

The efficacy and economic benefit of diabetes share care program in a regional teaching hospital

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Background

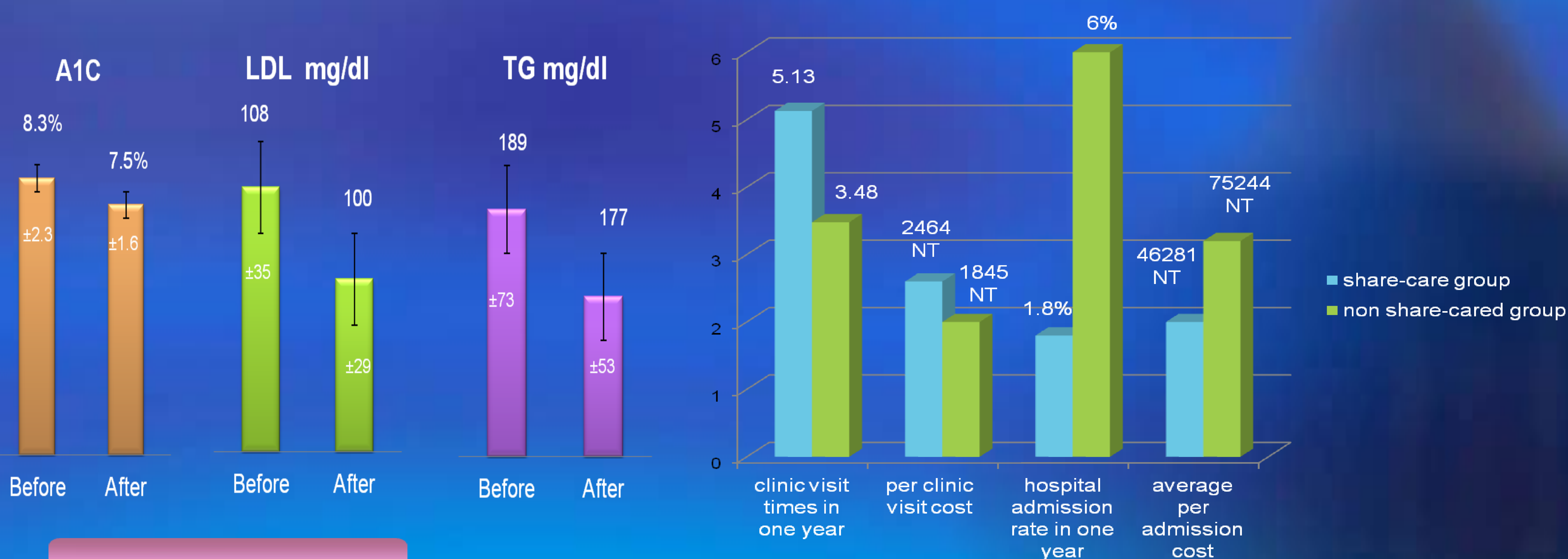
According to the analysis of National Health Insurance Administration (NHIA) of Taiwan, the expense of medical health-care of DM patients was 4.3 times higher than others in 1998. More than 350 billion NT that was around 12.5% of the total budget of NHI was spent every year in the care of diabetes and its' related complications. The evidence from UKPDS research showed that early intensive glycemic control can reduce diabetes related microvascular and macrovascular complications. In order to improve diabetes care quality, Taiwan government had initiated a program that enroll multi-professional diabetic specialist including physician、nurse、dietician and pharmacist to organize a diabetes share care network system since 2001. This study was to evaluate the efficacy and the economic benefit of diabetes share care program in a regional teaching hospital.

Method

This study retrospectively collect the data from 642 new patients that was enrolled in the diabetes share care program since 2016-1-1 to 2017-12-31 and they had at least 4 times of visit/year, we had analyzed the diabetes care quality including A1c、Blood pressure and lipid profile. In the mean time we also analyze the outpatient and inpatient medical expense of the patients between the diabetes share-cared (3472 patients) and non share-cared group (3103 patients) in 2016, in order to evaluate the efficacy and economic benefit of share care program.

Result

After 1 year engagement in the diabetes share care program, the A1c from 8.3±2.3%(mean±SD) to 7.5±1.6%(p0.000), LDL-cholesterol form 108±35 to 100±29 mg/dl(p0.000), Triglyceride from 189±73 to 177±53 mg/dl (p0.147). 35.5% of the diabetic patients achieved the ABC target (A1c<7% and BP<130/80 mmHg and LDL-c < 100 mg/dl). The average outpatient clinic visit was 5.13 times with the expense of 2464 NT at each visit in share-care group, the hospital admission rate was 1.8% with the average cost of 46281 NT per admission. The outpatient clinic visit was 3.48 times with the expense of 1845 NT at each visit, the hospital admission rate was 6% with the average cost of 75244 NT per admission in non share-cared group.



Conclusion

From short-term survey, there was a significant health quality improvement (based on ABC on target ratio) after 1 year enrolled in the diabetes share care program. In general, the share cared group had lower hospital admission rate and less inpatient expense per admission, but they had more outpatient clinic visit times and little more expense at each visit.

Reference

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