Ensuring Professional Service by Adopting a Structured Education Programme on Insulin-Initiation Among Patients with Type 2 Diabetes Attending General Out-patient Clinics of New Territories East Clust

Lau WH(1), Chiu KL(1), Wong RWM(2), Chung KW(1), Chiu SL(1), Fung WM(1), Lam FCL(1), Lam PH(1), Chiu CWH(1), Shiu ATY(3), Hui EMT(1), Li PKT(1)
(1) Department of Family Medicine, New Territories East Cluster, Hong Kong (2) Department of Medicine and Therapeutics, Prince of Wales Hospital, Hong Kong (3) Chung Chi, The Chinese University of Hong Kong

Keywords:
Structured Education Programme
insulin initiation
Type 2 diabetes
General Out-patient Clinic

Introduction
Diabetes is a serious public health problem in Hong Kong, affecting 10% of the population. The Hospital Authority has identified caring for citizens with chronic diseases including diabetes as one of its main focuses of service provision. Since 2009, a Risk Assessment and Management Programme (RAMP) on diabetes has been operating in general out-patient clinics (GOPC) under the governance of HA. Although insulin-therapy is often required for optimal glycaemic control, it is always met with great resistance from patients. In order to ensure professional diabetes education service and to facilitate patients’ appropriate self-management to achieve optimum glycaemic control, a structured education programme on insulin-initiation, led by GOPC nurses and supported by a diabetes nurse consultant and physicians of GOPCs, has been conducted in four GOPCs of the New Territory East Cluster.

Objectives
To examine the impact of the education program on insulin-initiation on patient outcomes.

Methodology
The study adopted a one-group pretest-posttest design, with a 14-week (4 sessions) structured education programme on insulin-initiation as the intervention. Adult Chinese patients with Type 2 diabetes requiring insulin-initiation and attending the RAMP of the four GOPCs were recruited. Six patient outcomes (as shown in the below) were
measured before and at the end of the intervention.

**Result**

Forty-three subjects completed the intervention. The pre-post data comparison showed significant improvement (*P*<0.001) in five of the six measured outcomes, including glycated haemoglobin (from 8.9 ± 1.4 to 8.2 ± 1.2), fasting blood glucose (from 9.9 ± 3.2 to 8.2 ± 2.5), diabetes knowledge (from 13.1 ± 2.7 to 16.1 ± 2.3), self-care activities (from 44.0 ± 12.7 to 65.0 ± 13.1), anxiety about insulin-initiation (from 22.7 ± 12.7 to 6.7 ± 6.5). There was no significant difference in pre-post comparison of quality of life. This study, although limited by a small sample size, demonstrates that using the structured education programme successfully enhances professional diabetes education service provision and supports GOPC patients for insulin-initiation.