Using Motivational Interviewing To Reduce Cardiovascular Risk In Type 2 DM Patients

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Background

• 11.3% of Singapore’s population has Diabetes Mellitus (DM).
• Almost 60% of diabetics die as a result of Cardiovascular Disease (CVD) in Singapore, up to 50% of whom die from their first myocardial infarction.
• Primary rather than secondary prevention of CVD is thus a major goal of therapy in DM patients.
• Evidence shows that a reduction of 1.0 mmol/L of Low-Density Lipoprotein Cholesterol (LDL-c) in diabetics translated to 23% fewer major coronary events (myocardial infarct or coronary artery disease death) over 5 years.
• A goal of <2.6 mmol/L is strongly recommended for all DM patients.
• It was noted that among the Type 2 DM patients attending SingHealth Polyclinics (SHP) - Bedok only 61.9% (March 2012) managed to achieve this target.

Objective

The goal of the study was to increase the percentage of Type 2 DM patients followed-up at Bedok Polyclinic with LDL-c treated to target by at least 10% within 1 year.

Methodology

• Baseline data were collected with the help of SHP head office
• A balanced multidisciplinary team of Health Care Workers (HCW) was assembled
• Reasons for LDL-c not being treated to target were identified using Root Cause Analysis
• Voting was done to plot the Pareto Chart to identify the most important factors:
  - Interventions were initiated to increase patients treated to target. The team chose to address the top two causes in the interventions.

First Intervention
15/09/2012: A Health Counselling Station (HCS) was set up specifically targeting dyslipidaemia in DM patients.
Patient Information Leaflet was used to reinforce the counselling

Second Intervention
15/11/2012: Teaching of Motivational Interviewing (MI) to HCW – concepts imparted:
1. Develop discrepancy
2. Express empathy
3. Roll with resistance
4. Support self-efficacy
Role play was done to enhance learning.

Paroeto Chart

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Learning Points
• Change in behavior requires time
• Change requires a team effort
• It is important to know stage of patient’s behavior change so that we can individualize our management and utilize certain interventions with maximum impact

Sustainability
• Results were made known to all the SHP Polyclinics
• MI has been incorporated as a component of the training programme for nurses and doctors doing SHP posting

Conclusion

Improved by >20%!