

was estimated, and 0.97 (95%CI 0.83-1.12) and 0.89 (95%CI 0.80-0.99) for males and females, respectively. The multivariable logistic regression model identified the use of antidiabetic drugs as unique predictor of SARS-CoV-2 infection (OR = 1.69; 95%CI 1.19-2.40). No association with any DMT was observed.

Conclusions:

No difference was observed in the incidence of SARS CoV-2 infection in MS patients compared with the general population. DMT does not seem to affect the risk of infection, while the higher incidence in individuals using antidiabetics could reflect the higher prevalence of diabetic population in infected people.

Key messages:

- This study supports previous research suggesting that the incidence of SARS-CoV-2 infection in MS population does not seem to be higher than that in the general population.
- Disease Modifying Therapy at the moment of infection does not appear to affect the risk of became infected from SARS-CoV-2.

Risk of SARS-CoV-2 infection in people living with Multiple Sclerosis in the Lazio region, Italy

Anna Acampora

A Acampora^{1,2}, S Cascini¹, E Calandrini¹, N Agabiti¹, M Davoli¹, AM Bargagli¹

¹Department of Epidemiology, Lazio Regional Health Service, Local Health Unit Roma 1, Rome, Italy

²Section of Hygiene, University Department of Life Sciences, Università Cattolica del Sacro Cuore, Rome, Italy

Contact: a.acampora@deplazio.it

Background:

Multiple Sclerosis (MS) patients might represent a vulnerable population to SARS-CoV-2 infection due to several factors, including the immunosuppressive or immunomodulating disease-modifying therapies (DMT) they use and the young age that expose them to a high number of contacts. This study aimed to estimate incidence of SARS-Cov-2 infection in a cohort of MS patients living in the Lazio region and to identify the risk factors for the infection.

Methods:

A retrospective cohort study was performed based on regional health administrative databases linked to the new integrated surveillance system of SARS-CoV-2 infection. MS patients residing in Lazio region and aged ≥ 18 years on 31 December 2019 were enrolled and followed-up to 31 March 2021. Age- and gender-standardised incidence ratios (SIR) was calculated to compare the infection rate of MS cases with that of the regional general population. A large number of socio-demographic and clinical variables were explored as potential risk factors using a multivariable logistic regression model.

Results:

In the Lazio region lived 10,248 individuals affected by MS (mean age 49.2 ± 12.9 ; 32.2% males; 67.8% females). During the follow-up period the overall incidence of SARS-CoV-2 infection was 5.0% (n = 510), 5.2% and 4.8% among males and females, respectively. An overall SIR of 0.92 (95%CI 0.84-1.00)