

## RESEARCH ARTICLE

# Clinical Evolution of Patients with Schizophrenia Associated with Addictive Disorders

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**Introduction:** The prevalence of schizophrenia in the general population is about 0.3% -0.7%. Pathological use of substances such as cocaine, alcohol, amphetamines and nicotine are common in schizophrenia with a lifetime prevalence of 80%. They tend to isolate themselves in an inner world, thus being prone to substance abuse. The most commonly used substances are: alcohol, nicotine, cocaine, amphetamines, hallucinogens and cannabis. **Method:** We conducted a retrospective, descriptive-analytical study on a group of 139 patients with a positive diagnosis of schizophrenia from the Psychiatry Clinic I of the Mureş County Clinical Hospital hospitalized between 01.01.2018-31.12.2019. The clinical and paraclinical data used were processed from observation sheets in the clinic archive. These were introduced and analyzed in the Microsoft Excel 2016 program, and the statistical test used was Chi Square in the Graph-Pad statistical analysis program. **Results:** Most patients with schizophrenia have a schizoid (41%) and paranoid (32%) personality. Other types are: organic 25% (unstable and impulsive) and obsessive anxiety 2%. Due to the evolution of diseases, patients end up consuming psychoactive substances, tobacco and alcohol. A percentage of 48% of patients were tobacco consumers, 37% were alcohol consumers and 15% consumed psychoactive substances. Tobacco use is not a statistically significant factor in the recurrence of the disease. **Conclusions:** Alcohol, tobacco and psychoactive substances are an important risk factor in the unfavorable evolution of the disease, most hospitalized patients are in the age group 50-59 years.

**Keywords:** schizophrenia, addiction, psychoactive substances, personality, alcoholism

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## Introduction

The term “schizophrenia” (“splitting, dissociation of the mind”) was introduced by Bleuler in 1911 and refers to the dissociation of various psychic functions [1].

In 1959 the psychiatrist Kurt Schneider is the one who differentiates between the main and secondary symptoms and thus allows an operational diagnosis. The main symptoms include: contradictory auditory hallucinations or commentary hallucinations, external influences on the body, phenomena influencing thoughts, sounding one’s thoughts, transmitting thoughts, delusional perceptions, external influences on feelings, impulses and volitional acts. Secondary symptoms are other types of hallucinations, perplexities, mood swings and emotional blunting [2-4]. This term for schizophrenia comes from the Greek “schizein” which means to split and “phren” which means mind, soul.

The pathological use of substances such as cocaine, alcohol, amphetamines and nicotine are common in schizophrenia with a lifetime prevalence of 80%. Mostly, the disease occurs between puberty and the age of 30 years [5-7]. The life expectancy of patients with schizophrenia has been shown to be shorter than of the general population [8,9]. Alcohol related disorder can be an important risk factor for suicide during severe intoxication and in the context of alcohol-induced temporary, depressive and bipolar disorders [10-12].

## Method

The aim of the study is to establish the frequency of relapses among patients with schizophrenia who associate the pathological use of psychoactive substances, alcohol and tobacco.

In the present study we aimed to evaluate the following parameters: -Distribution of patients diagnosed with schizophrenia by age groups and sex, background, prevalent symptoms of relapse, pre-existing personality disorder, marital status, overall functionality, variation PANSS(Positive and negative schizophrenia symptoms) score under treatment of patients as well as the structuring of patients diagnosed with schizophrenia according to the pathological use of alcohol, nicotine and psychoactive substances in relation to the distribution by sex and their distribution according to the quality of sleep.

We conducted a retrospective, descriptive-analytical study on a group of 139 inpatients with a positive diagnosis of schizophrenia from the Psychiatry Clinic I from Targu Mureş - Clinical Hospital, hospitalized between 01.01.2018-31.12.2019. This study has the approval of the Ethics Commission within the Targu Mures - Clinical Hospital.

Of our group, 48 patients were male and 91 were female aged between 19 and 79 years. They were divided into following age groups: 10-19 years, 20-29 years, 30-39 years, 40-49 years, 50-59 years, 60-69 years, 70-79 years.

The clinical and paraclinical data used were processed from observation sheets from the clinic archive. These

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were introduced and analyzed in the Microsoft Excel 2016 program, and the statistical test used was Chi Square in the Graph-Pad statistical analysis program.

Possible sources of errors encountered during the study were: 1. Incomplete observation sheets 2. Unfavorable medical data collection conditions 3. Incomplete investigated patients

## Results

The study included 139 inpatients, they were divided into age groups as follows: 10-19 years (2 patients), 20-29 years (18 patients), 30-39 years (23 patients), 40 -49 years (36 patients), 50-59 years (38 patients), 60-69 years (18 patients), 70-79 years (4 patients).

Of the studied group, 35% (48 subjects) were male and 65% (91 subjects) were female.

Patients from urban and rural areas were introduced in this study: 73 patients are from the urban area, and 66 patients from the rural area.

In this paper were introduced patients who in terms of marital status are: 50 married, 66 unmarried, 20 divorced and 3 widows. It has been observed that most of the patients remained unmarried, due to the severity of the disease could not start a family.

Relapses of patients diagnosed with schizophrenia are very common. Due to non-compliance with the treatment or consumption of psychoactive substances, tobacco and alcohol, patients always end up with relapses of the disease.

Most patients diagnosed with schizophrenia have a schizoid (41%) and paranoid (32%) personality. Other types of personalities encountered among patients are: organic 25% (unstable, paranoid and impulsive) and obsessive anxious 2% (Table I).

Because of evolution of this disease, patients ended up consuming psychoactive substances, tobacco and alcohol. 48% of patients used tobacco, 37% used alcohol and 15% used psychoactive substances (Table II).

It has been shown that among patients diagnosed with schizophrenia, tobacco use is not a statistically significant factor in the recurrence of the disease. Out of a total of 139 inpatients, 74 were tobacco users and the remaining 65 were non-consumers. Of the smoking patients,

only 34 had relapses during the course of the disease, and the remaining 40 patients had no relapses.

Among patients diagnosed with schizophrenia, alcohol consumption is a statistically significant factor in the recurrence of the disease. Of the total number of patients included in the study (139 subjects), 58 subjects are alcohol users, and the remaining 81 subjects are non-consumers. Of the patients consuming alcohol, 37 patients had relapses of the disease, and the remaining 21 of them had no relapses. The use of psychoactive substances is not a statistically significant factor in the recurrence of the disease. Out of the total of 139 patients included in the study, 23 of them used psychoactive substances and the remaining 116 were non-users of psychoactive substances. Of the 23 users of psychoactive substances, 11 subjects had relapses of the disease, and the remaining 12 had no relapses.

## Discussions

The data obtained from the current study were largely consistent with the data in the literature but some differences were also observed.

The study included 139 patients who were divided into age groups as follows: 10-19 years (2 patients), 20-29 years (18 patients), 30-39 years (23 patients), 40 -49 years (36 patients), 50-59 years (38 patients), 60-69 years (18 patients), 70-79 years (4 patients). After the distribution by age groups we can observe an increased number of patients diagnosed with schizophrenia in the age group 50-59 years.

Depending on the distribution by sex, the study showed a predominance of females 65% (91 subjects) compared to males represented by 35% (48 subjects). Unlike the literature, there was a slightly increased incidence of schizophrenia in males. The literature has shown that there are differences between the sexes regarding the genetic transmission of the disease, namely that the percentage of schizophrenia in family members of women with schizophrenia is higher than that of family members of men with schizophrenia [13].

In the literature it has been observed that patients with an early onset are usually male and have important evidence of structural brain abnormalities, lack of interest in educational and professional achievements, lack of hygiene and self-care, more obvious symptoms and negative signs, more severe prognosis. In contrast, late onset is more common among female patients, and brain structural abnormalities and cognitive impairments are less obvious, with a more favorable prognosis [13].

According to data from the literature in urban areas, the incidence of the disease increases in proportion to the size of the city. It appears that higher incidence rates occur in the industrialized countries reported to be at the level of development of the country .

Depending on the prevalence of personality disorders in patients diagnosed with schizophrenia, patients with

Table I. Prevalence of personality disorders in patients with schizophrenia

Personality type	Number of patients
Anxiety-obsessive	3
Organic (unstable, paranoid, impulsive)	34
Paranoid	45
Schizoid	57

Table II. Correlation between the use of psychoactive substances, alcohol and tobacco and patients diagnosed with schizophrenia

Pathological use	Nr. Of patients
Smoking	74
Alcohol	58
Drugs	23

different personality types were introduced in this study. Thus, with a schizoid type personality there were 57 patients, paranoid type 45 patients, organic type (unstable, paranoid, impulsive) 34 patients and anxious-obsessive type 3 patients. People with schizoid personality disorder have a pervasive combination of emotional detachment from restricted relationships with those around them, they almost always choose solitary activities, are indifferent to the praise or criticism of others, show emotional coldness and emotional flattening. The paranoid type is the presence of delusional ideas of persecution, grandeur, jealousy, religiosity. Some specialized studies have shown that the paranoid type has a more favorable prognosis than the schizoid in terms of the individual's ability to lead an independent life and in terms of professional functioning [13,14].

Some of them present at admission and the P 4 criterion of the PANSS scale - psychomotor agitation which represents an accelerated motor behavior with increased responsiveness to stimuli, hyperalert or excessive lability of mood [15].

There is a high number of smoking patients (tobacco) 74 subjects, followed by a number of 58 subjects consuming alcohol and 23 subjects consuming psychoactive substances. Some researchers argue that the association between marijuana use and schizophrenia is possible, with the disease occurring more frequently in people who use marijuana a trigger for the disease [15,16]. According to American studies, it appears that about half of people diagnosed with schizophrenia have a concomitant diagnosis of alcohol and nicotine use [17].

Individuals with an alcohol consumption disorder continue to consume alcohol even though there are unfavorable physical, psychological, social and interpersonal consequences. Alcohol is also used by patients to remove the unwanted effects of using psychoactive substances when the patient cannot afford them.

Regarding the use of psychoactive substances, a number of 11 consuming subjects are female and 12 consuming subjects are male. The literature also mentions that men are more prone to drug use and faster development of psychotic disorder than women [17-19].

Contrary to the data in the literature, in our study female sex has a higher prevalence in terms of nicotine use.

## Conclusions

Alcohol, tobacco and psychoactive substances are an important risk factor in the unfavorable evolution of patients with schizophrenia.

Depending on the sex, a predominance of patients with female schizophrenia was observed.

Most inpatients with schizophrenia are in the 50-59 age group.

Depending on the origin of the environment, there is an increased number of patients with schizophrenia from urban areas.

Regarding the marital status of patients with schizophrenia, most of them are unmarried.

Depending on the prevalence of personality disorder in patients introduced in the study, the schizoid subtype predominates.

Males are more prone to use psychoactive substances compared to females.

The decrease in PANSS score is relevant to the effectiveness of treatment.

## Authors' Contribution

AS: conceptualization, investigation, writing original draft, methodology

MF: data curation, investigation, methodology

DS: writing, validation, investigation

MG: supervision, validation, writing

## Conflict of interest

None to declare.

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