QUALITY OF CARE IN VERY OLD PATIENTS WITH TYPE 2 DIABETES MELLITUS: DISPARITIES BETWEEN PATIENTS MANAGED WITH LIFE STYLE INTERVENTIONS ONLY AND THOSE TREATED WITH ANTIDIABETIC MEDICATIONS

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Introduction: Considerable numbers of very old diabetic patients are managed with lifestyle interventions (LSI) without antidiabetic drugs. It was previously reported that there were some differences in management between patients with LSI and those on antidiabetic medications (Hippisley-Cox J, Pringle M. Lancet 2004;364:423-428). This study aimed to evaluate care process and achievement of intermediate outcomes in very old people with type 2 diabetes mellitus.

Methods: Eligible patients were aged 80 years old or older, diagnosed with type 2 diabetes and continuously registered more than one year on the UK Clinical Practice Research Datalink as of 1 April 2012. Nine process measures including smoking status, BMI, serum creatinine, HbA1c, blood pressure, cholesterol, eye examination, foot examination and urine protein were examined in the past one year from 1 April 2012. Target achievement of non-smoking, BMI (<30 kg/m²), HbA1c (≤7.5% or 58.5 mmol/mol), blood pressure (≤140 & ≤80 mmHg) and cholesterol (<5 mmol/L) were compared between patients with LSI only and those on antidiabetic medications, adjusted for gender, age group, duration of diabetes and patients’ general practice.

Results: A total of 34,239 patients, 11,971 with LSI and 22,268 on antidiabetic medications, were included. All the process measures were more recorded in patients on antidiabetic medications (all P < 0.001). All eight processes of care, excluding eye examination, were recorded in 37% of patients with LSI and 48% of those on antidiabetic medication (P < 0.001). Adjusted odds ratios for the achievement of HbA1c and BMI were 0.12 (95% CI 0.11 to 0.14, P < 0.001) and 0.67 (0.63 to 0.72, P < 0.001) in patients on antidiabetic medications against those with LSI, whereas those for blood pressure and cholesterol were 1.12 (1.06 to 1.18, P < 0.001) and 1.51 (1.40 to 1.62, P < 0.001), respectively. The proportions of non-smokers were similar in both groups (89%). Small numbers of patients achieved all of the five intermediate outcomes, and patients with LSI (36%) achieved more compared to those on antidiabetic medications (27%).

Conclusions: Patients treated with antidiabetic drugs had more favourable process of care measures and better control of blood pressure and cholesterol but had higher BMI and HbA1c values. Further research is needed to examine the associations between the control of risk factors and major complications in the patients with possibly limited life expectancy.