



Service Priorities and Programmes Electronic Presentations

Convention ID: 822

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Service Reengineering for Diabetes Patients with Sub-optimal Glycaemic Control

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Keywords:

Service reengineering

Glycaemic control

Introduction

Patient Empowerment is a core component in diabetes nurse education. Patients with Diabetes Mellitus (DM) having a better understanding of their disease can improve their glycaemic control through behavior changes. Patients with DM from non-DM Special Out-patient Clinics attending complication assessment at our Diabetes Centre have medical consultation 4 - 6 weeks afterwards to review complication report. Those with sub-optimal glycaemic control are then triaged to receive DM nurse education according to a protocol-driven pathway. However, patient may already have further glycaemia deterioration while waiting for the medical consultation. A new service reengineering program has been initiated to fill this gap.

Objectives

To evaluate the effectiveness of this service reengineering program

Methodology

Sixty patients who completed diabetes complication assessment with sub-optimal glycaemic control, defined as having HbA1c level over 8.0%, were recruited. Patients in the intervention group will receive diabetes nurse education and protocol driven treatment intensification prior to the scheduled medical consultation whereas patients in the control group received the same services after medical consultation as usual. The outcome measurements were HbA1c level, Chinese Diabetes Knowledge (CDKN) and Summary of Diabetes Self-Care Activities (SDSCA).

Result

These 60 patients had mean age 70.2 ± 11.5 years, with duration of DM at a mean of 15.0 ± 9.5 years. They had no significant difference in all clinical characteristics. At 12 weeks, patients in the intervention and control group had significantly HbA1c reduction by $1.1 \pm 1.1\%$ and $1.3 \pm 0.9\%$ respectively. However, no significant

difference between the two groups was found. For knowledge test, the total score in CDKN was significant higher in intervention group (6.6 ± 1.6) as compared to control group (5.2 ± 2.8) ($p = 0.026$) before medical consultation. In the SDSCA, patients in the intervention group had significant improvement in behavior changes like general diet compliance, self-monitoring blood sugar and foot care when compared to control group (all $p < 0.05$) before medical consultation as well. This service reengineering program improved both patients' knowledge and desirable behavior change in diabetes management without additional manpower. Further periodical review is recommended to assess the benefits and sustainability of this early intervention in behavior changes.