# Benzodiazepines misuse "to get high" in patients admitted for addiction treatment in Spain

M. TORRENS (1,2,3), F. Fonseca (1,2,3), M. Farré (2,3,4), K.E. McBride (5), I. Maremmani (6,7), M. Guareschi (7), R. C. Dart (5, 8)

- (1) Institut de Neuropsiquiatria i Addiccions, Hospital del mar, Barcelona, Spain
- (2) IMIM (Institut Hospital del Mar d'Investigacions Mèdiques), Barcelona, Spain
- (3) Universitat Autònoma de Barcelona, Barcelona, Spain
- (4) Hospital Universitari Germans Trias i Pujol-IGTP, Badalona, Spain
- (5) Denver Health Rocky Mountain Poison & Drug Center (RMPDC), Denver, USA
- (6) Department of Neurosciences, Santa Chiara University Hospital, Pisa, Italy
- (7) Associazione per l'Utilizzo delle Conoscenze Neuroscientifiche a fini Sociali (AU-CNS), Pietrasanta, Italy
- (8) University of Colorado-Denver School of Medicine, Aurora, US

#### Introduction

In Spain, the use of benzodiazepines (with or without prescription) has showed an upward trend from 2009 in the general population. In 2015, 18.7% of the population declared that they had taken tranquilizers at some time in their lives. The use of benzodiazepines over time can lead to an addiction disorder.

Furthermore, non-medical use of benzodiazepines in combination with prescription opioids has been implicated in a number of overdose deaths. The use of benzodiazepines in opioid use disorder has been related to self-medication (treat psychiatric symptoms) or to increase the effects of opioids.<sup>2</sup>

## Aims

We describe the patterns of benzodiazepines use in patients who enroll in treatment for prescription or other illegal substances dependence.

#### **Methods**

European Opioid Treatment Patient Survey (EUROPAD) Program data from Spain were analyzed for third quarter 2014 through first quarter 2018. Patients aged 18-65 years were included. Demographics and drugs used "to get high" in the 90 days prior to treatment intake were analyzed. Data were compared among patients endorsing the abuse of benzodiazepines and those who did not. For continuous data, T-test was utilized to determine if groups were different, and, for categorical data, chi-square tests were used.

#### Results

A total of 178 surveys were collected in Spain (68% males, 42±10 years). The main drug at admission was heroin (52%), followed by cocaine (25%), cannabis (11%), benzodiazepines (4%), prescription opioids (3%), and "other" drugs, mainly amphetamines (6%). Main characteristics of the sample are described in Table 1.

A total of 77 (43%) respondents in the sample reported abuse of benzodiazepines in the last 3 months, either as a primary or secondary substance of abuse.

When we compared patients using and not using benzodiazepines, we did not find differences in characteristics of patients. The only differences were found in the prevalence of heroine use (46.5% vs. 58.4%), higher in the BZD group, and the age at first treatment being younger the patients using benzodiazepines (33±11 vs. 29±11; p=0.017). Table 2.

Table 2. Main differences between patients reporting or not the use of benzodiazepines.

|  | No BZD<br>101 (57%) | BZD<br>77 (43%)  | р     |
|--|---------------------|------------------|-------|
| Male (%)                                 | 71 (70.3)           | 50 (64.9)        | 0.275 |
| Age (SD)                                 | 43 <u>+</u> 10      | 42 <u>+</u> 9    | 0.526 |
| Country birth (%)                        |                     |                  |       |
| Spain                                    | 68 (67.3)           | 49 (63.6)        |       |
| EU                                       | 8 (7.9)             | 10 (13)          |       |
| Europe (Non-EU)                          | 6 (5.9)             | 8 (10.4)         | 0.473 |
| America                                  | 4 (4)               | 3 (3.9)          |       |
| Asia                                     | 6 (5.9)             | 1 (1.3)          |       |
| North-Africa                             | 6 (5.9)             | 4 (5.2)          |       |
| Sub-Saharan Africa                       | 3 (3)               | 1 (1.3)          |       |
| Other                                    | 0                   | 1 (1.3)          |       |
| Main Drug (%)                            |                     |                  |       |
| Heroin                                   | 47 (46.5)           | 45 (58.4)        |       |
| Prescription Opioids                     | 5 (5)               | 1 (1.3)          | 0.025 |
| Cocaine                                  | 27 (26.7)           | 18 (23.4)        |       |
| Cannabis                                 | 16 (15.8)           | 4 (5.2)          |       |
| Benzodiazepines                          | 0                   | 4 (5.2)          |       |
| Other                                    | 6 (5.9)             | 5 (6.5)          |       |
| Opioid Use Disorder? (%)                 | 52 (51.4)           | 46 (59.7)        | 0.032 |
| Overdose (%)                             | 21 (20.8)           | 24 (30.6)        | 0.235 |
| Age first treatment (SD)                 | 34 <u>+</u> 11      | 29 <u>+</u> 11   | 0.017 |
| Number substances used last 90 days (SD) | 1.6 <u>+</u> 1.02   | 3.5 <u>+</u> 1.8 | 0.001 |

Table 1. Sample main characteristics.

| Sample characteristics                         | N= 178         |  |
|--|----------------|--|
| Male (%)                                       | 121 (68)       |  |
| Age (SD)                                       | 42 <u>+</u> 10 |  |
| Country of birth                               |                |  |
| Spain  | 117 (65.7)     |  |
| EU   | 18 (10.1)      |  |
| Europe (Non-EU)                                | 14 (7.9)       |  |
| America  | 7 (3.9)        |  |
| Asia   | 7 (3.9)        |  |
| North-Africa                                   | 10 (5.6)       |  |
| Sub-Saharan Africa                             | 4 (2.2)        |  |
| Other  | 1 (0.6)        |  |
| Age at first treatment (SD)                    | 32 <u>+</u> 11 |  |
| Main Drug (%)                                  |                |  |
| Heroin   | 92 (51.7)      |  |
| Prescription Opioids                           | 6 (3.4)        |  |
| Cocaine  | 45 (25.3)      |  |
| Cannabis                                       | 20 (11.2)      |  |
| Benzodiazepines                                | 4 (2.2)        |  |
| Other  | 11 (6.2)       |  |
| Route of administration (%)                    |                |  |
| Oral Swallowed                                 | 9 (5.1)        |  |
| Oral Chewed                                    | 1 (0.6)        |  |
| Sublingual                                     | 3 (1.7)        |  |
| Smoked   | 60 (33.7)      |  |
| Snorted  | 45 (25.3)      |  |
| Skin patch                                     | 2 (1.1)        |  |
| Injected                                       | 58 (32.6)      |  |
| Number of substances used in last 90 days (SD) | 2.4 ± 1.7      |  |
| Type of BZD use (%)                            |                |  |
| No BZD Use                                     | 101 (56.7)     |  |
| BZD main drug                                  | 4 (2.2)        |  |
| BZD comorbid                                   | 73 (41)        |  |
| Benzodiazepine Use                             | N = 77         |  |
| Type of BZD (%)*                               |                |  |
| Alprazolam                                     | 27 (35.1)      |  |
| Clonazepam                                     | 24 (31.2)      |  |
| Diazepam                                       | 17 (22.1)      |  |
| Clorazepate                                    | 5 (13)         |  |
| Lorazepam                                      | 2 (2.6)        |  |
| BZD (non-specified)                            | 19 (24)        |  |
| Zolpidem                                       | 1 (1.3)        |  |

BZD: Benzodiazepine; SD: Standard Deviation / \*Patients can report more than one benzodiazepine type

### **Conclusions**

Although not being the main substance of abuse at admission, the concomitant use of benzodiazepines is frequently reported by patients seeking treatment for illicit and prescription drug use in Spain (heroin and prescription opioids, mainly). Individuals entering treatment who also abuse benzodiazepines are different from other seeking treatment.











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