A Chronic Disease Management Model to empower patients with Diabetes Mellitus

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Introduction

Diabetes Mellitus (DM) is one of the significant and growing health problems in Hong Kong. It is evident that empower patients by telephone education and support can enable DM patients to remain stable conditions, prevent complications and improve quality of life. In view of the vast number of patients, an innovative chronic disease management model with structured telephone based self-management support program has been designed to improve the health status of DM patients. As a diabetes educator, nurse will coach and guide patients to improve the knowledge and practice for self-management.

Objectives

To strengthen self-management of DM patients and improve clinical outcomes by re-enforcing the key self-care behaviours including physical activity, dietary practice and psychosocial factors.

Methodology

DM patients being followed up in the General Out-patient Clinics (GOPCs) with sub-optimal disease control and are unable to attend other structured empowerment programme will be referred to the Patient Support Call Centre (PSCC). PSCC nurses will offer a systematic and protocol driven self-management program via phone support. Nursing assessment on patients’ health condition and lifestyle will be performed for understanding patients’ health conditions and individual needs. Nurses will work with patients to set behavior change goals. A series of telephone advice will be provided to improve the patients’ knowledge and self-care skills. Each patient will receive around 12 - 18 calls over a period of 9 months. The advice mainly focuses on...
diet, medication management, exercise and self-monitoring, etc.

**Result**
Service evaluation has shown that the Chronic Disease Management programme is effective in improving DM patients' knowledge and practices. A total of 2,290 patients were recruited and completed the 9 month follow-up by PSCC during the evaluation (from Aug 2011 to Mar 2013). Among the three most commonly selected goals, patients got scores from 47 to 56 at the start and increased to 76 to 90 at the end of the program (p-value<0.001). It was also revealed that compared with DM patients who have not received the telephone support service, the programme participants showed additional 0.23% point reduction in HbA1c (p-value< 0.001). With the collaborative effort with GOPC, the PSCC empowered patients and facilitated behaviour change in DM patients for better self-management. It provides the necessary framework for chronic disease management program development and benefits in serving high volume group of patients with other chronic diseases in future.