Assessment of the prevalence of chronic comorbidities in MS patients in Tuscany: a study from administrative data

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ABSTRACT

BACKGROUND Comorbidities are common in MS patients, and can worse the prognosis. The prevalence of these conditions varies widely depending on comorbidities considered, the specific patient population evaluated, and other factors such geographic region. There are few published studies in Italy despite the relevance of considering additional disorders both for clinical decision making and public health planning.

OBJECTIVE To evaluate the prevalence of some comorbidities in MS patients in Tuscany using case-finding algorithms based on administrative data. We selected some common chronic diseases, routinely monitored by the Regional Health Agency of Tuscany to evaluate the public health, as diabetes, chronic obstructive pulmonary disease (COPD), hypertension, stroke, heart failure (HF) and ischemic heart disease (IHD).

METHODS In a previous study, we calculated MS prevalence in Tuscany using a validated case-finding algorithm based on administrative data. Other similar algorithms have been created and are commonly used by the Health Agency to monitor other chronic diseases. The algorithms are based on the following administrative data: hospital discharge records, drug-dispensing records, disease-specific exemptions from copayment to health care and home and residential long-term care. So we linked the patients cohorts to find comorbidities.

RESULTS As at December 31, 2017, we identified 7,796 cases (>16 years old) with a crude MS prevalence of 208.3 per 100,000. Among prevalent cases vs general population, we found 2170 (278 vs 321 per 1000) cases of hypertension, 555 (71 vs 82) of diabetes, 496 (64 vs 72) with COPD, 240 (31 vs 54) with IHD, 161 (21 vs 16) with stroke and 110 (14 vs 26) with HF.

CONCLUSIONS Despite the chronic condition with progressive impact on health and QoL, we found no higher comorbidities prevalence rate in MS patients in comparison with general population. This might be due to the periodic clinical monitoring of MS patients.