

## Original Research Article

# Profile of use of benzodiazepines and mental distress in patients cared in a public health unit

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**Received:** 28 December 2020

**Revised:** 10 February 2021

**Accepted:** 11 February 2021

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## ABSTRACT

**Background:** Benzodiazepines are a class of drugs especially used in the treatment of insomnia and anxiety. The short-term use is considered safe, but the long-term treatment is associated with drug dependence and loss of efficacy due to the development of tolerance. Given the lack of mental health management services in primary healthcare, benzodiazepines have been prescribed to be used for undetermined periods of time, resulting in distress for patients and representing an important issue in the public health context.

**Methods:** This is a transversal study with a descriptive quantitative approach, which aimed to characterize the profile of patients served by the Basic Health Unit Pharmacy Taboão in São Bernardo do Campo, São Paulo, Brazil, and correlate the different studied variables with the mental distress of these patients. A questionnaire including demographic, socioeconomic and physical and mental health variables was applied to the pharmacy customers.

**Results:** It was revealed that among female patients ( $p=0.042$ ,  $\beta=0.61$ , 95% CI: 0.38-0.98), suicidal ideation ( $p<0.001$ ,  $\beta=1.53$ , 95% CI: 1.22-1.92), perceptions regarding their own health condition ( $p<0.001$ ,  $\beta=0.48$ , 95% CI: 0.34-0.67), occurrences of polypharmacy ( $p=0.137$ ,  $\beta=1.19$ , 95% CI: 0.94-1.50), knowledge on the risks associated with the use of benzodiazepines ( $p=0.176$ ,  $\beta=0.85$ , 95% CI: 0.067-1.07) and engagement in physical activities ( $p=0.685$ ,  $\beta=0.93$ , 95% CI: 0.68-1.27) are significantly associated with mental distress.

**Conclusions:** Therefore, after these findings were obtained, errors that contribute to the occurrence of this scenario were identified and possible strategies to deal with the issue were suggested.

**Keywords:** Benzodiazepines, Misuse, Public healthcare, Mental distress, Brazil

## INTRODUCTION

Globally, a total of 10% of the population suffers from some sort of mental health disorder. Taking into account that the world's population has surpassed 7.5 billion, mental health care has become a great challenge. The exhausting fast pace of life associated with daily pressures have paved the way to the use of psychotropic medications

because they rapidly and efficiently relieve mental distress.<sup>1</sup>

The WHO and the International Narcotics Control Board (INCB) have warned developing countries about the risks attached to the indiscriminate use of psychotropic drugs and its insufficient control in these countries. In Brazil, this alert was reinforced by studies that reveal the grave reality

related to the use of benzodiazepines (BZDs).<sup>1-3</sup> According to Razzouk et al, BZDs topped the list of the five most used psychotropics in Brazil.<sup>4</sup> In the year 2010 over 10 million boxes of clonazepam were sold in the country, and a total of R\$ 92.4 million (approximately US\$ 23.1 million) were spent on it. In 2013, clonazepam was the ninth most sold medication in Brazil.

BZDs have been available since 1960. They are highly effective psychoactive drugs with anxiolytic, hypnotic, muscle-relaxant, and anticonvulsant properties, which are commonly used to treat the symptoms of anxiety and insomnia.<sup>5,6</sup> These medications enhance the effects of gamma-aminobutyric acid (GABA), the main inhibitory neurotransmitter in the central nervous system via a modulatory site on the GABAA receptor complex. GABA-A receptors are a family of ligand-gated chloride channel inhibitory receptors and one of the main transmembrane neurotransmitter receptors in the brain.<sup>7</sup>

The main possible adverse effects (AE) caused by the use of BZDs include acute effects on psychomotor performance, both in acute and chronic administrations, thus impairing the capacity to carry out even the simplest tasks.<sup>8</sup> According to some studies published in 2015, there is also positive association between the use of BZDs and the risk for dementia (OR=1.24-2.30). Such effects increase as the treatment is prolonged and with the use of long half-life BZDs.<sup>9</sup> Regarding the cognitive function, memory deficit is a common manifestation. The long-term use of BZDs is associated with the risk of drug dependence and loss of efficacy due to the development of tolerance.<sup>10,11</sup> Some BZDs, among them clonazepam and diazepam, are not recommended to older patients, regardless of the diagnosis or the patient's clinical condition, due to the high risk of adverse effects and the existence of other safer marketed drugs for treatment in Brazil.<sup>3</sup>

Diazepam and clonazepam, long-acting medications most often prescribed, are benzodiazepines listed in the Municipal essential medicines lists (REMUME) in the municipality where this study was performed, São Bernardo do Campo. They can be found at basic health units (UBS), which are a reference in mental health, and prescriptions can be dispensed at pharmacies in the presence of a pharmacist according to ANVISA.<sup>12</sup>

The information system used in the municipality for the management and control of the dispensation of these drugs is the *hygia web*. Since, the correct diagnosis of mental disorders is not efficiently established by non-specialists and the desired effects of BZDs, such as anxiety relief and sedation, are easily attainable, the proper medical indication for the use of these drugs is seriously compromised.

The aim of this study was to analyze the profile of use of BZDs among patients served by the Basic Health Unit Pharmacy Taboão in São Bernardo do Campo, São Paulo,

Brazil. This study also aimed to correlate the different variables with these patients' mental distress.

## METHODS

This is a descriptive transversal study carried out in the municipality of São Bernardo do Campo, São Paulo, Brazil, more specifically in a basic health Unit (UBS) in Taboão. It is mandatory that this population be registered in the *hygia web* system, and during the period this study was conducted, there were a few more than 42 thousand active registrations. This study was conducted during the period from July of 2017 to September of 2018.

The project was submitted and approved by the Research Ethics Committee (Approval number: 2.491.607). All participants individually received proper clarification of the study, and they were only interviewed after they signed the free and informed consent form.

Data show that almost 80% of the Brazilian population uses the Sistema Único de Saúde (SUS, Brazilian publicly funded healthcare system) (IBGE, 2013). Since 2014, the country has been living a period of economic recession. As a result, there has been an increase in the search for public health services due to the high unemployment rate and the consequent loss of health insurance plans.

The UBS pharmacy Taboão is a reference in mental health in the area which fills prescriptions from SUS or any other private healthcare services. Two hundred and fifty prescriptions are dispensed daily, and an average of 35% of this total is for psychotropics. Among them, an average of 20% of prescriptions include BZDs like clonazepam 2 mg, diazepam 10 mg and clonazepam 2.5 mg/mL. São Bernardo do Campo network supplies the population with 36 types of psychotropic drugs from different therapeutic classes.

The sample was composed of 150 patients.

### *Inclusion criteria*

Users of clonazepam 2 mg, clonazepam 2 mg/mL or diazepam 10 mg served by the basic health unit pharmacy of Taboão. The medications were dispensed to each patient on at least one occasion while the study was conducted between July 2017 and September 2018.

### *Exclusion criteria*

Users who did not use benzodiazepines drugs. Users who refused to participate of the study. All who did not meet the inclusion criteria.

The sample was calculated according to the population of the region by GPower 3.1 software, following the formula:

$$n = \frac{N \cdot Z^2 \cdot p(1 - p)}{Z^2 \cdot p \cdot (1 - p) + e^2 \cdot (N - 1)}$$

Where:  $n$ - the calculated sample,  $N$ - the population,  $Z$ - the standard normal variable associated with the level of confidence,  $p$ - the true probability of the event,  $e$ - the sampling error.

### Questionnaire

A standard questionnaire was designed and applied to patients who indicated their consent by signing the Free and Informed Consent Form (FICF). The questionnaires were administered right after the medications were dispensed in a room adjacent to the pharmacy. They could only be answered in this established room by the patients themselves, and not remotely or by a third party who went to the pharmacy to pick up the medication on behalf of the patient.

The questionnaire comprised questions on demographic, socioeconomic, perceived health, chronic diseases and mental health-related variables.

To study demographic variables, the following information was collected: gender (male/female), age (years), self-referred race/color and marital status (married, single, widowed, separated). The analyzed socioeconomic variables were educational background (illiterate; elementary, middle and high school levels; incomplete higher education; complete higher education) and monthly income (up to 2 minimum wages, 2-4 minimum wages, 4-10 minimum wages).

Regarding perceived health, patients were asked if they considered themselves in good health (yes/no), if they did physical activities (yes/no), if they smoked (yes/no), if they consumed alcohol (yes, no, socially), if they were hospitalized in the previous year (yes/no), if they had chronic diseases (yes/no) and if they were on daily use of chronic disease medications (yes/no). To verify and confirm chronic disease occurrences, as well as the use of drugs for such cases, the history of drug dispensations for patients in the previous 12 months was assessed. The use of 5 or more drugs was pointed out as the occurrence of polypharmacy in the questionnaire (yes/no questions).

The questionnaire also included questions on the use of the medication, such as how long the patients had been taking the benzodiazepine (up to 8 weeks; from 8 to 12 weeks; from 12 weeks to 1 year; from 1 to 5 years; from 5 to 10 years; between 10 and 20 years; over 20 years), which medication the patients were on (clonazepam or diazepam), if they felt like stopping taking the drugs (yes/no) and if physicians used to warn them about the potential risks associated with the use of the medication (yes/no).

To measure the level of psychic morbidity, the self-report questionnaire 20 (SRQ-20) was applied. Created by the WHO to study psychiatric disorders in developing countries, the test consists of 20 yes or no questions with a score ranging from 1 to 20. A score  $\geq 7$  (seven or more yes

answers) indicates mental distress. In Brazil, this test was validated, and the same parameters have been used since then, despite the advances in psychiatric diagnoses.<sup>13,14</sup>

Finally, patients were asked about their diagnosis or the reason why benzodiazepine was prescribed.

A pilot study of the questionnaire was conducted one month prior to the beginning of the current study so that the respondents level of understanding of the questions could be evaluated. Throughout this period, some language modifications were made for better understanding.

### Statistical analysis

Qualitative variables were described by absolute and relative frequencies. The chi-square test was used to study the association between sociodemographic and clinical variables according to the SRQ results. The association of diagnoses for mental distress (no or yes, scores of 0 or 1 respectively) was made according to the poisson multiple regression model, with robust variance and stepwise forward strategy for entry into the multivariate model, in which gross and adjusted prevalence ratios were estimated.<sup>15</sup>

A 95% confidence interval (CI) was adopted for all the analyses. Stata 11.0 software was used for statistical analysis.

## RESULTS

A total of 150 patients were included in this study: 124 (82.67%) females, 94 (62.66%) over 50 years of age. They were mostly white (80.67%), the monthly income was of up to two minimum wages in 59.33% of the cases, and 56.01% of the respondents did not reach high school. In the sample, there was a prevalence of non-alcohol consumers (86%), non-smokers (78.67%), and married individuals (53.67%). It could also be observed that 69.33% of the respondents had been on benzodiazepines for over 5 years, clonazepam in 90% of the cases.

Among the 150 interviewed patients, 66% revealed they wanted to stop using the medication, and only 38.67% reported not being informed about the risks associated with the long-term use of the medication. Regarding perceived health, 54.67% of the participants did not consider themselves in good health, 69.33% did not engage into physical activities, and 52% had chronic disease and used medications for such conditions, with polypharmacy occurrence in 40% of the cases.

Mental distress, according to SRQ results, was present in 62% of the patients, and suicidal ideation was mentioned by 30% of the respondents. Diagnoses of depression associated with insomnia or insomnia alone were reported by 54% of the patients. Table 1 shows the characteristics of the sample, with all the studied variables and the

obtained responses expressed in numbers(n) and percentage (%), according to the questionnaire criteria.

Upon associating the studied variables with mental distress via chi-square test, positive associations were found. Table 2 shows that mental distress had positive association with gender ( $p=0.007$ ), polypharmacy occurrence ( $p=0.046$ ), suicidal ideation ( $p<0.001$ ), guidance regarding the risks involved in using the medication ( $p=0.037$ ), patients own health perception ( $p<0.001$ ) and engagement in physical

activities ( $p=0.067$ ). The other variables did not have positive association with the SRQ results (Table 2).

Variables associated with mental distress were tested in a multiple regression model (poisson regression). In Table 3, the variables associated with mental distress are shown. It can be observed that gender, suicidal ideation and perception on their own health associate with mental distress.

**Table 1: Sample characteristics.**

Variables	N	%
<b>Gender</b>		
Male	26	17.33
Female	124	82.67
<b>Monthly income</b>		
Up to 2 minimum wages	89	59.33
Between 2 and 4 minimum wages	49	32.67
Between 4 and 10 minimum wages	12	8.00
<b>Education</b>		
Illiterate	1	0.67
Elementary school	43	28.67
Middle school	40	26.67
High school	46	30.67
Complete higher education	17	11.33
Incomplete higher education	3	2.00
<b>Marital status</b>		
Married	79	53.67
Single	27	18.00
Widowed	23	15.33
Divorced	21	14.00
<b>Smokers</b>		
No	118	78.67
Yes	32	21.33
<b>Alcohol users</b>		
No	129	86.00
Yes	7	4.67
Socially	14	9.33
<b>Length of BZD use</b>		
Up to 8 weeks	2	1.33
8 to 12 weeks	5	3.33
12 weeks to 1 year	12	8.00
1 to 5 years	27	18.00
5 to 10 years	31	20.67
Over 10 years	38	25.33
Over 20 years	35	23.33
<b>Do you feel like stopping?</b>		
No	51	34.00
Yes	99	66.00
<b>Were you warned about the risks associated with the use?</b>		
No	58	38.67
Yes	92	61.33
<b>Are you in good health condition?</b>		
No	82	54.67
Yes	68	45.33

Continued.

Variables	N	%
<b>Do you do physical activities?</b>		
No	104	69.33
Yes	46	30.67
<b>Were you hospitalized in the last year?</b>		
No	116	77.33
Yes	34	22.67
<b>SRQ (mental distress)</b>		
No	57	38.00
Yes	93	62.00
<b>Age (Years)</b>		
Up to 40	15	10.00
41 - 50	35	23.33
51 - 60	44	29.33
61 - 70	36	24.00
71 - 80	17	11.33
81 - 90	3	2.00
<b>Race</b>		
White	121	80.67
Black	1	0.67
Multiracial	28	18.67
<b>Chronic diseases</b>		
No	72	48.00
Yes	78	52.00
<b>Medication for chronic diseases</b>		
No	72	48.00
Yes	78	52.00
<b>Polypharmacy occurrences</b>		
No	90	60.00
Yes	60	40.00
<b>BZD in use</b>		
Diazepam	15	10.00
Clonazepam	135	90.00
<b>Referred diagnoses</b>		
Depression associated with insomnia or not	48	32.00
Insomnia	33	22.00
Anxiety associated with insomnia	9	6.00
Panic associated with depression	19	12.67
Onset of treatment after mourning, trauma, stress or disease	20	13.33
Treatment for alcohol and/or drugs	5	3.33
Neurological/psychiatric diseases	16	10.67
<b>Suicidal ideation</b>		
No	105	70.00
Yes	45	30.00

Responses of 20 (SRQ-20) questionnaire.

**Table 2: Association between the studied variables and mental distress in patients calculated by chi-square test.**

Variables	SRQ for mental distress		P value
	No (%)	Yes (%)	
<b>Gender</b>			
Female	41 (33.06)	83 (66.94)	0.007*
Male	16 (61.54)	10 (38.46)	
<b>Age (Years)</b>			
Up to 40	6 (40.00)	9 (60.00)	0.821

Continued.

Continued.

Variables	SRQ for mental distress		P value
	No (%)	Yes (%)	
41 - 50	12 (34.29)	23 (65.71)	
51 - 60	14 (31.82)	30 (68.18)	
61 - 70	16 (44.44)	20 (55.56)	
71 - 80	8 (47.06)	9 (52.94)	
81 - 90	1 (33.33)	2 (66.67)	
<b>Race</b>			
White	44 (36.36)	77 (63.64)	0.451
Black	0 (0.00)	1 (100)	
Multiracial	13 (46.43)	15 (53.57)	
<b>Chronic diseases</b>			
No	28 (38.89)	44 (61.11)	0.829
Yes	29 (37.18)	49 (62.82)	
<b>Medication for chronic disease</b>			
No	29 (40.28)	43 (59.72)	0.581
Yes	28 (35.90)	50 (64.10)	
<b>Polypharmacy occurrences</b>			
No	40 (44.44)	50 (55.56)	0.046*
Yes	17 (28.33)	43 (71.67)	
<b>BZD in use</b>			
Diazepam	4 (26.67)	11 (73.33)	0.340
Clonazepam	53 (39.26)	82 (60.74)	
<b>Referred diagnosis</b>			
Depression associated with insomnia or not	11 (22.92)	37 (77.08)	0.067*
Insomnia	17 (51.52)	16 (48.48)	
Anxiety associated with insomnia	4 (44.44)	5 (55.56)	
Panic associated with depression	10 (52.63)	9 (47.37)	
Onset of treatment after mourning, trauma, stress or disease	5 (25.00)	15 (75.00)	
Treatment for alcohol and/or drugs	3 (60.00)	2 (40.00)	
Neurological/psychiatric diseases	7 (43.57)	9 (56.25)	
<b>Suicidal ideation</b>			
No	50 (47.62)	55 (52.38)	0.001*
Yes	7 (15.56)	38 (84.44)	
<b>Monthly income</b>			
Up to 2 minimum wages	28 (31.46)	61 (68.54)	0.123
Between 2 and 4 minimum wages	24 (48.98)	25 (51.02)	
Between 4 and 10 minimum wages	5 (41.67)	7 (58.33)	
<b>Education</b>			
Illiterate	0	1 (100)	0.678
Elementary school	18 (41,86)	25 (58,14)	
Middle school	14 (35,00)	26 (65,00)	
High school	19 (41,30)	27 (58,70)	
Complete higher education	6 (35,29)	11 (64,71)	
Incomplete higher education	0	3 (100)	
<b>Marital status</b>			
Married	34 (43.04)	45 (56.96)	0.603
Single	9 (33.33)	18 (66.67)	
Widowed	7 (30.43)	16 (69.57)	
Divorced	7 (33.00)	14 (66.67)	
<b>Smoker</b>			
No	41 (34.75)	77 (65.25)	0.115
Yes	16 (50.00)	16 (50.00)	
<b>Alcohol user</b>			
No	48 (37.21)	81 (62.79)	0.885

Continued.



Variables	SRQ for mental distress		P value
	No (%)	Yes (%)	
Yes	3 (42.86)	4 (57.14)	
Socially			
<b>Length of BZD use</b>			
Up to 8 weeks	0	2 (100)	0.598
8 to 12 weeks	2 (40.00)	3 (60.00)	
12 weeks to 1 year	4 (33.33)	8 (66.67)	
1 to 5 years	12 (44.44)	15 (55.56)	
5 to 10 years	15 (48.39)	16 (51.61)	
Over 10 years	14 (36.84)	24 (63.16)	
Over 20 years	10 (28.57)	25 (71.43)	
<b>Do you feel like stopping?</b>			
No	18 (35.29)	33 (64.71)	0.624
Yes	39 (39.39)	60 (60.61)	
<b>Were you warned about the risks associated with the use?</b>			
No	16 (27.59)	42 (72.41)	0.037*
Yes	41 (44.57)	51 (55.43)	
<b>Are you in good health condition?</b>			
No	15 (18.29)	67 (81.71)	0.001*
Yes	42 (61.76)	26 (38.24)	
<b>Do you do physical activities?</b>			
No	34 (32.69)	70 (67.31)	0.044*
Yes	23 (50.00)	23 (50.00)	
<b>Were you hospitalized in the last year?</b>			
No	45 (38.79)	71 (61.21)	0.712
Yes	12 (35.29)	22 (64.71)	

Chi-square test-\* p<0.05.

**Table 3: Multiple regression model with characterization variables and SRQ-20 (mental distress).**

Variables	SRQ (Mental distress)		
	$\beta$	95% CI	P value
<b>Gender</b>	0.61	0.38, 0.98	0.042*
<b>Polypharmacy</b>	1.19	0.94, 1.50	0.137
<b>Diagnosis</b>	0.99	0.93, 1.05	0.898
<b>Suicidal ideation</b>	1.53	1.22, 1.92	0.001*
<b>Were you warned about the risks?</b>	0.85	0.067, 1.07	0.176
<b>Are you in good health condition?</b>	0.48	0.34, 0.67	0.001*
<b>Do you do physical activities?</b>	0.93	0.68, 1.27	0.685

Chi-square test-\* p<0.05.

## DISCUSSION

Data obtained from the second household survey on psychotropic drug use in Brazil reveals that females are 2-3 times more likely to consume BZS than males. Yet, women are the most dependent users (ANVISA, 2011). In the current study, 82.67% of the patients were females and 66.94% were mentally distressed. The fact that women are known to be more concerned about their health, added to the considerable changes in their role in society (overload of tasks to be carried out both at home and at work) may have contributed to the amplification of mental health issue in this population.<sup>16</sup>

According to a systematic review on the chronic use of BZDs, long-term use of medication is defined as at least 6 months in a year.<sup>16</sup> In 2013, the Brazilian Medical Association established a parameter in which long-term treatments with BZDs were those that lasted over 12 weeks. Based on this parameter, 95.33% of the respondents were long-term users. Interestingly, the length of use is not associated with mental distress, which suggests that regardless of how long patients have been using the medication, they still undergo distress. Therefore, it is possible to infer that the medication in such cases is not being effective.

Shaltout et al reported that the rate of chronic BZD use increases by 3% for each year of life. In the current study,

it was not possible to perform this kind of analysis. However, this fact should cautiously be evaluated since many times elderly over 70 are not in good physical condition or do not feel safe to go to a UBS, so the medication is withdrawn by a third party in such cases. The use was more frequent among persons with 40-70 years old, and the age did not have positive association with mental distress.<sup>17</sup>

Part of the population studied suffer from chronic diseases (diabetes, hypertension and/or dyslipidemias) and reported that medication used for these conditions did not present significant association with mental distress. On the other hand, the association between occurrences of polypharmacy and mental distress was highlighted. Polypharmacy is a very recurrent issue culturally embedded in the Brazilian society; it was estimated that 9.4% in the general population and 18.1% in adults above 65 years old.<sup>18</sup> Females of advanced age who are in worse health condition and show symptoms of depression are predisposed to polypharmacy. In the study context, depression symptomatology was detected by the SRQ-20.<sup>19</sup> The main referred diagnoses were depression associated or not with insomnia (32%) and insomnia alone (22%). There is a tendency of positive correlation between diagnosis and mental distress. It is possible to infer that the insomnia issue is apparently solved at the beginning of the treatment; nevertheless, it is known that BZDs are ineffective for chronic insomnia treatment and can cause alterations in the sleep architecture when chronically used.<sup>20, 21</sup> In fact, the chronic use of BZDs as well as the use of stimulants for the central nervous system are referred to cause of insomnia. Therefore, it can be suggested that longer treatments for insomnia with BZDs could prolong the distress. Likewise, it was possible to observe many mental distress cases in patients who started the treatment for depression with BZDs in this study.

The association between suicide attempts and BZD is significant, especially among patients with undiagnosed mental disorders who are not properly treated.<sup>22</sup> After the decentralization of mental health services in São Bernardo do Campo, general practitioners took over the treatment of non-severely ill patients and of new patients who started the treatment at the UBSs throughout this process. These physicians receive guidance from a psychiatrist once a week only, and they become the major BZD prescribers in these units. In this study, it could be observed that 61.33% of the patients referred to having been warned by the physicians about the risks associated with the use of the medication. Interestingly, the number of prescriptions has been increasing despite the insecurity feeling due to an apparent lack of ability to deal with the medication. Moreover, the inability to discontinue the treatment and search for other alternative therapies can also be observed.

Parr et al analyzed the perception of doctors and BZD users regarding the continuous prescription of these medications. The researchers reported that continuous prescription was common and possibly related to the fact that practitioners

lack time or will to introduce other options to stimulate BZD withdrawal. Besides, it was acknowledged that long-term BZD users were already dependent, and an attempt of intervention would be useless once the patients did not show motivation for change.<sup>23</sup> Physicians also revealed that they take a stance of not questioning what is prescribed by other fellow professionals. In this scenario, what can be observed on a day-by-day basis is the institutionalization of the continuous prescription process, which demonstrates a potential health care negligence. Cotton et al conducted a different qualitative study on the patterns of improper use of BZDs among women.<sup>24</sup> Among the respondents, 54.67% did not consider themselves in good health, and from this rate, 81.71% are in mental distress. This suggests that this negative health self-perception is directly related to the individual's mental condition. Once the SRQ-20 assesses common mental disorders (CMD), in the current study the association between self-health perception and mental distress was highlighted.

Physical activity has increasingly been encouraged in public health due to the fact it is constantly associated with significant improvements in conditions like stress, obesity, diabetes and coronary diseases. Besides, it is also associated with endorphin release, the so-called "pleasure hormones" that generate well-being and increase physical and mental disposition. In this study, it could be observed that 69.33% of the respondents did not engage in physical activity, and within this rate, 67.31% are mentally distressed. The association between physical activity practice and mental health was highlighted here.

## CONCLUSION

The data of the present study demonstrated that, despite receiving adequate information from health professionals, regarding the risks of the continuous use of BZD, users of the public service of Taboão give preference to this treatment over others that cause less adverse effects. On the other hand, doctors give preference to BZDs at the prescription, even in the face of adverse information regarding long-term use. This conduct makes it difficult for the patient to wean in the future, and ends up institutionalizing the continuous prescription process. Some flaws can be found regarding the chronic use of BZDs by population of São Bernardo do Campo. Errors are made by patients who many times neglect healthcare. Prescriptions, use and dependence of BZD have been increasing exponentially and silently, posing a threat to the health of the population. We suggested that strategies and healthcare policies can be elaborated, thus reducing the number of unnecessary prescriptions.

## ACKNOWLEDGEMENTS

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*



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**Cite this article as:** Kawano LDO, Pereira EC, Veiga GLD, Alves BCA, Azzalis LA, Adami F, et al. Profile of use of benzodiazepines and mental distress in patients cared in a public health unit. *Int J Community Med Public Health* 2021;8:2090-8.