Empowerment Program for Diabetes Patients

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Outline

• Introduction
• Impact of diabetes
• Chronic disease management
• Empowerment program
• Diabetes patient support group activity
• Take home message
Diabetes is a Huge and Growing Problem.....
Impact on Public Health Services

- Service by an average of at least **2% every year**
- **43%** of the patients attending the GOPC of HA have either hypertension or diabetes
- Patients who are being treated for diabetes in HA will **↑** by **29%** from **0.43M to 0.55M** between 2012-2017

Hospital Authority Strategic Plan 2012-2017
Diabetes is a chronic disease. It requires long-term lifestyle modification and medical care.
Complex Interactions in People with Diabetes

- **Diabetes Mellitus**
  - ↓ Quality of life
  - ↓ Compliance
  - ↑ Hypoglycaemia

**Diabetes Mellitus**
- **Coronary Artery Disease**
  - Neuropathy
- **Cerebral Vascular Disease**
  - Retinopathy
- **Peripheral Vascular Disease**
  - Nephropathy

<table>
<thead>
<tr>
<th>Cognitive Dysfunction</th>
<th>Depression</th>
<th>Multi-Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>↓Adherence</td>
<td>Physical disability</td>
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</table>

↑ Mobility
↑ Mortality
Physician Centered Care → Patient Centered Care

Patient-Physician collaboration is fundamental to achieving optimal medical outcomes in chronic disease like DIABETES

Anderson et al, 2002; Von Korff et al, 1997; Funnel, 2004
Health Care Delivery model

Provider-Centered Approach
• Paternalism
• Doctors knows Best
• Patient do not participate in medical decision-making
• Patients should do what they are told to do

Non-compliance

Patient-Centered Approach
• Autonomy
• Mutual respect
• Unique role & responsibility
• Define problems & set realistic goal
• Develop action plan & commit action

Trust & Rapport

Von Korff, 1997
Funnell (1991) “Patient empowerment is defined as helping patients to discover and develop the inherent capacity to be responsible for one’s own life”.

Funnell and Anderson (2004) "The choices that patients make each day as they care for diabetes have a greater impact on their outcomes than those made by health professionals".
Patient Empowerment Program in PMH

• Team approach
• Incorporate both group and individual experience
• **Practical application** to life: exercise, meal planning, and medication adjustment
Objectives

• Build personal, therapeutic relationship with patients
• Identify & eliminate barriers to successfully managing diabetes
• Enhance patient’s ability to set realistic goal
• Improve ability to be self-motivated
• Develop and implement a individual diabetes management plan
Self-Care Domains

- Healthy Eating
- Blood Glucose Monitoring
- Regular Exercise
- Medication
Patient Selection

- Perform Metabolic Risk Assessment
- Attend for Assessment Report
- Patient’s HbA1c > 8.5 %
- Patient Empowerment Program
Recruit patients whose HbA1c > 8.5% to Patient Empowerment Program
**Intervention**

**First Visit**
- Assessment:
  - Physical & Psychosocial
  - Dietary Compliance
  - Drug Compliance
  - Regular Exercise
  - Glucose Monitoring
- Identify Barrier
- Readiness to Change
- Set Realistic Goal
- Formulate Management Plan

**Second Visit**
- Empowerment
  - Diet:
    - Review meal diary
    - Carbohydrate counting
    - Food choice
  - Exercise:
    - Exercise record
  - Blood Glucose Record
  - Refer other Health Care Professional

**Third Visit**
- Empowerment
  - Diet:
    - Review meal diary
    - Tips on eating out
    - Read food label
  - Exercise:
    - Type, frequency & intensity
  - Blood Glucose Record

**Telephone Follow Up**

**Evaluation after 6 months**
Five-Step Empowerment Counseling Model

- Explore the Problem
- Clarify Feelings
- Develop a Plan
- Commit to Action
- Experience and Evaluation

Goal Setting

Funnel, 2004
Learning Though Activities

Carbohydrate Counting

Food Choice

Reading Food Label
Program Evaluation

- HbA1c
- LDL-Cholesterol
- Patient Satisfactory Survey
Recruited 106 diabetic patients whose HbA1c > 8.5% from Jun-Sep 2014

### Patient Demographics

<table>
<thead>
<tr>
<th></th>
<th>Attend Program</th>
<th>Not Attend Program</th>
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<tbody>
<tr>
<td></td>
<td>74 (70%)</td>
<td>32 (30%)</td>
</tr>
<tr>
<td>Male</td>
<td>43 (58%)</td>
<td>15 (47%)</td>
</tr>
<tr>
<td>Female</td>
<td>31 (42%)</td>
<td>17 (53%)</td>
</tr>
<tr>
<td>Type 1 Diabetes</td>
<td>3 (4%)</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Type 2 Diabetes</td>
<td>71 (96%)</td>
<td>30 (94%)</td>
</tr>
<tr>
<td>Mean Age (Years)</td>
<td>63.3</td>
<td>60.3</td>
</tr>
<tr>
<td>Mean Duration of Diabetes (Years)</td>
<td>17.1</td>
<td>17.5</td>
</tr>
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</table>
**HbA1c Change Over 6 Months**

**Attended the Program (N=74)**

- **56 (76%)** patients had improvement and **10 (14%)** remained unchanged in HbA1c.
- Mean HbA1c dropped from **9.7%** to **8.9%**.

**Not Attend the Program (N=32)**

- **8 (25%)** patients had deterioration and **10 (31%)** remained unchanged in HbA1c.
- Mean HbA1c increased from **9.7%** to **9.8%**.
24(32%) patients had improvement in LDL-C post-empowerment program. Mean LDL-C dropped from 2.5mmol/L to 2.4mmol/L.
The Overall Satisfactory Rate is 82%
Further Study

Reason of defaulted Fu:

? Social Background
? Age Related
? Disease Related
### Patient Support Group Activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Activities</th>
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<tbody>
<tr>
<td>2008</td>
<td>糖尿病與牙齒之口腔護理</td>
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<tr>
<td>2008</td>
<td>九龍西糖尿同樂日</td>
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<tr>
<td>2010</td>
<td>烹飪班 : 製作桂花糕</td>
</tr>
<tr>
<td>2010</td>
<td>糖尿病患者的足部護理</td>
</tr>
<tr>
<td>2011</td>
<td>糖尿同路人Fun Fun日</td>
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<tr>
<td>2012</td>
<td>糖尿知心友同樂日</td>
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<tr>
<td>2012</td>
<td>&lt;胰家齊控糖&gt; 齊創健力士世界紀錄</td>
</tr>
<tr>
<td>2013</td>
<td>香港糖尿病患者研討會 “關顧糖尿．愛未來”</td>
</tr>
<tr>
<td>2013</td>
<td>健康糖尿同樂日</td>
</tr>
<tr>
<td>2014</td>
<td>[腦]友記同樂日</td>
</tr>
<tr>
<td>2015</td>
<td>糖尿運動日 – ‘Fing’走脂肪，舞動健康</td>
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**PMH Diabetes Club**

*Found in 1994*

**Sharing with Newly Diagnosed DM Patients***
DM Fun Day 2015 – ‘Fing’ 走脂肪，舞動健康
47 (87%) patients had improvement in post-exercise blood glucose. Mean capillary blood glucose dropped from 10.3 to 9.5 mmol/L.
Patient Satisfaction Survey

A. Background Information:
1. Gender

B. Surveys Results:
1. Your satisfaction with the theme of the lecture: "Exercise for Diabetes"
   - Excellent, Good, Satisfactory, Poor, Insufficient

2. Your satisfaction with the lecture content
   - Excellent, Good, Satisfactory, Poor, Insufficient

3. Your satisfaction with the lecture techniques
   - Excellent, Good, Satisfactory, Poor, Insufficient

4. Your satisfaction with the diabetes exercise
   - Excellent, Good, Satisfactory, Poor, Insufficient

5. Your satisfaction with the timing of the lecture
   - Excellent, Good, Satisfactory, Poor, Insufficient

6. Your satisfaction with the venue
   - Excellent, Good, Satisfactory, Poor, Insufficient

7. Your overall satisfaction with the lecture
   - Excellent, Good, Satisfactory, Poor, Insufficient

Would you like to make exercise a part of your daily life?

Would you recommend other diabetes or patients to participate in future lectures or activities?
Summary

• Diabetes is a **chronic** disease with serious short term and long term **complications**

• **Advance** in research and treatment technology have provided patients, families and the health care team with many tools

• Comprehensive **professional knowledge** from multidisciplinary approach would enhance patients on diabetes management

• However, **patients involvement and empowerment** would make their own choices to control the disease and lead to successfully diabetes management
Take Home Message

- **Listening** to patients’ concern, life situation and difficulties
- Building a **trust relationship** that actively engages the patient
- Use collaborative **patient-centered** approach
Acknowledgement

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- Ms. Candic Tang (DOM / M&G / PMH)

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- Dr. KW Chan (Team Head / Endocrine & Diabetes Team / PMH)
- Dr. Victor Hung (AC / M&G / PMH)
- Dr. C H Chung (AC / M&G / PMH)
- Dr. Vivian Chow (MO / M&G / PMH)

**And All Staff of Diabetes Care Center / PMH**
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Thank you for fighting diabetes.