

# CUIDADO É FUNDAMENTAL

Escola de Enfermagem Alfredo Pinto – UNIRIO

RESEARCH

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## Prescription and Dispensing of Benzodiazepines in Times of the Covid-19 Pandemic in Brazil

*Prescrição e Dispensação de Benzodiazepínicos em Tempos de Pandemia da Covid-19 no Brasil**Prescripción y Dispensación de Benzodiazepinas en Tiempos de la Pandemia Covid-19 en Brasil***Davi Azevedo Ferreira<sup>1</sup>** **Pedro Ithaló Francisco da Silva<sup>1</sup>** **Maria Renata Florêncio de Azevedo<sup>2</sup>** **Jaelson Rodrigo Ricardo de Sousa<sup>3</sup>** **Regina Lígia Wanderlei de Azevedo<sup>4</sup>** 

### ABSTRACT

**Objective:** the objective was the prevalence of prescription and dispensing of benzodiazepines in Brazilian capitals, in the first quarters of 2020 and 2021, considering the *Coronavirus disease-2019* (COVID-19) pandemic. **Methods:** this is an epidemiological, exploratory, quantitative, documentary and retrospective study that investigated data from the National Controlled Protocol Management System. Descriptive statistics and association tests were used for data analysis, using the Software Statistical Package for Social Sciences program. In addition, the calculation of the prevalence of dispensation was performed. **Results:** dispensing of alprazolam and clonazepam is more prevalent. The Southeast region has the highest prevalence of dispensing (1st quarter of 2020 n = 7098.74; 1st quarter of 2021 n = 6849.77), followed by the South (1st quarter of 2020 n = 5939.6; 1st quarter of 2021 n = 5616.16). **Conclusion:** therefore, there was no significant increase to say that the prescription and dispensing of benzodiazepines between the years analyzed.

**DESCRIPTORS:** Benzodiazepines; Psychotropic drugs; Coronaviruses; Self medication; Anxiety.

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## RESUMO

**Objetivo:** teve como objetivo analisar a prevalência da prescrição e dispensação de benzodiazepínicos nas capitais brasileiras, nos 1<sup>os</sup> trimestres de 2020 e 2021, considerando a pandemia da *Coronavirus disease-2019* (COVID-19). **Método:** é um estudo epidemiológico, exploratório, quantitativo, documental e retrospectivo que investigou dados do Sistema Nacional de Gerenciamento de Protocolos Controlados. Utilizou-se da estatística descritiva e testes de associação para as análises dos dados, pelo programa *Software Statistical Package for the Social Sciences*. Além disso, foi realizado o cálculo da prevalência da dispensação. **Resultados:** a dispensação de alprazolam e clonazepam tem maior prevalência. A região Sudeste apresenta maior prevalência de dispensação (1<sup>o</sup> trimestre de 2020 n = 7098,74; 1<sup>o</sup> trimestre de 2021 n = 6849,77), seguida do Sul (1<sup>o</sup> trimestre de 2020 n = 5939,6; 1<sup>o</sup> trimestre de 2021 n = 5616,16). **Conclusão:** sendo assim, não houve aumento significativo para dizer que há prescrição e dispensação de benzodiazepínicos entre os anos analisados.

**DESCRITORES:** Benzodiazepínicos; Psicotrópico; Coronavírus; Automedicação; Ansiedade.

## RESUMEN

**Objetivo:** el objetivo de este estudio fue analizar la prevalencia de la prescripción y dispensación de benzodiazepinas en capitales brasileñas en el 1er trimestre de 2020 y 2021, considerando la pandemia de *Coronavirus disease-2019* (COVID-19). **Método:** se trata de un estudio epidemiológico, exploratorio, cuantitativo, documental y retrospectivo que investigó datos del Sistema Nacional de Gestión de Protocolos Controlados. Para el análisis de datos se utilizaron estadísticas descriptivas y pruebas de asociación, utilizando el programa *Software Statistical Package for Social Sciences*. Además, se realizó el cálculo de la prevalencia de dispensación. **Resultados:** la dispensación de alprazolam y clonazepam es más prevalente. La región Sureste tiene la mayor prevalencia de dispensación (1er trimestre de 2020 n = 7098.74; 1er trimestre de 2021 n = 6849.77), seguida por el Sur (1er trimestre de 2020 n = 5939.6; 1er trimestre de 2021 de 2021 n = 5616.16). **Conclusión:** por lo tanto, no hubo un aumento significativo para decir que la prescripción y dispensación de benzodiazepinas entre los años analizados.

**DESCRIPTORES:** Benzodiazepinas; Psicotrópicos; Coronavirus; Automedicación; Ansiedad.

## INTRODUCTION

Benzodiazepine drugs (BDZ's) are restricted prescription drugs subject to special control, as they are hypnotic and sedative psychotropics used in clinical practice. Worldwide, their indiscriminate use has been increasingly recognized, denoting a process of medicalization because they are used for long periods.<sup>1</sup>

BDZs are used in the treatment of depressive and anxiety disorders, insomnia, seizures, and other psychological and behavioral symptoms; they produce a rapid effect and are considered the first therapeutic alternative. According to the Diagnostic and Statistical Manual of Mental Disorders - 5 (DSM 5), depressive disorders include disruptive mood dysregulation disorder, major depressive disorder (including major depressive episode), persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and depressive disorder not otherwise specified.<sup>2</sup>

The COVID-19 pandemic was an event that triggered such vulnerabilities, considering that such a pandemic context, as well as the necessary control measures advocated, affect the population in various areas of health, among them mental health. Thus, an event such as COVID-19 causes psychological and social disturbances, demanding emergency efforts from several interdisciplinary areas, such as psychology, pharmaceuticals, and psychiatry.<sup>3,4</sup>

COVID-19 brought with it fear of contracting the disease, daily changes generating varied insecurities and sequelae in mental health.<sup>5,6,7</sup> Isolation and social distancing, face-to-face and/or remote work are examples of behaviors that have been completely modified with the pandemic and, in a survey conducted during the pandemic with 45,161 Brazilians, sadness, frequent nervousness, and sleep disorders were observed, especially among adults, women, and those with a clinical history of depression.<sup>3</sup>

The prescription of psychotropic drugs in the context of family health, through Basic Health Units (BHU), found in the reports of the surveyed subjects the medication as the only form of permanent care, suppressing or disregarding emotional issues, subjectivities, and a priori alternatives to medication, when these subjects reported nervousness and body pain. For the researchers, the results demonstrate a culture of medicalization, based on the biological health model, disregarding the political and social implications of psychological illness.<sup>8</sup>

In a study about the reasons why subjects started using psychotropic drugs, found that the trigger was anxiety, anger, anguish, stress, and sadness. The authors also mention the process of medicalization of society, in which any pain can be solved by using drugs to preserve health.<sup>9</sup>

In a systematic review on the medicalization of life and population harm, the authors stated that the practice of medicine has been facing a crisis, through which many medical practices generate harm to the population. According to the authors, it is necessary to work strongly to raise awareness, both among

physicians and the population in general, about the risks of excessive medicalization, thus requiring collective work to build a way of doing that is not the search for a cure at all costs, but to seek a balance between risks and benefits.<sup>10</sup>

In a study about the development/validation of a questionnaire that evaluates the social-behavioral impacts of COVID-19 in the population, among other results, the authors stated that anguish is present in the lives of individuals, when related to social isolation, making it impossible to attend social meetings and religious ceremonies. The researchers also cited that COVID-19 caused changes in people's lifestyles, such as changes in sleep, physical activity, and eating patterns. At the same time, the authors cited about coping strategies such as preventive measures to avoid contamination, which reduces stress and fear.<sup>11</sup>

In this direction, the changes in anxiety and loneliness symptoms after increased social isolation due to COVID-19, found results that social anxiety symptoms increased during the pandemic; social interactions decreased and were affected due to isolation, as well as this caused increased loneliness.<sup>12</sup>

A study by the Federal Pharmacy Council (CFF), pointed out the increase in the number of sales of psychiatric drugs due to the pandemic, while at the same time there was an increase in exogenous intoxication. Of the cases investigated in 2019, 85,178 were motivated by attempted suicide.<sup>13</sup>

Observing the aforementioned research, the questionings and problematizations about the use of BZD's in Brazil emerged, considering this the guiding question of this research. Thus, this article aimed to analyze the prevalence of prescription and dispensation of BZD's in Brazilian capitals, in the first quarters of 2020 and 2021, considering the pandemic of COVID-19.

## METHODS

This is an epidemiological, exploratory, quantitative, documental, and retrospective study that investigated the data available in the National Controlled Protocols Management System (SNGPC), referring to the first quarter of 2020 and the first quarter of 2021.

The sample universe of the research in use was the entire Brazilian population, equivalent to 213,221,064 inhabitants, and the population of all capitals of the country, represented by 43,786,740 inhabitants.<sup>14</sup> It is worth noting that the focus of the study is the prescription and dispensing of BDZ's in the capitals of Brazil. In this regard, maps were created through the Quantum Geographic Information System (QGIS) 3.18.2 software, representing in the maps the quantity of dispensations in the states of the federation, as well as in their capitals.

As inclusion criteria, the capitals in the first quarter of 2020 and first quarter of 2021, the prescribing councils: Regional Council of Medicine (CRM), Regional Council of Dentistry (CRO), and also physicians who had a Ministry of Health Registration (RMS) were selected in SNGPC. The BDZ's selected were: Diazepam;

Alprazolam; Clonazepam; Estazolam; Flurazepam; Nitrazepam; Lorazepam; Midazolam, and Oxazepam.

As exclusion criteria, the drugs registered in the SNGPC from the fourth month of 2020 and 2021 were discarded, in order to make a comparison only of the first quarters of 2020 and 2021, the veterinary medicine prescribing councils, Regional Council of Veterinary Medicine (CRMV).

Descriptive statistics and association tests were used for data analysis, with the statistical program Software Statistical Package for the Social Sciences (SPSS), version 13.0, along with Microsoft Excel for data collection from SNGPC and plotted in spreadsheets for averages, and subsequent creation of graphs and tables, and the variables cited were calculated through SPSS, obtaining their absolute and relative frequencies and calculated the adjusted residuals, considering  $\geq 1.96$ . The adjusted residual has a normal distribution with zero mean and standard deviation equal to 1.

Thus, if the adjusted residual is greater than 1.96, in absolute value, one can say that there is evidence of a significant association between the two categories. The higher the adjusted residual, the greater the association between the categories. In the bivariate analysis, the prevalence ratio (PR) was calculated, with 95% confidence intervals and  $p\text{-value} \leq 0.05$ , using Pearson's Chi-square Test.

After collecting the data, in Microsoft Excel, to form the database, being schematized by placing each active ingredient selected and below the months of each year, by capital. Then, the averages for the first quarter of 2020 and the first quarter of 2021 were calculated, as well as the sum of each quarter.

Then, the averages for each capital city were separated and grouped by macro-region (Northeast, North, Midwest, Southeast, and South), and the averages per macro-region were calculated for each quarter analyzed. Furthermore, the calculation of the prevalence (Pr) of BDZ dispensation was done by dividing the number of dispensations of BDZ's by the population per region, after which the resulting value of this division was multiplied by 100 thousand, to give the Pr per 100 thousand inhabitants.

The present study was carried out exclusively with secondary data, of public access, without identifying the subjects, obeying the ethical principles of resolution 510/2016 of the National Health Council, which justifies the absence of the opinion of the Research Ethics Committee.<sup>15</sup>

## RESULTS

After descriptive analysis of the data, a concentration in the distribution of BDZ's was observed for the drugs Clonazepam and Alprazolam compared to the others. Regarding the averages per region, there was a higher frequency for the Southeast, South, Midwest, and Northeast regions. When comparing the adopted time frame, a similarity in the distribution of the above-mentioned drugs was observed. For better organization and systematization of the information, the data were represented in graphic format, as shown in Figure 1.

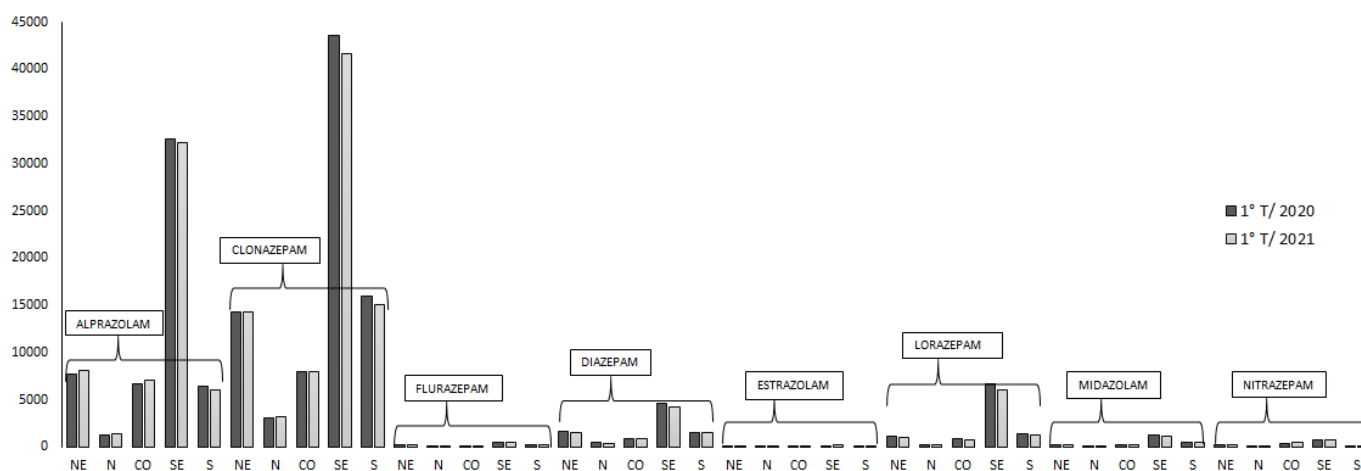
In Table 1, the Southeast region had a higher prevalence of dispensing BDZ's in its capitals compared to the capitals of other Brazilian regions, both in the first quarter of 2020 (n = 7098.74) and in the first quarter of 2021 (n = 6849.77), followed by the South regions (n = 5939.6 in the first quarter of 2020 and n = 5616.16 in the first quarter of 2021) and Northeast (n = 5446.2 in the first quarter of 2020 and n = 5521.76 in the first quarter of 2021). The North region showed the lowest dispensing prevalence, being n = 1826.96 in the first quarter of 2020 and n = 1854.3 in the first quarter of 2021.

The data showed a reduction in the prevalence of BDZ dispensing in the South and Southeast regions in the first quarter of 2021 when compared to the first quarter of the previous year, with an increase in the capitals of the other regions of the country.

Still on Table 1, Clonazepam represents higher prevalence in all regions (n = 2772.18 and n = 2712.02, first quarter of 2020 and 2021, respectively), with the South region in first place, with n = 3652.45

in the first quarter of 2020 and n = 3450, 49 in the first quarter of 2021, followed by the Southeast (n = 3436.2 and n = 3286.55, first quarter of 2020 and 2021, respectively) and Northeast (n = 3063.34 in the first quarter of 2020 and n = 3074.75 in the first quarter of 2021). Next, we have Alprazolam with the highest dispensing prevalence (n = 1743.35 and n = 1771.91, first quarter of 2020 and 2021, respectively) and Estazolam with the lowest (n = 1.1 and n = 12.52, first quarter of 2020 and 2021, respectively).

Regarding the frequency of dispensing BDZ's by prescribing boards (Table 2), the CRM holds a large part of the prescriptions, concentrated in the capitals of the Southeast region (p<0.001), being n = 1079914+ and n = 1056963, first quarter of 2020 and 2021, respectively. The Northeast region comes next with n = 657773 in the first quarter of 2020 and n = 676845 in the first quarter of 2021 (p<0.001). CRO, on the other hand, presents as the second place in prescriptions according to dispensing frequency data, with majority recorded in the Northeast region,



**Figure 1** - Distribution of benzodiazepines in the 1st quarter of 2020 and 2021, by averages, in the regions of Brazil

Key: NE = North East; N = North ; CO = Midwest; SE = Southeast; S = South; T = quarter.

Source: survey data, 2021.

**Table 1** - Prevalence of benzodiazepines dispensed by active ingredient and by region (data from capital cities)

PA	Northeast		North		Midwest		Southeast		South		Prevalence by PA	
	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21	1 <sup>st</sup> Q20	1 <sup>st</sup> Q21
<b>Diazepam</b>	352,57	323,12	163,94	110,41	177,37	182,62	360,09	333,34	342,65	335,88	304,35	279,49
<b>Alprazolam</b>	1651,7	1749,2	445,45	489,47	1308,3	1383,6	2573,2	2547,2	1454,9	1377,7	1743,3	1771,91
<b>Clonazepam</b>	3063,3	3074,7	1103,4	1146,4	1565,3	1572,0	3436,2	3286,5	3652,4	3450,4	2772,1	2712,02
<b>Estazolam</b>	1	19,72	0,25	1,34	0,61	10,96	1,79	12,78	0,51	7,83	1,1	12,52
<b>Flurazepam</b>	48,56	42,59	7,83	7,75	22	21,6	41,68	37,14	44,55	41,97	36,6	32,77
<b>Nitrazepam</b>	36,95	36,95	16,82	15,53	67,09	92,29	60,56	63,16	23,87	20,71	45,47	49,43
<b>Lorazepam</b>	239,67	222,14	66,22	61,82	163,83	154,87	528,51	478,76	319,46	284,99	313,21	285,92
<b>Midazolam</b>	52,4	53,22	23,06	21,52	37,36	34,14	96,67	90,77	101,2	96,56	66,12	63,23
<b>PR</b>	5446,2	5521,7	1826,9	1854,3	3342	3452,1	7098,7	6849,7	5939,6	5616,1		

PA = Active ingredient; 1<sup>st</sup>Q20 = First quarter of year 2020; 1<sup>st</sup>Q21 = First quarter of year 2021; PR = Prevalence by Region.

Source: survey data, 2021.

**Table 2** - Frequency of benzodiazepine dispensing in the regions (data from capital cities) according to the prescribing council

Region		Prescribed Adviser			Total	P
		CRM	CRO	RMS		
Northeast	1°T20	657773	3995+	1243	663011	<0,001
	1°T21	676845	3336	2131+		
North	1°T20	108017+	567	547	109131	0,01
	1°T21	111099	608	661+		
Midwest	1°T20	204382+	665	232	205279	<0,001
	1°T21	215129	976+	408+		
Southeast	1°T20	1079914+	3779	863	1084556	<0,001
	1°T21	1056963	3675	1690+		
South	1°T20	234359+	954	714	236027	<0,001
	1°T21	229125	1159+	712		
<b>Total</b>		4573606	19714	9201	4602521	

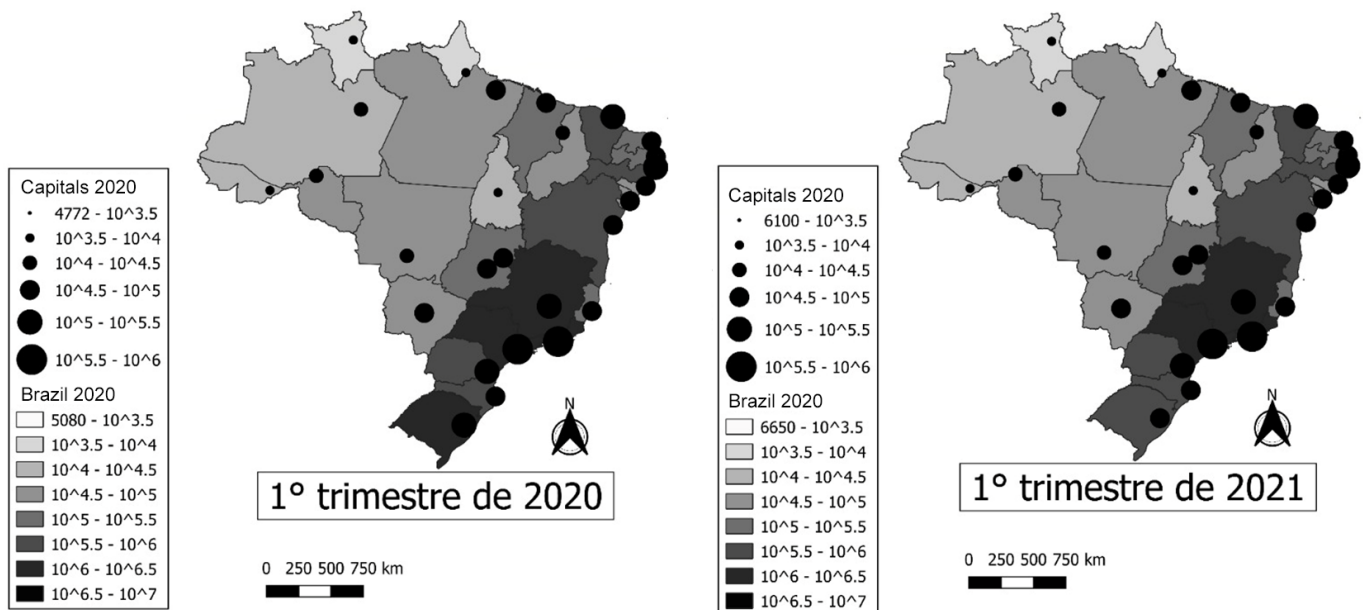
P - Chi-square test; + Adjusted residuals  $\geq 1.96$ ; CRM = Regional Council of Medicine; CRO = Regional Council of Dentistry; RMS = Ministry of Health Registry; Q120 = First quarter of year 2020; Q121 = First quarter of year 2021. Source: survey data, 2021.

with  $n = 3995+$  and  $n = 3336$  ( $p < 0.001$ ), first quarter of 2020 and 2021, respectively.

RMS has lower frequency of prescribing BDZ's according to the data, with the Northeast region having majority of these data in both first quarter of 2020 ( $n = 1243$ ) and 2021 ( $n = 2131+$ ), being  $p < 0.001$ , followed by the Southeast region, with  $n = 863$  and  $n = 1690+$  ( $p < 0.001$ ), first quarter of 2020 and 2021, respectively. The remaining data on the frequency of dispensing BDZ's from capital cities by regions are available in Table 2.

The use of BDZ's by Brazil, is concentrated in the coastal states, as observed in Figure 2. Moreover, taking into account the capital cities, the largest uses are concentrated in the capital cities of São Paulo, Rio de Janeiro, Minas Gerais, Rio Grande do Sul, and Pernambuco, considering the first quarter of 2020 and the first quarter of 2021. As we observe the internalization of the national territory, there is also a decrease in the use of BDZ's.

In the comparison between the two quarters, there is a greater concentration in the southeast region of the country, with the



**Figure 2** - BDZ's use by states and capitals in Brazil in the 1st quarter of 2020 and 1st quarter 2021

Key: t = quarter; CAP = Capitals; BR = Brazil.

Source: survey data, 2021.

highest use in the first quarter of 2020 by the capitals (n = 147731 to 491573), compared to the first quarter of 2021 (n = 151549 to 465914). Regarding the states of the Federation, it is also concentrated in the Southeast, however, unlike the capital cities, the states in the Southeast saw an increase from the first quarter of 2020 (n = 1054919 to 1857007) to the first quarter of 2021 (n = 721500 to 1991400) (Figure 2). Thus, it can be seen that in some states there was an increase in BDZ consumption, while in their capitals there was a decline.

In Table 3, that there was a significant association between the averages by region for Q1 2020 and Q2021, with BDZ's (p<0.001). Highlighting, by the adjusted residual, the cells that showed relevance to the p-value in question.

With regard to alprazolam, the largest uses were in the southeast, but a greater use was observed from 2020 to 2021 in the mid-west. With Clonazepam, the same trend as Alprazolam is observed. Something to note is Stazolam, which showed a large increase from the first quarter of 2020 to the first quarter of 2021 in all regions.

## DISCUSSION

Alprazolam and Clonazepam are the most prescribed and dispensed BDZ's in Brazil and worldwide, used for the treatment of anxiety disorders and panic disorders. Its clinical use generates disagreements, for being considered highly addictive, due to its pharmacodynamic properties, which consists of a strong bond with its receptors, however, it is verified that some primary care physicians continue to prescribe them for longer periods, evidencing the culture of medicalization.<sup>16</sup>

With the pandemic of COVID-19, it is likely that the level of anxiety in society has risen, due to social isolation. In a study of 1000 Brazilians, an increase in anxiety and bad eating habits was observed in 84% of the respondents during this pandemic period.<sup>17</sup>

The overuse of BDZ's can lead to several Adverse Drug Reactions (ADR's), such as bradycardia, which occurs when there is an overdose. The use of these drugs in seniors is a cause for concern, since their pharmacokinetics and pharmacodynamics are weaker, and they may trigger ADRs more easily. Thus, it is a fundamental role of primary care in an interdisciplinary approach to provide medical orientation in this regard, preventing reactions.<sup>18</sup>

The increased consumption of BDZ's in capitals with higher population density is due to the increasing medicalization of modern society, also reflected in the training of prescribing professionals. A process by which the use of drugs for the treatment of non-medical difficulties or problems is exacerbated, and these become defined and treated as medical problems, both in terms of diseases and disorders.<sup>19,20,21</sup>

The increasing use of Clonazepam and Alprazolam has become a matter of discussion, and may be associated with the over-diagnosis that has led to pharmacological treatment for conditions that do not fall under clinical syndromes, becoming a concern, especially with the effects of prolonged use and the potential for abuse.<sup>22,23</sup>

BDZ's are among the most consumed drugs in Brazil and worldwide, bringing effective responses to treatments for sleep and anxiety disorders, for example. However, it is necessary to be cautious regarding their use, because they can cause serious health risks when used erroneously, through the irrational use of medicines and self-medication, for example, generating in the user dependence and/or tolerance, as well as several other reactions, such as respiratory failure, this being a more serious reaction to the use of BDZ's.<sup>24</sup>

In a study by the prevalence and routes of BDZ use in Brazil, the results show that the highest consumption of the drug occurred in the South and Midwest regions, showing different results from the present study, raising the hypothesis that the pandemic context has changed this scenario. Moreover, it is also

**Table 3-** Average 1st quarter 2020 and 2021 regions by active ingredient (PA)

PA	Average per Region										P
	CO1 <sup>st</sup> Q20	CO1 <sup>st</sup> Q21	ND1 <sup>st</sup> Q20	ND1 <sup>st</sup> Q21	N1 <sup>st</sup> Q20	N1 <sup>st</sup> Q21	SD1 <sup>st</sup> Q20	SD1 <sup>st</sup> Q21	S1 <sup>st</sup> Q20	S1 <sup>st</sup> Q21	
<b>Alprazolam</b>	6668+	7051+	7709	8165	1254	1378	32622+	32292+	6378	6040	<0,001
<b>Clonazepam</b>	7978	8011	14298+	14351+	3106+	3227+	43561	41664	16013+	15127+	
<b>Diazepam</b>	904	931	1646+	1508+	461+	311+	4565	4226	1502+	1473+	
<b>Estazolam</b>	3	56+	5	92+	1	4	23	162+	2	34	
<b>Flurazepam</b>	112	110	227+	199+	22	22	528	471	195+	184+	
<b>Lorazepam</b>	835	789	1119	1037	186	174	6700+	6069+	1401	1249	
<b>Midazolam</b>	190	174	245	248	65	60	1226	1151	444+	423+	
<b>Nitrazepam</b>	342+	470+	172	172	47	44	770	801	105	91	

P - Chi-square test; + Adjusted residuals  $\geq 1.96$ ; CO1<sup>st</sup>Q20 = Center-West 1st quarter 2020; CO1<sup>st</sup>Q21 = Center-West 1st quarter 2021; ND1<sup>st</sup>Q20 = Northeast 1st quarter 2020; ND1<sup>st</sup>Q21 = Northeast 1st quarter 2021; N1<sup>st</sup>Q20 = North 1st quarter 2020; N1<sup>st</sup>Q21 = North 1st quarter 2021; SD1<sup>st</sup>Q20 = Southeast 1st quarter 2020; SD1<sup>st</sup>Q21 = Southeast 1st quarter 2021; S1<sup>st</sup>Q20 = South 1st quarter 2020; S1<sup>st</sup>Q21 = South 1st quarter 2021; PA = Active Principle.

Source: survey data, 2021.

noteworthy that the study shows a larger amount of patients aged 40 years or older, predominantly women.<sup>25</sup>

These numbers may reflect the so-called medicalization culture, which in times of pandemics is accentuated, with reports of depression and anxiety, triggered by the experience of a devastating disease that ravages the world.<sup>4</sup> The medicalization culture of suffering is something routine today, making people skip necessary experiences in their lives and camouflaging emotions that need to be felt and resigned.<sup>26</sup>

This fact is the result of a society that is more and more immediatist, with no time and/or availability to experience suffering, seeing in medication, such as BDZ's, an alternative to not stop productivity.<sup>21</sup> However, it is also worth mentioning that, yes, there are people with a real need to use anxiolytics and the like, and this is a possible result, or not, of an immediatist society.

In a study on the impact of the pandemic of COVID-19 in pharmaceutical care in a UBS in Distrito Federal, it is evident that, despite the intense changes that the pandemic caused in society, there was no significant change in the consumption of psychotropic drugs, and the study used the first quarter of 2020, at the very beginning of the pandemic in Brazil.<sup>27</sup>

It is notorious that the pandemic of COVID-19 brought several impacts on Brazilian society, among them the psychological impact. In a study it is portrayed that 44% of the total respondents reported negative psychological impact on their lives, referring to social isolation (necessary to contain the progress of COVID-19), as well as increased levels of anxiety and depression, especially in brown and black people.<sup>28</sup>

## CONCLUSION

The present study shows that the dispensation of BDZs in Brazil is concentrated in the Southeast and South regions, which may be due to the population numbers in these regions. Moreover, it was found that there was no significant increase to say that the prescription and dispensation of BDZ's in Brazil was higher in the first quarter of 2021 compared with the first quarter of 2020. Thus, new comparative studies of the two years are needed to further analyze how the prescriptions and dispensations occurred during the pandemic of COVID-19.

Moreover, it is important to emphasize the culture of medicalization present in Brazil, and it is important to carry out new studies correlating the medicalization, especially of BDZ's, in this period, still in force, of the SARS-Cov-2 pandemic, analyzing its impact on the general population.

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