

## Use of antidepressants during COVID19 outbreak: a real-world drug-utilization study

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### Background:

Lockdown measures implementation (LMI) to prevent COVID19 disease diffusion was associated to increased depression and anxiety cases. The main aim was to evaluate whether LMI affected prevalence and incidence of antidepressants (ADs) use, and ADs treatment interruption (TI) in the general population.

### Methods:

Adults ( $\geq 18$  years) with at least 1 dispensing of ADs between 01/01/2019-26/09/2020 were selected from a regional Italian healthcare administrative database. Patients presenting an AD dispensing in the year preceding the first observation were considered as prevalent otherwise as incident users. We divided the studied period into 3 parts: pre-lockdown (01/01/2019-08/03/2020), lockdown (09/03/2020-14/06/2020) and post-lockdown (15/06/2020-27/09/2020). The weekly prevalence (WP) and incidence (WI) per 10,000 inhabitants were compared among periods. Incidence of TI (no dispensing refill within 30 days of the end of its validity) was computed among prevalent AD users.

### Results:

The WP (mean of 552.3 per 10,000 pre-lockdown vs 505.5 lockdown phase; relative change: -9%) and WI (5.2 vs 3.7; -29%) of ADs use decreased after LMI. During the post-lockdown phase WP (505.5 vs 495.9; -2%) decreased whereas the WI (3.7 vs 4.3; 16%) slightly increased in relation to the lockdown period, although differences were not statistically significant. Conversely, the incidence of TI increased during lockdown (344.7 vs 384.3; 12%) and post-lockdown (384.3 vs 394.2; 3%) periods, even not always statistically significant.

### Conclusions:

Our analysis showed a reduction of ADs use during the early phase of lockdown. Several factors might have impacted on the observed phenomenon (i.e. patient reluctance to start new AD treatment). Considering the mutation of the virus and the potential waves that might occur in the next months, a continuous monitoring of the impact of COVID19 on mental diseases onset and treatment adherence are suggested.

### Key messages:

- In Italy, the implementation of lockdown measures was followed by a reduction in antidepressants use, even though evidences are that diagnoses of psychiatric disorders increased.
- Future studies should monitor if these phenomena led to an increase in adverse events potentially correlated with inappropriate treatment of depression.