

## ORIGINAL ARTICLE

# FEATURES OF SOCIAL DYSFUNCTION, ASSESSMENT OF LEVELS OF SOCIAL FRUSTRATION AND SATISFACTION WITH THE QUALITY OF MEDICAL CARE IN PATIENTS WITH SCHIZOPHRENIA ON THE BACKGROUND OF SOMATIC COMORBIDITY

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## ABSTRACT

**The aim:** To study the features of social dysfunction, assess the levels of social frustration and satisfaction with the quality of medical care in patients with schizophrenia on the background of somatic comorbidity.

**Materials and methods:** The study included 105 patients (55 women – 52.38% and 50 men – 47.61%) with a verified diagnosis of schizophrenia (F20.0-F20.3). The psychopathological condition of patients was assessed according to the “Positive and Negative Syndrome Scale” (PANSS). A special psychodiagnostic technique by L. I. Wasserman in the modification of V.V. Boiko was used to assess the level of social frustration. Peculiarities of social dysfunction were assessed based on the “Personal and Social Performance scale” (PSP). “The Health Resource Use Questionnaire” was used to obtain the information about the coverage of this patient with primary or specialized somatic care during the last three months. General and systematic examination of the patient was also performed, physical methods of diagnosis (palpation, percussion, auscultation) were applied, body mass index was calculated. Consultations of specialists, instrumental (ECG, ultrasound, Echo-CS, etc.) and laboratory diagnostic methods were prescribed depending on the detection or suspicion of concomitant somatic pathology.

**Results:** The results showed significant social isolation of the respondents, their contacts were limited to communication with relatives and friends. This was confirmed by the data of social functioning on the PSP scale, according to which the most pronounced violations in the examined patients were found in the areas of “personal and social relationships”, “socially useful activities, including work and study”. It should be noted that the higher the rates of social dysfunction, the stronger the level of frustration ( $p < 0.05$ ). In particular, the low level of satisfaction with the field of medical services due to its inaccessibility, according to respondents, attracts attention. According to the relatives, the main reason for this restriction was the patients’ lack of awareness of their condition, neglect and indifference.

**Conclusions:** Further attention is required to develop strategies to improve comorbid treatment in the patients with schizophrenia regardless of whether this situation is the result of negative attitude of health professionals towards patients with mental illness, or the result of the patients’ ignorance of their physical condition, or other factors.

**KEY WORDS:** paranoid schizophrenia, social dysfunction, social frustration, somatic comorbidity, satisfaction with the quality of medical care

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## INTRODUCTION

According to epidemiological data, 4 to 7% of the adult population is diagnosed with persistent mental illness. About 60% of them suffer from a psychotic disorder, mainly schizophrenia. The mortality rate in this category of people is much higher than in the general population, it reduces life expectancy by an average of 10-30 years [1, 2]. According to statistics, this is caused by neglected concomitant somatic pathology rather than the underlying disease. It accounts for 50% to 60% of deaths in schizophrenia [3]. According to researchers, in addition to high mortality, disability, overuse of health resources for diagnosis, the problem of comorbidity of the internal organs diseases leads to lower treatment outcomes.

According to scientific data, the potential causes of high somatic comorbidity in patients with schizophrenia include: biological mechanisms; childhood disorders and

mental disorders increasing the risk of an unhealthy lifestyle (smoking, poor diet, drug and alcohol use, hypodynamics); the use of drugs with side effects increasing the risk of somatic diseases; unsatisfactory prevention, screening and treatment of somatic diseases; self-medication [3].

Unfortunately, most current studies reporting excessive mortality in people with schizophrenia are conducted mainly in high-income countries. The situation can be much worse in low-income countries, developing countries, where health resources are scarce and institutions are poorly managed, so the access to qualitative medical care, including the psychiatric one, is limited.

According to the World Health Organization’s (WHO) 2013-2020 plan on mental disorders, psychiatrists were required to work more actively with general practitioners regarding their patients’s care, however, not to isolate them but to work with those treatments which will allow them to

socialize as much as possible. It is a question of psychiatry integration in somatic service and on the contrary, somatic service integration in psychiatry. 170 countries of the world are known to have joined this initiative, and Ukraine has not for some reason. Therefore, it is extremely important to address the disparity in access to health care for people with schizophrenia in a wide range of health facilities by stigmatizing the problem of patient care. Adhering to the principle of non-discrimination and universal coverage of health care, as developed and highlighted in United Nations Chapter 3.4, the Sustainable Development Goals aim “to reduce premature deaths due to noncommunicable diseases by one third by 2030 through early prevention, rational treatment, promotion of mental health and well-being”, in particular for patients with mental illness.

The study of the satisfaction of patients' with mental disorders with the quality of medical care deserves special attention. In our opinion, a better understanding of the requirements and needs of this category of patients by assessing their satisfaction will promote greater participation of patients in the treatment process and increase its effectiveness in general.

## THE AIM

The aim was to study the features of social dysfunction, assess the levels of social frustration and satisfaction with the quality of medical care on the background of somatic comorbidity in patients with schizophrenia.

## MATERIALS AND METHODS

The study was conducted at the premises of the municipal non-profit enterprise “Precarpathian Regional Clinical Center for Mental Health of Ivano-Frankivsk Regional Council” (KNP “PRCCMHIFRC”). All patients were examined and interviewed in the hospital. It should be noted that patients were admitted in the acute period of the disease and required active antipsychotic therapy. We examined 105 patients with a verified diagnosis of schizophrenia (F20.0-F20.3), (55 women – 52.38% and 50 men – 47.61%) who were hospitalized. Criteria for inclusion in the study were: diagnosis schizophrenia (F20.0-F20.3) according to ICD-10 criteria; informed consent to participate in the study; primary or specialized medical care for somatic diseases, such as hypertension, type 2 diabetes, heart failure, chronic diseases of the gastrointestinal tract, urinary system, etc. during the previous 12 months.

The study was comprehensive. The psychopathological condition of the patients was assessed according to the “Positive and Negative Syndrome Scale” (PANSS). A special psychodiagnostic technique by L. I. Wasserman in the modification of V.V. Boiko was used to assess the level of social frustration. Peculiarities of social dysfunction were assessed based on “The Personal and Social Performance” (PSP) scale which assesses the degree of impairment in four main areas of social functioning: (a) socially useful activities; (b) personal and social relationships (c) self-

care, (d) restless and anxious behaviors. The evaluation is conducted by a clinician and includes a semi-structured interview that helps to obtain good information about each of the areas.

The study also used “The Health Resource Use Questionnaire”. Due to this questionnaire, the attending physician was able to obtain information about the coverage of this patient with primary or specialized somatic care during the last three months. In particular, it was necessary to indicate: the number of visits of the examined patient to the doctor for any reason; the number of appeals to the emergency department; the number of hospitalizations with an indication of the length of stay. Each item asked if it was related to schizophrenia. At the same time, it was established whether the patient had been employed during the last three months and whether he/she received care assistance from relatives or friends (if so, the duration in hours per week).

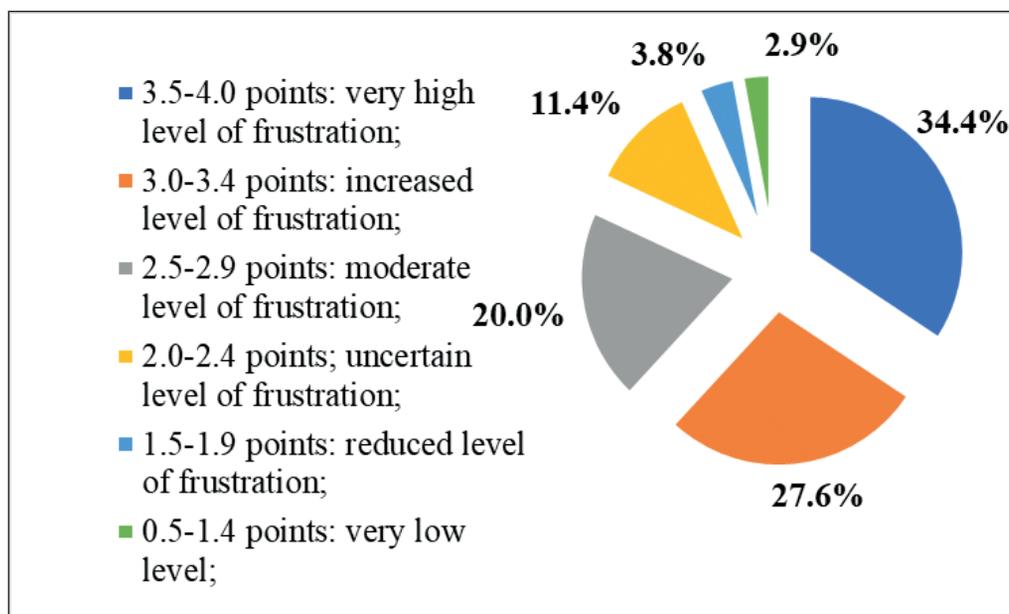
General and systematic examination of the patient was also performed, physical methods of diagnosis (palpation, percussion, auscultation) were applied, body mass index was calculated., Consultations of specialists, instrumental (ECG, ultrasound, Echo-CS, etc.) and laboratory diagnostic methods were prescribed depending on the detection or suspicion of concomitant somatic pathology.

Statistical analysis of the results was performed using the software packages STATISTICA 7.0. and the package of statistical functions of the program “Microsoft Excel, 2016”. A database of values based on the results obtained during the initial and repeated examinations of patients was created for the calculations. The reliability of the obtained indicators was confirmed by calculating errors for relative values, and the probability of data differences in the compared groups was proved by calculating the t-coefficient (Student) and determining the accuracy of the error prognosis. Arithmetic mean (M), standard error ( $\pm m$ ) were used to describe quantitative characteristics.

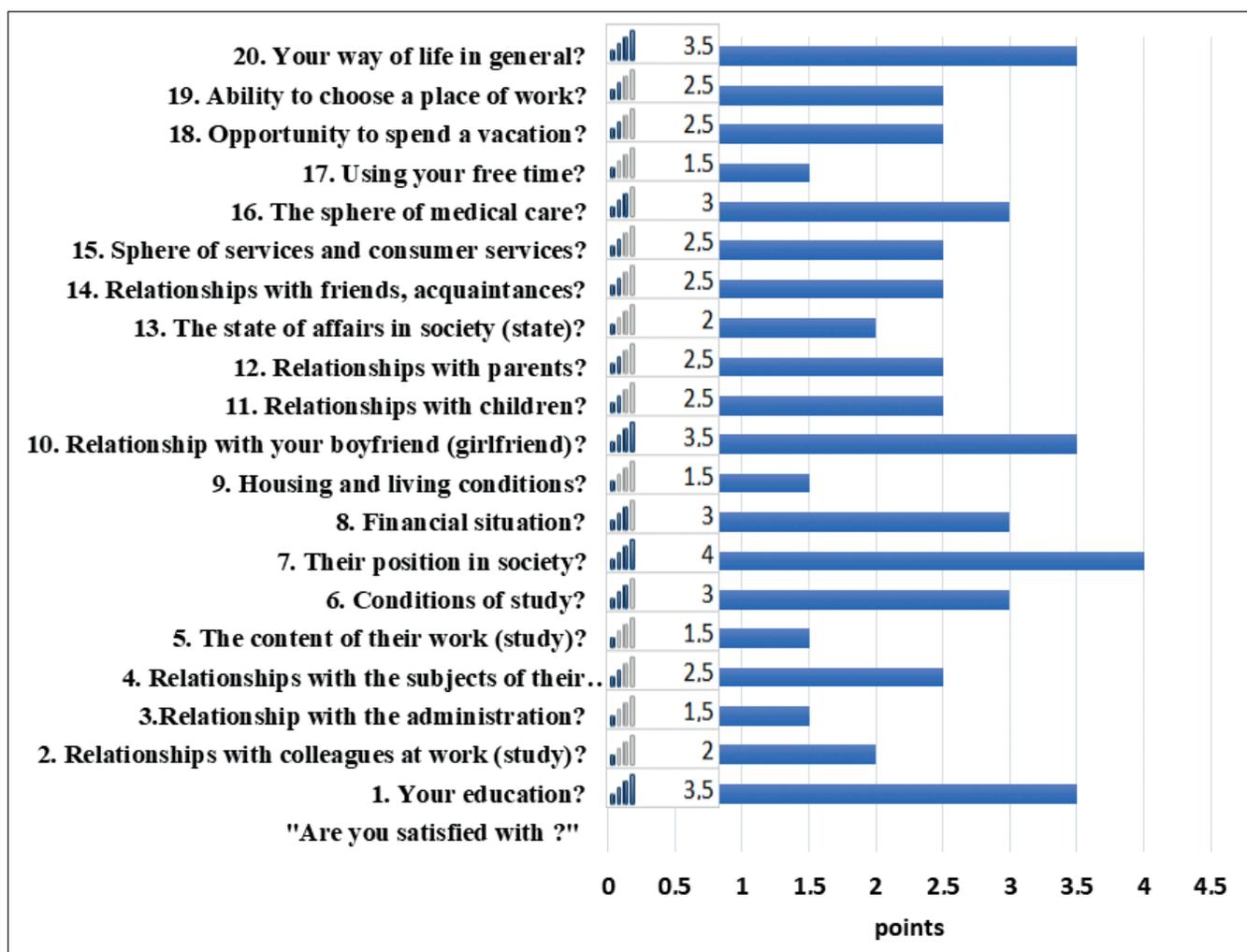
## RESULTS AND DISCUSSION

A socio-demographic analysis of the studied category of patients was conducted during the study in order to obtain representative and comparable data,. Among the patients we examined, 52.38% were women (55) and 47.61% were men (50).

All the examined patients had some degree of education: 1.8 % of women and 4.0 % of men had the primary one; 16.4 % and 14.0 % had a secondary education; 45.5 % and 38.0 % had special secondary one; incomplete higher education was received by 27.2 % and 34.0 %; higher education was received by 9.1% and 10.0 %. Interestingly, their social and labor adaptation was quite high: 83.6% of women and 88.0% of men worked. However, the percentage of highly skilled workers among the surveyed patients was only 3.6 % and 6.0 %, respectively. In particular, women were mostly involved in low-skilled work, and men in occasional work (Table 1). Regarding marital status, the following patients were examined: single – 20.0 %



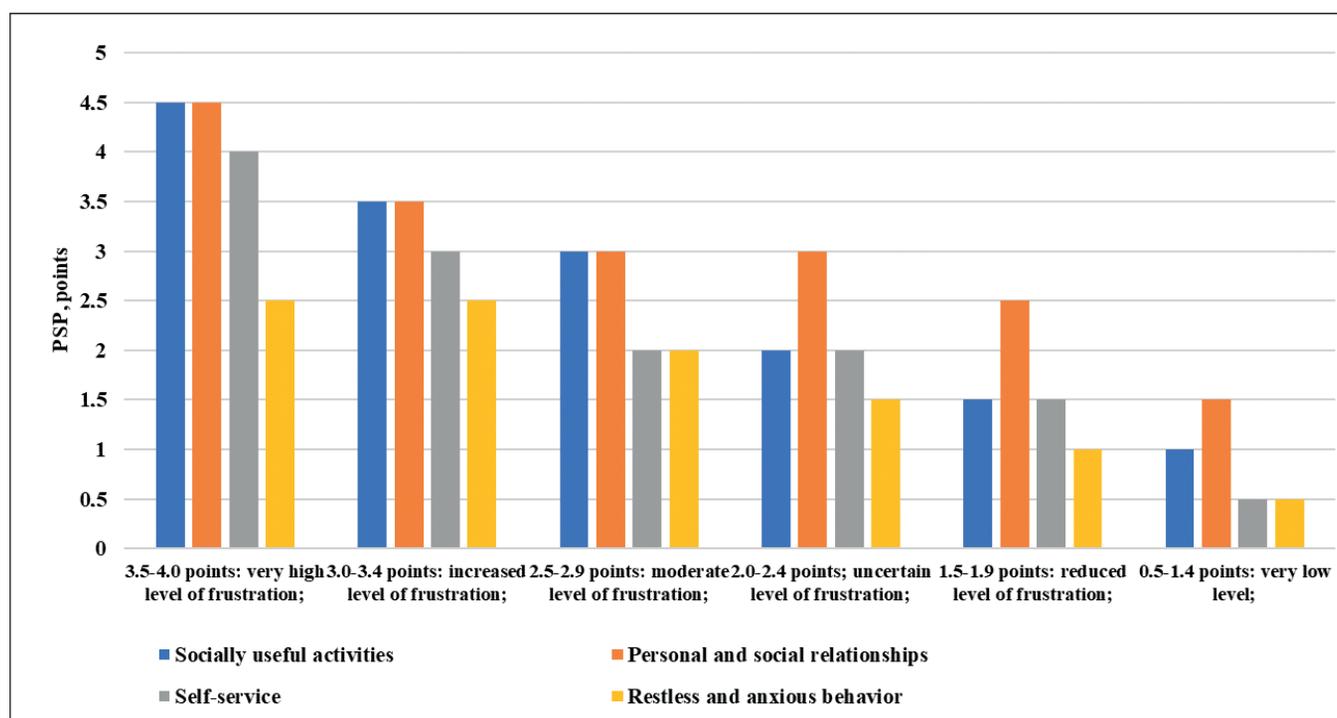
**Fig. 1.** The level of general social frustration of the examined patients (%)



**Fig. 2.** Average indicators of the level of social frustration of the examined patients in the main aspects of their life

of women and 24.0 % of men; married – 41.8 % and 32.0 %; divorced – 34.5 % and 42.0 %; widows – 3.7 % and widows – 2.0%. Analysis of patients’ social connections

showed significant social isolation of the subjects. Their contacts were limited to communication with relatives and friends (Table I).



**Fig. 3.** The value of the PSP scale indicators depending on the overall level of social frustration.

**Table I.** Socio-demographic indicators of the examined patients.

Indicator	n=105			
	Women (55)		Men (50)	
	absolute number	%	absolute number	%
Educational level				
Did not study (did not study)	-		-	
Primary education	1	1.8	2	4.0
Secondary education	9	16.4	7	14.0
Secondary special education	25	45.5	19	38.0
Incomplete higher education	15	27.2	17	34.0
Higher education	5	9.1	5	10.0
Efficiency				
Low-skilled work	32	58.2	9	18.0
Highly skilled work	2	3.6	3	6.0
Occasional employment	12	21.8	32	64.0
They do not work on disability	9	16.4	6	12.0
Marital status				
Married	23	41.8	16	32.0
Divorced	19	34.5	21	42.0
Lonely	11	20.0	12	24.0
Widow – (er)	2	3.7	1	2.0

Among the examined patients, the most common components in the structure of comorbidity in patients with schizophrenia are diabetes, musculoskeletal diseases, cardiovascular diseases, non-alcoholic fatty liver disease (NAFLD).

We diagnosed the level of social frustration in the examined patients. Social frustration, as a type of mental stress, is known to occur due to dissatisfaction with the achievements and position of the individual in socially defined hierarchies. Social frustration conveys a person's emotional attitude to

the positions he/she has managed to take in society. There are 20 categories that represent the main aspects of human life.

The average rate of overall dissatisfaction of our patients with their own social achievements is shown in Figure 1, and the categorical distribution in Figure 2. The data presented in Figure 1 show that 34.3% of respondents had a very high level of frustration, 26.6% – high, 20.0% – moderate, 11.4% – indeterminate, 3.8% – low, 2, 9% – very low. The patients were the least satisfied with their position in society, relationships with their “beloved”, friends and relatives, level of education, financial status, lifestyle in general. Particular attention should be paid to their dissatisfaction with the field of medical services due to the negative, in their opinion, attitude of health professionals to patients with mental illness in general. Most patients report that doctors, including “non-psychiatrists”, do not understand them and are unable to identify other problems and needs based on their primary diagnosis. Although Vus V and coauthors investigated that the most significant influence on the level of public confidence in medicine is made by the individual’s satisfaction with the level and quality of physical exertions, satisfaction with the individual’s physical condition, and satisfaction with the quality of food [14].

At the same time, according to “The Questionnaire for Assessing the Use of Health Resources”, few of them sought help from a family doctor or specialists (10.9 % of women and 14.0 % of men), especially in somatic hospitals (5.45 % of women and 4 % of men). As a rule, patients with schizophrenia and their relatives sought help from the emergency department only in case of severe, incomprehensible conditions. In most cases, these visits were associated with an exacerbation of the underlying disease. In the period between exacerbations, most of the examined patients were involved in work, had the support of relatives. According to the latter, the main obstacle to this category of patients’ access to adequate medical care is their lack of awareness of the seriousness of their disease.

To a lesser extent, patients were concerned about relationships with colleagues at work, housing problems, the state of affairs in society, the use of their free time.

When assessing social functioning on the PSP scale, the most pronounced violations in the examined patients were found in the areas of “personal and social relationships” –  $3.0 \pm 0.5$  points, “socially useful activities, including work and study” –  $2.58 \pm 0.5$  points. The violations in the areas of “self-service” ( $2.1 \pm 0.4$  points) and “restless, anxious behavior” ( $2.0 \pm 0.2$  points) were less pronounced. The statistical analysis showed a strong positive correlation between the level of general frustration and the degree of manifestation of these disorders ( $p < 0.05$ ). The values of the PSP scale indicators depending on the general level of social frustration are presented in Figure 3. As can be seen from the presented data, the higher the indicators of social dysfunction, the stronger the level of frustration.

## CONCLUSIONS

Thus, in this paper, we analyzed the social relationships in patients with schizophrenia on the background of comorbid

somatic pathology. The results showed significant social isolation of the respondents, their contacts were limited to communication with relatives and friends. This was confirmed by the data of social functioning on the PSP scale, according to which the most pronounced violations in the examined patients were found in the areas of “personal and social relationships”, “socially useful activities, including work and study”. It should be noted that the higher the rates of social dysfunction, the stronger the level of frustration, as indicated by a strong positive correlation. In particular, the low level of satisfaction with the field of medical services due to its inaccessibility, according to the respondents, attracts attention. According to relatives, the main reason for this restriction is the patient’s lack of awareness of their condition, neglect and indifference. The obtained data are somewhat comparable with the results of a study conducted by Nielsen, R.E., and co-authors in patients with bipolar disorder.

In our opinion, further attention is required to develop strategies to improve comorbid treatment in the patients with schizophrenia regardless of whether this situation is the result of negative attitude of health professionals towards patients with mental illness, or the result of the patients’ ignorance of their physical condition, or other factors. The expediency of the above mentioned data is evidenced by some aspects highlighted in the work of Docherty M. and co-authors [5]. It is obvious that the quality assurance should be based on human rights standards, as Meux C. and Gnatovskyy M. (2019) pointed out in a specialist guide published with the support of the Council of Europe.

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**Conflict of interest:**

*The Authors declare no conflict of interest.*

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