Inequalities in the management of immigrant patients with Type 2 diabetes in primary care: the VALORE project


Objectives

1. To describe the burden of diabetes in a select group of immigrants from high-pressure migration countries (HPMCs) and highly-developed countries (HDCs).
2. To compare the performance of primary care, diabetes management, and outcomes in HPMC and HDC patients with diabetes.

Methods

1. Setting: The study was conducted in six health districts (HDs) across Italy, covering Lombardy, Veneto, Emilia-Romagna, Tuscany, Marche, and Sicily.
2. Data collection: The study was based on the Valore database, which contains patient data from 2000 to 2007. The Charlson index was used to assess comorbidity. The index date was 1 year before the diagnosis.
3. Patients: In total, 29,579 patients were included, of whom 21,123 were HPMC patients and 8,456 were HDC patients.

Results

1. Patients from HPMC had an almost 30% lower odds of undergoing glycosylated hemoglobin testing annually, and more than 40% lower odds of having a cholesterol profile checked.
2. The comorbidity index was not associated with the likelihood of annual HbA1C testing, but a higher comorbidity index coincided with a higher likelihood of annual screening for nephropathy and annual LDL cholesterol testing.
3. Among HPMC patients, gender was not associated with adherence, while patients aged 45 to 74 years were more likely to meet the standards than younger patients. Among HPMC patients with longer-standing diabetes, the comorbidity index was more likely to meet the standards. 

Discussion

1. It is the first time that administrative data are used to investigate primary care devoted to immigrant patients in a large sample of Italian regions. Use of administrative data might underestimate adherence in patients from HPMC, since they are more likely than the others to leave the region without being deleted from the inhabitant registry. However, it is unlikely that this limitation completely justifies our results.

Conclusion

1. Immigrant patients from HPMC are less likely to meet common standards of primary care for diabetes than the rest of diabetic patients. This might lead to worse outcomes of the disease in this population.