

INTRODUCTION

Assessing how people with diabetes manage their condition against clinical management targets is important as it provides valuable information about their current diabetes-related health status and risk for future diabetes-related complications.

In this study, achievement of diabetes management targets were assessed among people with diagnosed diabetes in the North West Adelaide Health Study (NWAHS) using the clinical management guidelines for type 2 diabetes, developed by the South Australian Divisions of General Practice and the South Australian Department of Health^a.

METHODS

The NWAHS (n=4060) uses a representative population sample of adults living in the north western region of Adelaide to examine the prevalence of chronic conditions. All households within this region with a telephone connected and the telephone number listed in the Electronic White Pages were eligible for selection. Within each household, the person who had their birthday last and was aged 18 years or older, was selected for interview and invited to attend the study clinic. People with diagnosed diabetes were defined as those who self-reported having been told by a doctor that they had diabetes.

Biomedical measurements were used to determine the proportions of those with diagnosed diabetes who achieved each of the diabetes management targets as listed in Table 1. These targets covered HbA1c, fasting plasma glucose (FPG), blood pressure (BP), cholesterol, body mass index (BMI) and waist circumference (WC). Proportions achieving between none and nine of these targets was also assessed.

Socio-demographic differences in sex, age, education, income, country of birth, and marital and work status between those who did and did not achieve targets were compared.

RESULTS

The prevalence of diagnosed diabetes was 5.5% (n=225).

Proportions of those with diagnosed diabetes who achieved each of the diabetes management targets are shown in Table 1.

Table 1: Proportion (%) with diagnosed diabetes achieving each diabetes management target

Management target	Proportion achieving target level	
	n	% (95% CI)
HDL > 1.0mmol/L	144/222	64.6 (58.4 – 70.9)
Triglycerides < 2.0mmol/L	135/222	60.7 (54.3 – 67.1)
HbA1c < 7.0%	119/223	53.3 (46.8 – 59.9)
LDL < 2.5mmol/L	73/212	34.4 (28.3 – 41.0)
WC [†] Men < 100cm; Women < 90cm	72/225	32.2 (25.1 – 38.3)
FPG 3.5 – 6.0mmol/L	64/223	28.6 (23.1 – 34.9)
BP < 130/85mmHg	59/225	26.1 (20.8 – 32.3)
Total cholesterol < 4.0mmol/L	41/222	18.5 (13.8 – 23.9)
BMI ≥ 18.5 and < 25 kg/m ²	29/225	12.8 (9.0 – 17.8)

[†]Based on European populations

Socio-demographic differences

No statistically significant socio-demographic differences were found between the proportion of people with diagnosed diabetes who achieved few (zero to two) targets and those who achieved three or more targets. Socio-demographic factors associated with achievement of specific management targets were not consistent across the targets.

- Those not meeting the HDL target were less likely to be female and widowed, and more likely to have an income of \$20,000 to \$40,000.
- Those not meeting the BP target were less likely to have ever been married and more likely to be home duties/retired.
- Those not meeting the WC target were less likely to have an educational level of trade/apprentice/certificate and more likely to be home duties/retired.
- Those not meeting the BMI target were less likely to be widowed.

The proportion of people with diagnosed diabetes achieving none, one, or multiple targets is shown in Figure 1. No participants achieved all nine targets.

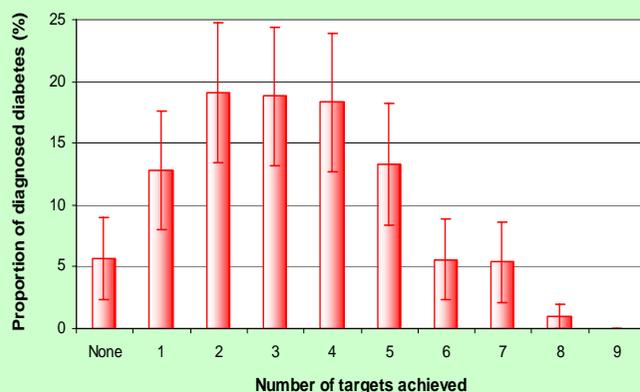


Figure 1: Proportion of people with diagnosed diabetes achieving between none and nine diabetes management targets

CONCLUSIONS

- The proportion of people with diagnosed diabetes achieving multiple management targets is low. The extent to which these proportions reflect variation in individual biology, number of years with the condition, unrealistic management target goals, medical and pharmacological management or inadequate self-management of their diabetes, requires further analysis.
- Given that effective treatment options exist for hypertension and hypercholesterolemia, there is room for improvement in the proportions of people who are meeting the targets for blood pressure and cholesterol.
- Lack of a consistent pattern of differences in socio-demographic factors across all targets, between those who achieved the management targets and those who did not, did not allow any general socio-demographic targeting information to be drawn from this study.

REFERENCE

^a South Australian Divisions of General Practice and the South Australian Department of Health. *Managing type 2 diabetes in South Australia – screening, diagnosis and management in general practice*. Adelaide, 2002.