



Title	Holistic diabetes management in primary care
Author(s)	Lam, CLK
Citation	The 2016 Diabetes Preventing the Preventables Forum (DPP 2016), Hong Kong, 21-22 May 2016.
Issued Date	2016
URL	http://hdl.handle.net/10722/235731
Rights	This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Holistic diabetes management in primary care

Cindy Lam

Danny D. B. Ho Professor in Family Medicine, Department of Family Medicine and Primary Care, The University of Hong Kong, Hong Kong

Background: The prevalence of diabetes mellitus (DM) is increasing worldwide and at the fastest rate in Asia. It is estimated that about 10% of the adult population in Hong Kong have DM and many people have to live with their DM for decades. The majority of DM patients are managed in primary care for most of their care. Holistic DM management needs to go beyond the control of the disease to include the management of other risk factors to prevent complications and to enable the patient to live the longest possible quality life. To serve the purpose, we need a systematic and multi-disciplinary approach to DM care.

Methods: Two structured multidisciplinary programmes to enhance DM management in primary care have been established in the Hospital Authority in Hong Kong. Both of them are additional to the usual care provided by the doctor. The first is the Risk Assessment and Management Programme for DM (RAMP-DM) and the second is the Patient Empowerment Programme (PEP). RAMP-DM is nurse-led and protocol driven to assess risk factors and screen for complications. It stratifies DM patients into low, medium, high and very high risk groups based on the JADE classification, and then provides the appropriate follow up management including risk factor modification. The programme is supported by a wide range of medical and other health professional services. The PEP is provided by NGO that aims at promoting self-care through the enhancement of disease specific knowledge and life style modification skills. The core programme consists of four 2-hour sessions with two on DM knowledge, and two on generic self-management skills. Two propensity score matched cohort studies were carried out to evaluate the effectiveness of the RAMP-DM and PEP in reducing CVD and microvascular complications, and all-cause mortality over three years.

Results: 18188 (9094 in RAMP-DM, and 9094 in usual care only) adult DM patients without any known complication on enrollment were included in the evaluation of RAMP-DM. 19864 (9932 in PEP and 9932 not in PEP) subjects who had enrolled in RAMP-DM were included in the evaluation of PEP. RAMP-DM was associated with an absolute reduction of 2.30% CVD, 1.37% microvascular complications and 3.85% deaths over 3 years. PEP was associated with an additional absolute reduction of 0.13% CVD, 1.11% microvascular complications and 0.81% deaths over 3 years. Adjusted 3-year survival analyses showed that RAMP-DM was associated with a HR of 0.63, 0.71 and 0.36 for CVD, microvascular complications and deaths, respectively, and PEP was associated with a HR of 0.71 and 0.69 for microvascular complications and deaths, respectively.

Conclusion: Systematic risk assessment and management and patient empowerment programmes are effective in enhancing holistic DM management in primary care with significant reduction in complications and mortality.