



Proceeding Paper

# Oral Health in Psychotropic-Medicated Outpatients of the Lisbon Psychiatric Hospital Centre (CHPL) <sup>†</sup>

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**Abstract:** We conducted a cross-sectional study to assess the oral health status in psychotropic-medicated outpatients of the Lisbon Psychiatric Hospital Centre (CHPL). Sixty outpatients of the General Psychiatry consultation consented to participate in this study. An oral examination and a structured questionnaire were conducted. Among the 60 subjects, 61.70% were males and the mean age was  $51.53 \pm 11.15$  years. The prevalence of dental caries was 98.3%, and the decayed, missing, filled index (DMFT) mean score was  $18.03 \pm 9.39$ . Considering the tooth brushing frequency, 30% and 40% brushed their teeth once and twice daily, respectively.

Keywords: psychotic disorders; oral health; dental caries

#### 1. Introduction

In Portugal, 22.9% of the total population have experienced a mental health disorder at some stage in their life [1]. There is evidence that people with a serious mental illness experience worse oral health outcomes than the general population [2]. Oral health is an important aspect of general health and well-being because of its effects on pain, eating, speech and quality of life [3]. People who have experienced a mental health disorder are a heterogeneous group, who commonly exhibit many factors which may contribute to poor oral health, including xerostomia caused by psychiatric medication, lack of motivation for self-care, poor oral hygiene and difficulties to access dental care [4]. The aim of this study is to assess the prevalence of dental caries and self-care behaviour in psychotropic-medicated outpatients of the Lisbon Psychiatric Hospital Centre (CHPL).

## 2. Materials and Methods

A cross-sectional study was conducted over a period of 4 months (March–June 2022) at the outpatients department of the General Psychiatry and Non-Medical Nursing consultation (injectable) at the CHPL. The inclusion criteria for the patients were as follows: (1) had a psychiatric diagnosis according the International Classification of Diseases-10 [5]; (2) have had the psychiatric condition for at least 1 year; (3) have taken antipsychotic medication for at least 1 year; (4) being treated as an outpatient; and (5) over 18 years old. A sample of 60 outpatients was selected randomly from the psychiatry department of CHPL of both genders, aged between 27 and 72 years who consented to participate in this study. Approved by the Ethics Committee of the Lisbon Psychiatric Hospital Centre and the Instituto Universitário Egas Moniz. The prevalence of dental caries was assessed using the decayed, missing, and filled teeth index (DMFT). Subsequently, a questionnaire was applied regarding sociodemographic variables, psychiatric pathology, and oral hygiene habits. Data were submitted to descriptive analysis using IBM SPSS Statistics<sup>®</sup>v.28 software.



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#### 3. Results

Amongst 60 outpatients, 61.70% (37) were males and the mean age of the study population was  $51.53 \pm 11.15$ . The majority of the population, 53.34% (32), had primary or less education level; 46.7% (28) had less than 1 monthly family income of minimum wages, and 46.7% (28) were retired (Table 1). The frequency distribution of psychiatric patients was 66.70% (40) schizophrenia, schizotypal, and delusional disorders, 31.70% (19) epilepsy, and 1.7% (1) neurotic, stress-related, and somatoform disorder (Table 2). The prevalence of dental caries was 98.3% and the DMFT score was  $18.03 \pm 9.39$  among our population. Overall DMFT scores ranged from 0 to 32, whereas the mean of decayed (D) score was  $3.63 \pm 3.9$ , the mean of missing (M) score was  $12.81 \pm 11.03$ , and the mean of filled(F) score was  $1.56 \pm 2.95$  (Table 3). According the tooth brushing frequency, 40.0% of the population brushed the teeth twice daily (Table 4). The results demonstrate a statistically significant correlation between the prevalence of dental caries and subjects who never brush their teeth (p = 0.018) (Table 5). A total of 63.30% of the population had their last dental visit over a year ago (Table 6).

Table 1. Distribution of participants according to sociodemographic characteristics.

Variables		Absolute Frequency	Relative Frequency	
Gender	Male	37	61.70%	
	Female	23	38.30%	
<b>Educational Level</b>	Primary or less	32	53.34%	
	Secondary or higher	15	25.00%	
	Graduate student or higher	13	21.70%	
<b>Employment status</b>	Employed	15	25.00%	
1 ,	Unemployed	17	28.40%	
	Retired	28	46.70%	
Income	Not known/No response	4	6.70%	
	Less than 1 monthly family income wage	28	46.70%	
	1–2 monthly income	23	38.30%	
	2–4 monthly income	5	8.30%	

**Table 2.** Distribution of participants according to their psychiatric diagnosis.

Psychiatric Diagnosis	Absolute Frequency	Relative Frequency
Schizophrenia, schizotypal, and delusional disorders	40	66.70%
Épilepsy	19	31.70%
Neurotic, stress-related, and somatoform disorder	1	1.7%

Table 3. Distribution of mean scores of DMFT.

	Mean	SD	Minimum	Maximum
DMFT	18.03	9.39	3	32
D	3.63	3.9	0	18
M	12.81	11.03	0	32
F	1.56	2.95	0	16

**Table 4.** Distribution of tooth brushing frequency.

<b>Tooth Brushing Frequency</b>	Absolute Frequency	Relative Frequency
Not known/No response	5	8.30%
Never	8	13.30%
Sometimes	5	8.30%
Once daily	18	30.00%
Twice daily	24	40.00%

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<b>Table 5.</b> Distribution of	f DMFT mea	n scores among	tooth	brushing:	frequency.

Tooth Brushing Frequency	DMFT	<i>p-</i> Value <sup>1</sup>
Not known/No response	$32.0\pm0.0$	-
Never	$23.75 \pm 10.64$	0.018
Sometimes	$16.2\pm6.61$	0.381
Once daily	$16.0 \pm 8.58$	0.356
Twice daily	$15.13 \pm 7.93$	0.084

A significance level of 0.05 was considered statistically significant.

**Table 6.** Frequency of last dental visit.

Last Dental Visit	Absolute Frequency	Relative Frequency
Not known/No response	1	1.70%
Over a year	38	63.30%
Unless a year	21	35.00%

### 4. Discussion and Conclusions

The DMFT index is classified in five levels: 0.0-4.9 very low, 5.0-8.9 low, 9.0-13.9 moderate, 14.0–17.9 high, and more than 18 very high [6]. The most recent study of the prevalence of caries in the general population is from the World Health Organization from the year 2000. The prevalence of caries in permanent teeth is between 25% and 50% [7], lower than for the data obtained in our study. Goud et al. (2021) determined that dental caries was prevalent in 87.3% of psychiatric outpatients in India, the mean of DMFT scores was 4.06, and the mean of decayed (D) score was 3.4 [8]. Deepali et al. (2021) conducted a study on oral health in patients of schizophrenia in Haryana, and 72% and 3% of the subjects brushed their teeth once and twice daily, respectively [9]. An epidemiological study conducted by Nielsen J et al. (2011) indicated that 43% of participants had visited the dentist within one year. Despite the prevalence of suboptimal oral health among mental health disorder patients compared with the general population, dental services are often underutilized by this heterogeneous group due to the stigma, helplessness, low self-esteem, and low income [10,11]. The poor oral health of people with psychological disorders remains a largely forgotten problem. The findings of this study suggest that the oral health concerns of this heterogeneous group are unrecognized, especially with regard to dental caries, and they lack the responsibility to take care of their oral health. The increased focus on the physical health of people with psychiatric illness should include consideration of oral health, and a closer collaboration between dental and mental health professionals is also important.

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**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of Egas Moniz School of Health and Science (protocol code 1013, approved in 27 January 2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author. The data are not publicly available, as they are part of an ongoing study.

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#### **Conflicts of Interest:** The authors declare no conflict of interest.

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