S7 - A Randomised Controlled Trial Evaluating Efficacy of a Psychological Intervention Based on Commonsense Model in Improving Mental Health and Self-care among Type-2 Diabetes Mellitus Patients

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Introduction and Project Objectives: Individuals with type-2 Diabetes Mellitus (T2DM) are more likely to develop depression and other mental health problems than the general population. Poor mental health is significantly associated with poor adherence to self-care activities and DM complications among T2DM patients. The Commonsense Model (CSM) posits that how patients view their illness, a concept known as illness representations, plays an important role in their coping and disease outcomes. This study examined whether an intervention based on the CSM would result in better mental health and adherence to self-care activities among T2DM patients.

Methods: A prospective parallel group two-arm randomised controlled trial (RCT) was conducted. A total of 455 T2DM patients were recruited from an outpatient DM clinic and were randomised to intervention or control group. Participants in the intervention group attended five weekly group sessions delivered by a psychologist while those in the control group received five education booklets about DM. They were evaluated at baseline, one month and six months after the intervention. Measures on depression, anxiety, negative affect, diabetes-related distress, coping, self-care, self-care self-efficacy, IR towards T2DM were collected using self-reported survey, while blood glucose level was assessed from medical record.

Results: Results from the 2 x 3 linear mixed model analysis using modified intention to treat showed that participants in the intervention group produced statistically significant improvement in level of self-care (p<.001), self-care self-efficacy (p<.001), and use of adaptive coping (p=.010) compared to the control group over time. Subgroup analyses on gender and DM complications further indicated significant improvement in illness representations of personal control (p=.035), treatment control (p=.004) and cyclical timeline (p=.025) in among male participants in the intervention group; and significant improvement in illness representations of personal control (p<.009) and emotional representation (p<.013) among participants without any complication in the intervention group, indicating that the intervention produced better improvements among male participants and participants without any complications. Results of the process evaluation indicated that participants reported positive feedbacks to the intervention, perceived improvement in various domains, and wished to participate in similar program in the future.

Discussion: The study showed that intervention based on CSM was effective in improving self-care and coping among DM patients. The intervention also demonstrated high level of feasibility and acceptability. Findings provided important insights on integrating illness representations in improving health-related outcomes for patients with T2DM.

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