

Anxiolytics, antidepressants, sedatives and hypnotics prescription during the Covid-19 pandemic: the Portuguese case

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Background The prevalence of diagnosed mental disorders in Portugal is the highest in Europe, being related to an excessive consumption of anxiolytics and antidepressants. The COVID-19 pandemic has had a significant impact on mental health, considering the unprecedented mass home-confinement directives and the pandemic context itself.

Purpose The main purposes of this study are to evaluate the prescription trends of anxiolytics, sedatives, hypnotics and antidepressants in Portugal, considering the number of doctor visits in hospital and primary care settings, and to analyse whether the declaration of the State of Emergency, and the resulting restrictive governmental measures adopted due to Covid-19 pandemic, had an impact on the aforementioned prescription trends.

Method The data concerning drug prescription were obtained from the System of Information and Monitoring of the Portuguese National Health System (SIM@SNS) public-access platform, between January 2018 and July 2020. It comprised the Defined Daily Dose of anxiolytics, sedatives and hypnotics and antidepressants prescribed by physicians of the public health sector per month, across the period January 2018 ? July 2020. Data on doctor visits have been retrieved from the Transparência - SNS database. An interrupted time series (ITS) analysis model based on a segmented regression approach was designed to analyse the trends of the monthly prescribed DDDs of these drugs per doctor visit.

Findings Concerning the ratio of DDDs prescribed by doctor appointment, it can be observed some stability on throughout 2018 and 2019 on anxiolytics, sedatives, hypnotics, and antidepressants, both in hospital and primary care settings. In March 2020 a peak on the ratio of DDDs prescribed by doctor visit is observed both settings, as well as on the antidepressants? group and the anxiolytics, sedatives and hypnotics? group. It can be observed that the COVID-19 pandemic has promoted an increase of the prescription of the aforementioned drugs per doctor visit, ranging from a 1.3-point increase ($p < 0.001$) of DDDs prescribed per doctor visit in terms of anxiolytics, sedatives and hypnotics in the hospital context, to a 4.4-point ($p < 0.001$) increase of antidepressant DDDs prescribed per hospital consultation.

Conclusion The results show an important impact of the COVID-19 pandemic on the prescription of drugs used to treat mental illness, associating it with the decrease in doctor appointments after the declaration of the State of Emergency. Considering the impact of the pandemic context on mental health, it is crucial to consider this increase on prescriptions as an indicator of the mental health state of the Portuguese population.