Type 2 Diabetes Mellitus: Patient Characteristics at Initial Diagnosis

Lorraine Scanlon¹, Katie Murphy², Carthage Moran³, Colin Bradley², Joe Moran².

Abstract

Background and Aim

The incidence and prevalence Type 2 Diabetes Mellitus (T2DM) is increasing. Diabetes in General Practice (DiGP) is an educational forum for Irish General Practices aiming to improve their care of patients with T2DM. We investigated the characteristics of T2DM patients at initial diagnosis and whether patients cared for in DiGP practices had better glycaemic control (lower HbA1c) at the time of diagnosis than patients attending non-DiGP practices.

Methods

22 General Practices from the South West of Ireland were recruited over a 6 week period, including 15 DiGP practices and 7 non-DiGP practices. A random selection of T2DM patients (N=460) were selected and their records were analysed. Demographics, smoking status, BMI (Body Mass Index) and HbA1c values at the time of initial diagnosis were recorded.

Results

Smoking status was recorded for 41% of patients, with 38% reported as current or exsmokers and 62% reported as non-smokers. BMI was recorded in 47% of patients, with 10% of patient "underweight" or "normal" and 28% "overweight" and 63% considered "obese". There was a significant negative correlation between HbA1c at initial diagnosis and patient age (r=-0.203, p=0.00). There was a significant correlation between HbA1c at initial diagnosis and positive smoking status (r=0.204, p=0.005). There was no significant correlation between HbA1c at diagnosis and either BMI or DiGP membership.

Conclusion

HbA1c level at initial diagnosis is higher in younger adults diagnosed with T2DM. This highlights the need for increased diagnostic suspicion in this patient group. Positive smoking status is associated with higher HbA1c level at initial diagnosis, highlighting the need for increased awareness of T2DM in smokers. Membership of DiGP did not lead to earlier diagnosis of T2DM.

¹ School of Medicine, University College Cork, Western road, Cork City, Ireland.

²Dept. General Practice, Western Gateway Building University College Cork, Western Rd. Cork.

³Department of Medicine, University College Cork, Clinical Sciences Building, Cork University Hospital.