

National prevalence of heart failure in type 2 diabetes patients derived from the National eHealth System and their access to treatment with SGLT2 inhibitors or GLP-1 Receptor Agonists

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Background and aims:

Our country is estimated to have the second highest diabetes age-adjusted (20-79 years) comparative prevalence in Europe (10.1%), and is categorized as a very high risk country for cardiovascular disease (CVD) mortality (CVD mortality >450/100,000 for men, and >350/100,000 for women) [1,2,3,4].

Aim of the study was, for the first time, to evaluate the national prevalence of heart failure in type 2 diabetes patients, based on the data derived from National eHealth System (NeHS), and their access to reimbursed treatment with SGLT2 inhibitors (SGLT2i) or GLP-1 Receptor Agonists (GLP-1RA), as recommended for those patients after initial treatment with metformin [5].

Materials and methods:

National eHealth System was searched for all type 2 diabetes patients (ICD-10 code E11) with heart failure (ICD-10 codes I42 (I42.0-I42.9), I43 and I50 (I50.0, I50.1, I50.9)) in their Electronic Healthcare Records (EHR), with a cut-off date of 01-Apr-2017.

Number of total patients with access to reimbursed treatment with GLP-1RA or SGLT2i, at the given cut-off date, was 50.

Results:

Total of 9,849 patients with type 2 diabetes were identified to be diagnosed with heart failure from their EHRs in NeHS. Since the estimated number of type 2 diabetes patients was 82,268 [1,3], national prevalence of heart failure in type 2 diabetes patients was 12.0%. Majority of type 2 diabetes patients with heart failure were at the age of 60 years or above (n=9,107; 92.5% of all type 2 diabetes patients with heart failure). Only up to 0.5% of all type 2 diabetes patients with heart failure had access to reimbursed treatment with GLP-1RA or SGLT2i.

Conclusions:

These are the first results of national prevalence of heart failure in type 2 diabetes patients (12.0%) derived from the NeHS, with majority of patients identified at the age of 60 years or above. Despite the recent increase in number of patients having reimbursed treatment with SGLT2i or GLP-1RA (from 50 to 300 patients), their access to those medications has been very limited.

Key words:

Type 2 diabetes, heart failure, prevalence, SGLT2i, GLP-1RA

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