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NEW ANTIDEPRESSANTS PRESCRIPTIONS IN THE POPULATION OF BRESCIA (ITALY) BEFORE AND AFTER THE COVID-19 PANDEMIC (2018-2021).

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INTRODUCTION

The province of Brescia in Italy was one of the most dramatically hit by the COVID-19 pandemic. From March to June 2020, the Italian Government imposed a national lockdown to limit the spread of the infection. In the following months and throughout 2021, phases of partial reopening alternated with new lockdowns, depending on the trend of the infections. Pandemic circumstances are expected to have had an impact on the mental health of the population.

OBJECTIVES

The aim of this study was to assess the impact of the pandemic on the mental health of the general population, particularly considering the incidence rate of depressive disorder.

MATERIALS AND METHODS

This is a retrospective, observational study, analyzing antidepressants prescription data from Brescia Health Protection Agency as reliable indicators of depressive disorder incidence and prevalence. The study population is represented by citizens aged >18 years old (N= 958.727, M= 48,9%), and it is split into the two categories : AD users and non-AD users, according to 1st January 2018 data. We calculated the cumulative number of monthly events of new AD prescriptions and then we performed an interrupted time-series analysis to study the change of AD use trend subsequent to the lockdown period. A logistic regression was applied to test for associations with age, gender, nationality and physical morbidity.

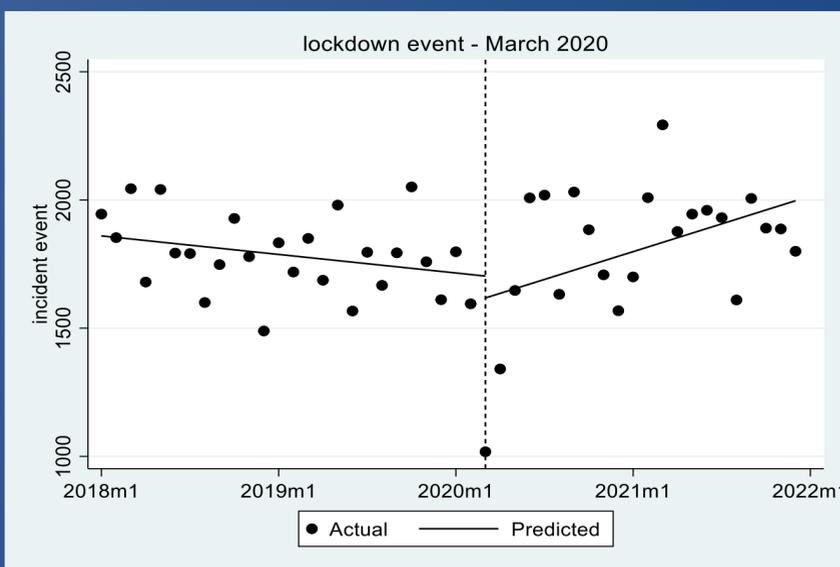


Figure 1. Time series analysis of the incident event of AD use.

	Total	Incident cases		OR	95% CI	p
		yes	no			
N	958.727	76.518	882.209			
Age, median (p25-p75)	50,7 (37,6-65,6)	62,2 (46,4-76,9)	49,9 (37,0-64,2)			
Gender N (%)						
Male	468.560 (48,9)	26.664 (34,8)	441.896 (50,1)	1 reference		
Female	490.167 (51,1)	49.854 (65,2)	440.313 (49,9)	1,72	1,70-1,75	< 0,001
AD user at baseline						
no	884.624 (92,3)	64.213 (83,9)	820.411 (93,0)	1 reference		
yes	74.103 (7,7)	12.305 (16,1)	61.798 (7,0)	1,62	1,56-1,66	< 0,001
Age category N (%)						
18-49	446.832 (46,6)	22.247 (29,1)	424.585 (48,1)	1 reference		
50-64	252.116 (26,3)	17.901 (23,4)	234.215 (26,5)	1,23	1,20-1,25	< 0,001
>=65	259.779 (27,1)	36.370 (47,5)	223.409 (25,4)	2,01	1,96-2,05	< 0,001
Citizenship N (%)						
Italian	840.800 (87,7)	71352 (93,3)	769.448 (87,2)	1 reference		
non Italian	117.927 (12,3)	5166 (6,7)	112.761 (12,8)	0,71	0,69-0,73	< 0,001
Comorbidity N (%)						
none	573.844 (59,8)	31.264 (40,9)	542.580 (61,5)	1 reference		
1	180.518 (18,8)	17.556 (22,9)	162.962 (18,4)	1,37	1,35-1,40	< 0,001
2-3	152.841 (16,0)	19.996 (26,1)	132.845 (15,1)	1,56	1,52-1,59	< 0,001
>3	51.524 (5,4)	7.702 (10,1)	43.822 (4,9)	1,62	1,57-1,67	< 0,001

Fig.2. Multivariate logistic model of risk factors associated with at least one AD prescription event.

RESULTS

Of 958.722 included subjects, 74.103 (7.7%) were antidepressant users at baseline. The monthly raw incidence rate of new users was 186.1/100.000 in the pre-lockdown years, 106.2 in March 2020, and 192.4 in the post-lockdown period. The significantly higher risk of new prescriptions after lockdown was due to new cases in 2021 (relative risk 1.07, $p < 0.05$), while in 2020 the relative risk was not significant. According to the logistic regression analysis results, new prescriptions of antidepressants were predicted by female sex (OR 1,72; 95% CI : 1,70-1,75), older age, particularly the ≥ 65 years group (OR 2,01; 95% CI: 1,96-2,05), Italian citizenship, being AD user at baseline and the higher number of physical comorbidity (>3 comorbidity : OR 1,62; 95% CI: 1,57-1,67). Analysing the characteristics of incident cases according to the period of diagnosis (before lockdown Jan 2018-Feb 2020; March –Dec. 2020; Jan 2021-Dec.2021) it is clear that the incidence increases uniformly for all categories, no group shows an increased risk compared to others.

CONCLUSIONS

Data suggest that new cases of depression may need a longer than expected time to show up, and clinicians should be careful in monitoring subjects with more risk factors for depression, in order to plan public health strategies.