

Diabetes still goes unnoticed, resulting in delayed diagnosis

Presented by

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A British study of more than 200,000 blood samples from people not diagnosed with diabetes showed that HbA1c screening could have identified 1% of cases of undiagnosed diabetes in people aged 40-69 years. These individuals were only clinically diagnosed with diabetes 2.3 years later on average, thus highlighting a substantial delay in time to diagnosis.

The UK Biobank (UKBB) is a cohort of about 500,000 participants aged 40-69 years at recruitment, with primary care records (clinical codes and prescription data) available for 44% of participants. Dr Katie Young (University of Exeter Medical School, United Kingdom), presented the study which included participants without a diagnosis of diabetes at recruitment and had no indications of diabetes in their primary care records prior to recruitment (clinical codes for diabetes, HbA1c measurements ≥ 48 mmol/mol, or prescription for glucose-lowering medication) [1]. For these subjects, the time to receive a clinical diagnosis was determined from their primary care records and defined as the first occurrence of a diagnostic code for diabetes, an HbA1c ≥ 48 mmol/mol, or a prescription for glucose-lowering medication.

Of the 201,465 UKBB participants with primary care records available, no prior diagnosis of diabetes, and HbA1c measured at recruitment, 2,022 (1.0%) had undiagnosed diabetes by HbA1c screening. People who had undiagnosed diabetes on screening were older (61 vs 58 years), more likely to be obese (body mass index 31.0 vs 26.6 kg/m²), and were more frequently male (60% vs 45%) than those without diabetes. It took an average of 2.3 years following UKBB recruitment for these patients to be diagnosed with diabetes; 23% still had not been diagnosed at 5 years follow-up.

The availability of this screening data and primary care records on a large cohort of individuals offers a unique opportunity to study the impact of a delay in diagnosis on the risk of developing future complications, the researchers added.

1. Young KG, et al. HbA1c screening in 195,460 'non-diabetic' individuals (40-69 years) identifies 1.1% with undiagnosed diabetes 2 years before clinical diagnosis. EASD 2020. Abstract #331.