

Service development / integrated care news

The DIADEM project: targeting the forgotten population?



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Introduction

Alzheimer's Disease International recently published a report assessing the impact of dementia globally in the next 40 years.¹ As of 2015 there are 46.8 million people with dementia in the world with this number rising to over 131.5 million by 2050. The report highlighted the significant economic impact of dementia and the likelihood of this increasing further. Similarly, Diabetes UK have issued a document on the impact of diabetes.² The estimated diabetes prevalence for adults between the ages of 20 and 70 worldwide for 2015 was 415 million and it is expected to affect one person in 10 by 2040 – 642 million.

From the figures above it is clear that the impact of dementia and diabetes and the predicted increase in burden in the coming decades make it necessary to understand the management of patients with both conditions, as their numbers too will only increase.

Method

A recent review of patients with both dementia and diabetes admitted to Sandwell and West Birmingham Hospitals NHS Trust found that over

500 had been seen in the trust in 1 year, accounting for over 1,000 separate admissions.

We audited a cohort of 141 patients (73 male, 68 female, mean age 82.5 years). All had type 2 diabetes.

Results

17 (12.1%) patients had vascular dementia, 44 (31.2%) had Alzheimer's, 2 (1.4%) mixed and 78 (55.3%) not coded. 56 (39.7%) lived in care homes and 85 (60.3%) lived in their own homes. Mean HbA1c was 55.6 mmol/mol. Mean length of stay was 8.5 days (median 4 days).

In terms of medication, 25 patients (17.7%) were on sulfonylureas, 28 (19.9%) on DPP-4 inhibitors, 63 (44.7%) on metformin, 33 (23.4%) were on insulin, 6 (4.3%) were on a sulfonylurea and insulin combination, 11 (7.8%) were on three or more agents and 25 (27.7%) were not taking any medication.

26 patients (18.4%) had at least one episode of hypoglycaemia as an inpatient and 15 (10.6%) suffered with clinically significant hypoglycaemia (<3 mmol/L).

According to the above findings, 74 patients (52.5%) were taking hypoglycaemia-causing medications and would have had intervention with medication adjustment, HbA1c review or management of glycaemic abnormalities. Each of these patients would have benefited from a focused diabetes review.

Conclusion

The Diabetes and Dementia (DIADEM) is a novel project aimed at targeting this subgroup of patients regardless of the reason for admission. Our main aim was to improve medicines management in order to optimise and provide safer care and reduce variations for patients with both dementia and diabetes. This initial audit was carried out to understand the current trend in hospital admissions of such a vulnerable group of patients. The diabetes team, medical teams (especially elderly care ward) and nursing teams were made aware of the need for focused review of such patients and the need to be referred via the diabetes referral system. The DIADEM team then assessed the patients to optimise treatment targets, ensure up-to-date diabetes control and testing and improve overall diabetes care. This included stopping or reducing unnecessary hypoglycaemia-causing medications as well as simplifying regimes (thus reducing hypoglycaemia risk), ensuring inpatient foot assessments were carried out, involving carers/family