

# Gender differences in a sample of Romanian forensic psychiatric inpatients

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## ABSTRACT

**Objectives.** To gain insight into the characteristics of female forensic psychiatric patients in Romania and to identify the potential differences between female and male forensic inpatients.

**Material and method.** Data on all patients admitted according to art. 110 of the Romanian Penal code to Săpoca Psychiatry and Safety Measures Hospital between 2008 and 2018 were collected from hospital records (electronic records, clinical files, social assessment forms and legal files). The final sample comprised 650 individuals: 84% were men and 16% were women.

**Results and discussion.** There were few socio-demographic differences. Both men and women had a psychiatric history, and schizophrenia spectrum disorders were the most frequent main diagnosis in both groups. Women were more likely to have committed arson, homicide and attempted homicide and to be hospitalized for a shorter period of time.

**Conclusions.** Consistent with previous studies, we concluded that men and women admitted to forensic psychiatric hospitals differ in a number of ways. Our study highlights the need to continue and expand the research into the Romanian forensic psychiatric inpatient population.

**Keywords:** gender, inpatient, forensic psychiatry, offender

## INTRODUCTION

Article 110 of the Penal code of Romania states: “When the perpetrator is mentally ill, a chronic consumer of psychoactive substances or suffers from an infectious contagious disease and presents a danger to society, the measure of hospitalization in a specialized health care unit can be taken, until recovery or until obtaining an improvement that removes the danger condition” (1).

Săpoca Psychiatry and Safety Measures Hospital (SPMS Săpoca) is among the 4 safety measures hospitals in Romania, offering psychiatric care to such patients from 10 counties and Bucharest, at a medium level of security, in 3 wards, with a total capacity of 300 beds. Two of the wards (with 60 and 120 beds, respectively) provide care to male patients, while the third is a mixed gender ward (120 beds).

Every year, patients undergo a forensic psychiatric evaluation, and the court rules on the maintenance, replacement or termination of the safety measure.

The last 30 years have seen an increase in the number of forensic psychiatric beds worldwide (2-5), which reflects the growth in patient numbers and duration of hospitalization in forensic psychiatric care. At the same time, a constant increase in violent offending by women has been noticed (6,7).

While most patients in psychiatric forensic units are men (8), De Vogel & Nicholls suggested that the fastest growing forensic population worldwide is represented by women (7). If until now, several studies focused on female offenders in prisons (7), little information on women in forensic psychiatric hospitals is available.

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To our knowledge, no study has addressed the characteristics of the female forensic psychiatric inpatient in Romania. Studies from other countries suggest that there are important gender differences in the profiles of patients admitted to medium security hospitals (9-11).

## OBJECTIVES

The purpose of this observational, descriptive and retrospective study is to gain insight into the socio-demographic, clinical and legal characteristics of female forensic psychiatric inpatients in Romania, as well as to identify the potential differences between female and male forensic patients.

## MATERIAL AND METHODS

### Subjects and assessment

The study sample included all patients admitted to SPMS Săpoca from January 1<sup>st</sup> 2008 to December 31<sup>st</sup> 2018. Admissions for the execution of the safety measure were court ordered for those patients who committed a criminal offence and were found to be irresponsible according to the Romanian penal code.

Socio-demographic (age at admission, gender, area of residence, marital status, offspring, level of education, professional status, housing situation) and clinical information (psychiatric diagnosis, comorbidity, psychiatric history, alcohol misuse, date of admission and discharge where it applied) were collected from hospital records (electronic records, clinical files and social assessment forms).

Psychiatric diagnoses were made according to the ICD-10 criteria (12) and patients were divided into groups according to the ICD-10 diagnostic groups.

Legal information (type of offence, criminal background, duration of hospitalization) was obtained from the legal files of each patient. Offences were classified according to the Romanian penal code. Where more than one offence was committed, the most serious one was taken into consideration.

Prior to data collecting, the study project was approved by the Ethics Committee of SPMS Săpoca.

### Statistical analysis

The data were recorded in a Microsoft Excel 2019 database and were analysed with IBM SPSS Statistics 20. To make comparisons between the male and female groups, Student's t-test and the ANOVA test were used for continuous data and the Chi-square test for categorical data. A p value < .05 was considered significant.

## RESULTS

### Socio-demographic characteristics

From January 1<sup>st</sup> 2008 to December 31<sup>st</sup> 2018, 650 patients were admitted to SPMS Săpoca according to art. 110 of the Penal code. At the time of the study, 262 (40.31%) were still admitted.

Table 1 presents the socio-demographic characteristics of the sample. Most of the patients were male (n = 546, 84%), single (n = 405, 62.3%), unemployed (n = 584, 89.84%), with a low level of education (lower secondary school) (n = 337, 51.85%), didn't have offspring (n = 412, 63.38%) and were living with their parents or other relatives at the time of admission (n = 352, 54.15%).

TABLE 1. Socio-demographic characteristics of the sample

Socio-demographic characteristics	Male patients	Female patients
<b>N, %</b>	546, 84.00%	104, 16.00%
<b>Age (mean ± SD)</b>	43.976 ± 12.09	46.240 ± 13.85
<b>Area of residence (Urban) (n, %)</b>	270, 49.45%	66, 63.46%
<b>Professional status</b>		
Social aid	20, 3.30%	2, 1.92%
Unemployed	178, 28.39%	23, 22.12%
Disability allowance	243, 37.91%	36, 34.62%
Retired	186, 26.74%	40, 38.46%
Employed	23, 3.66%	3, 2.88%
<b>Marital status (n, %):</b>		
Married	48, 8.79%	9, 8.65%
Cohabiting	24, 4.40%	3, 2.88%
Divorced	104, 19.05%	26, 25.00%
Single	352, 64.65%	53, 50.96%
Widower	17, 3.11%	13, 12.50%
<b>Education (n, %)</b>		
No education	37, 6.78%	8, 7.69%
Primary education	58, 10.62%	5, 4.81%
Middle school	182, 33.33%	34, 32.69%
High school	120, 21.98%	31, 29.81%
Post-secondary	2, 0.37%	2, 1.92%
Vocational	101, 18.50%	15, 14.42%
Special education	11, 2.01%	2, 1.92%
Superior studies	33, 6.04%	7, 6.73%
Postgraduate studies	2, 0.37%	0, 0.00%
<b>Housing situation</b>		
Living alone	152, 27.84%	30, 28.85%
With husband/wife	42, 7.69%	15, 14.42%
With other relatives	54, 9.89%	11, 10.58%
With parents	251, 45.97%	36, 34.62%
With other persons, without kinship	31, 5.68%	8, 7.69%
Without housing	16, 2.93%	4, 3.85%
<b>With offspring (n, %)</b>	179, 32.78%	59, 56.73%

The average age at the time of admission was 46.24 years (SD = 13.85, range = 19-86) for the female group and 43.97 years (SD = 12, range = 18-84) for

the male group, which was not significantly different. Most female patients lived in the urban area, while men lived in rural areas (63.46% vs. 49.45%,  $p = 0.009$ ).

We found a significant statistical gender difference in marital status ( $p < 0.001$ ). While women were more often divorced or widowed, men were more often single. There were no significant differences between genders regarding the level of education, professional status, nor the housing situation.

### Clinical characteristics

The clinical characteristics of both groups are shown in Table 2.

Regarding the main psychiatric diagnosis, schizophrenia spectrum disorders (F20-F29) were most common in both groups (54.58% vs. 61.54%). Women were more often diagnosed with dementia (F00-F03) and mood disorders (F30-F39), while the men were more commonly diagnosed with organic mental disorders, other than dementia (F04-F09), disorders due to psychoactive substance use (F10-F19) and personality disorders (F60-F69).

TABLE 2. Clinical characteristics of the sample

Clinical characteristics	Male patients	Female patients
<b>Diagnostic group (n, %)</b>		
F00 - F03	12, 2.20%	8, 7.69%
F04 - F09	75, 13.74%	4, 3.85%
F10 - F19	7, 1.28%	0, 0.00%
F20 - F29	298, 54.58%	64, 61.54%
F30 - F39	29, 5.31%	9, 8.65%
F60 - F69	56, 10.26%	2, 1.92%
F70 - F79	69, 12.64%	17, 16.35%
<b>Psychiatric comorbidity (n, %)</b>		
Depressive episode	2, 0.37%	1, 0.18%
Organic mental disorder	8, 1.47%	6, 1.10%
Personality disorders	20, 3.66%	1, 0.18%
Psychosis	17, 3.11%	2, 0.37%
Substance-related disorders	214, 39.19%	24, 4.40%
<b>Any medical comorbidity (n, %)</b>	286, 52.38%	76, 73.08%
<b>Alcohol misuse (n, %)</b>	214, 39.19%	24, 23.08%
<b>Psychiatric history (n, %)</b>	461, 84.43%	95, 91.35%

The most frequent comorbid psychiatric diagnosis in both groups was that of substance - related disorders (39.19% vs. 4.40%), followed by personality disorders for the men.

High levels of medical comorbidity were found in both men and women (52.38% vs. 73.08%). The most common comorbidities in the sample were: cardio-vascular diseases (hypertension, ischemic heart disease and atrial fibrillation), followed by metabolic and endocrinological disorders (type II

diabetes, dyslipidaemia and hypothyroidism), infectious (HVB and HVC hepatitis, HIV), neurological (epilepsy, Parkinson disease, stroke) and pulmonary diseases (chronic obstructive pulmonary disease and tuberculosis).

Lifetime alcohol misuse was more common in men than women (39.19% vs. 23.08%,  $p = 0.002$ ). The majority of both groups had a psychiatric history and no statistically significant gender difference was found in respect with previous contact with psychiatric services.

### Legal characteristics

In respect to the legal characteristics (Table 3), women had a significantly lower criminal history than men (41.58%, 29.81%,  $p = 0.024$ ). Almost half of both groups committed crimes against the person (48.35% vs. 47.12%), followed by crimes against the patrimony (23.08% vs. 25.00%) and crimes against the administration of justice (19.23% vs. 16.35%).

TABLE 3. Legal characteristics of the sample

Legal characteristics	Male patients	Female patients
<b>Type of offence (n, %)</b>		
Against the authorities	15, 2.75%	4, 3.85%
Against the administration of justice	105, 19.23%	17, 16.35%
Against religious freedom and respect for the deceased	4, 0.73%	0, 0.00%
Against public order and peace	21, 3.85%	6, 5.77%
Against the patrimony	126, 23.08%	26, 25.00%
Against the person	264, 48.35%	49, 47.12%
Against public safety	8, 1.47%	1, 0.96%
False offenses	3, 0.55%	1, 0.96%
<b>Violence (n, %)</b>	217, 39.74%	48, 46.15%
<b>Criminal history (n, %)</b>	227, 41.58%	31, 29.81%
<b>Hospitalization duration (years) (mean <math>\pm</math> SD)</b>	3.16 $\pm$ 2.85	1.79 $\pm$ 2.73

We identified a significant gender difference in regards to the type of offence ( $p = 0.010$ ). Women committed more serious crimes as homicide and attempted homicide (16.35% vs. 13.37%) and destruction of property offences, including arson than men (16.35% vs. 12.82%). The proportion of sexual offenses was higher for the male group (2.93% vs. 0.96%).

Our results show that the violent nature of the crime is linked to alcohol misuse ( $p = 0.006$ ). However, in regard to violence, there was no difference in the type of offence between genders.

Compared to their male counterparts, female patients were more likely to be hospitalized for a shorter period of time (1.79  $\pm$  2.73 vs. 3.16  $\pm$  2.85 years).

## DISCUSSION

This study analyzed the characteristics of a group of female forensic inpatients and compared them to the male patients admitted to SPMS Săpoca according to art. 110 of the Romanian penal code in the same period of time.

In our sample, as in other studies on forensic populations (13-15), patients were mostly male, around 40 years of age, unemployed, single, without offspring and with a low level of education.

Regarding the socio-demographic characteristics, we identified differences between the two groups in terms of the area of residence and marital status.

The clinical characteristics of the patients included in our study resemble those identified by previously published studies (16): over half of both groups had a main diagnosis of schizophrenia spectrum disorders and the most frequent comorbid psychiatric diagnosis was represented by substance-related disorders. The majority of both groups had a history of psychiatric disorder (14,17,18). The men in our sample were more likely to consume alcohol than the women (14,19).

In line with the existing literature, a high proportion of our sample had at least one comorbid medical condition (20,21).

Finally, regarding the legal characteristics, our findings resemble earlier studies that reported that arson, homicide and attempted homicide are more frequently committed by women (9,14,15,22,23). The male group committed more sexual offences than the women (24). Also, the women in our sample were less likely to have a criminal history than the men (25,26).

We found an average period of hospitalization of 1.79 years for the women in our sample, which is comparable to that found in other studies (16,27). Also, the average length of stay in the hospital was shorter for the female group (11).

## Strengths and limitations

Prior studies into forensic female inpatients have addressed the issue of small sample sizes, emphasizing the need for further research into this specific population. To our knowledge, the present study is the first in Romania to explore the characteristics of a sample of this special patient population.

The results of our study should be viewed taking into account its limitations, the most important ones being its retrospective nature and the fact that we relied on the information available in the hospital's records.

## CONCLUSIONS

Consistent with previous studies into mentally disordered criminal offenders, we concluded that while there are many similarities in the socio-demographic, clinical and legal characteristics of the men and women admitted to forensic psychiatric hospitals, they also differ in a number of ways.

Our study highlights the need to continue and expand the research into the Romanian forensic psychiatric inpatient population, which could lead to better case management, specialized service provision and improved prevention strategies.

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