THE IMPACT OF PATIENTS' UTILIZATION UNDER THE SHARED CARE DISEASE MANAGEMENT PROGRAM FOR DIABETES IN TAIWAN-AN EXAMPLE FROM A REGIONAL TEACHING HOSPITAL

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BACKGROUND: The Bureau of National Health Insurance Taiwan proposed a Shared Care Disease Management Program for Diabetes on November 2001 and expected to control diabetes progression and medical utilization via financial incentives. This study aimed to investigate these patients' medical utilization after they had participated in the program.

METHODS: A total of 487 subjects were selected from 1243 patients who had joined this program for at least 25 months between May 2002 and March 2005. They had received at least 684 days (90% of the observed duration) of medication and at least 4 educational sessions from nurses and dietitians.

RESULTS: Outpatient expense had positive associations with baseline Hba1c, severity of complications, being overweight or obese, duration of more than 6 years, and education frequency. Emergency expense had a positive association with insulin injection, but a negative association with education frequency. Admission expense had positive associations with duration of more than 21 years, hypercholesterolemia, and baseline Hba1c but a negative association with education frequency. Total diabetes-related expense had positive associations with baseline Hba1c, duration of more than 6 years, severity of complications, being overweight or obese and hypercholesterolemia. Outpatient visit had a positive association with severity of complications. Emergency frequency had a negative association with education frequency. Admission frequency had a positive association with severity of complications, but a negative association with education frequency. Admission days had positive associations with severity of complications, duration of more than 21 years, and hypercholesterolemia, but a negative association with education frequency.

<u>DISCUSSION/CONCLUSION:</u> The most important predictors of increased utilization were long duration and the presence of severe complications. Although more education frequency would cause more outpatient expense, it decreased emergency expense and frequency, admission expense, admission frequency and days of hospitalization.

Key words: Diabetes, Shared Care Disease Management Program, utilization