## X. SUMMARY OF THE PAPER

Sexuality is a multidimensional topic and it is inseparably connected with human functioning. Moreover, it is an integral part of the mental health. Each person, including a human affected by a psychiatric disorder, has the right to lead a satisfactory life (together with the sexual part of this).

The problem of sexual functioning of patients with diagnosed schizophrenia is frequently omitted as specialists mainly concentrate on the treatment of the underlying disease.

Currently, 1% of the population is affected by schizophrenia, mostly young patients aged between twenty and thirty, both males and females. They are young, at the working age, and limited by the psychopathological symptoms of schizophrenia concerning social skills and competence, which results in a lack of interpersonal relationships. Symptoms, treatment and rehabilitation of schizophrenic patients considerably affect their daily functioning. Their sexual life (needs, fantasies, capacity) is treated as minor. The patients' sexuality is usually regarded in the context of side effects of antipsychotic medications. As the quality of sexual life is one of the determinants of health, this topic (still being a taboo) is worth considering for psychiatric patients. Better understanding of factors influencing the assessment of sexual functioning of schizophrenic patients will make it possible to improve the quality of their sexual life as well as their treatment and therapeutic relationships.

Objective of the paper: The paper's objective was assessment of the relationships between the levels of sex hormones (testosterone, estradiol, progesterone), parameters of the oxidative stress (TAC, TOS) and the enhancement of sexual needs, reactions, dreams, fantasies and satisfaction of patients with schizophrenia. Moreover, an assessment of the influence of the number of hospitalisations on the perceived level of the sexual satisfaction, needs and capacity as well as the frequency of erotic fantasies was attempted.

In addition, the correlation of the severity of psychotic symptoms and the level of sexual functioning in selected aspects was measured – concerning the sexual capacity and perceived sexual satisfaction.

Material and methods: The study was conducted between October 2015 and June 2018, following the approval of the Bioethics Committee of the Medical University of Bialystok. 84 patients participated in the study – 41 females and 43 males, aged between 18 and 45, mainly residents of big cities (54.8%). The respondents were mostly (81%) not married. A majority of patients have the secondary level of education. Every seventh of the study subject has a

university degree and every fourth subject demonstrates the primary education. There are no problems with alcohol or drugs in the study group; a half of them smokes cigarettes and the two-third drinks coffee. Each person, following the consent to participate in the study, was enrolled into one of four study groups, regarding the sex and the number of hospitalisations (the following tools were also used: the Structured Clinical Interview (SCI-PANSS), the Mell-Krat Scale for women and for men, the Sexual Satisfaction Scale by Davies, the Glenn-Wilson Sexual Fantasy Questionnaire and a personal questionnaire. Moreover, the following laboratory parameters were measured based on the biological material: the saliva levels of testosterone, estradiol and progesterone as well as the urine level of oxidative stress parameter.

The distribution of the levels of psychometric measures concerning the sex and the disease duration, determined by the order of hospitalisations, were compared. The significances of the particular effects was assessed using the ANOVA two-way analysis of variance.

In addition, the effect of the severity of the psychopathological symptoms on the sexual functioning regarding the sexual needs, satisfaction and fantasies was assessed using the Spearman's rank correlation coefficient.

The correlations between the sexual satisfaction and sexual fantasies were also studied, using the Spearman's rank correlation coefficient.

Results and conclusions: The conducted study showed a low level of sexual satisfaction among the study subjects with schizophrenia. Moreover, a positive correlation between the TOS parameter and the sexual needs and capacity was revealed in the male group. It was found that the patients with negative disease symptoms showed lower levels of sexual fantasies, but they demonstrated more frequent sexual fantasies during the disease. Besides, a positive correlation between the levels of estradiol and sexual satisfaction was observed in the male group. A relationship between sexual fantasies and the general as well as physical satisfaction among males and females was determined – more frequent fantasies were seen in the patients with a higher level of the satisfaction. In addition, there is a positive correlation between fantasies and the satisfaction of the sexual control in males.

It was confirmed that a high progesterone level affects a subjective decreased sexual satisfaction.

The patients who are subsequently hospitalised and have been ill for a longer time assess their sexual satisfaction as poorer, regarding its emotional aspect. The females demonstrated stronger relationships.

The high severity of negative schizophrenia symptoms, both in males and females, mainly affects the sexual capacity and general satisfaction, also in the physical aspect. In females, a negative effect on the emotional satisfaction is also additionally observed.