized equation modeling, this change in HbA1c level accounted for the time effect on both groups.

Using CMT in a more systematic way to empower self-care is not only highly feasible for diabetic management in Hong Kong, but also increase effectively their self-care efficacy and health-related quality of life. To translate such evidence to practice, strategies to develop the manpower resource and community-based nurse-lead clinic are implicated.