

## QUALITY OF LIFE OF PATIENTS WITH TERMINAL STAGE OF CHRONIC KIDNEY DISEASE

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### Abstract

WHO defines quality of life (QL) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". Health related QL is an evaluation of QL and its relationship with health. **The aim.** To analyse quality of life components in patients with chronic kidney disease (CKD), stage V. For this 68 CKD (stage V) patients have been under examination. By assessing physical activity, performance, clinical and laboratory data, an objective assessment of QL have been made. The patient's subjective perception of his illness and social adaptation makes it possible to determine with great accuracy the measures necessary for the medical and social rehabilitation of patients on program and peritoneal dialysis. **Conclusion.** In the terminal stage of CKD, the patients' QL and its individual components deteriorate significantly. According to general health, physical, mental well-being, social functioning, the lowest assessment of QL was found in patients of the hemodialysis group.

**Key words:** chronic kidney disease; quality of life; general health; physical; mental well-being; social functioning.

**Urgency.** Quality of life (QL) is a complex interdisciplinary concept. QL is a health-related notion and an important indicator of the psychological burden of a disease. QL

analysis allows to assess patient's satisfaction with his life under the conditions of a disease and identify the most problematic areas. QL monitoring is one of the standard criteria for the treatment effectiveness assessment, along with the control of somatic parameters, risk assessment and consequences. Ghronic kidney disease, a condition common in different regions of the world [1-4], is no exception. The need to study the health-related quality of life follows from the current principle of modern medicine "to treat the patient, not the disease" [5, 6].

**The aim.** To analyse quality of life components in patients with chronic kidney disease, stage V.

**Materials and methods.** 168 patients who received treatment for CKD, stage V during 2016-2017 were examined.

The patients under examination have been distributed into 3 groups: the 1st group consisted of 60 patients with CKD stage V in the pre-dialysis period;

the 2<sup>nd</sup> group included 60 patients with CKD stage V who were on programmed hemodialysis (HD), and the 3<sup>rd</sup> group numbered 48 patients with CKD stage V who were on peritoneal dialysis.

All the groups were further divided into main (n =30) and control (n=30s in the 1<sup>st</sup> and 2<sup>nd</sup> groups, and n =18 - in the 3<sup>rd</sup>) subgroups. The main subgroups patients got additionally to the basic therapy *febuxostat* at a dose of 40 mg / day for a month. The control subgroups consisted of the patients who did not get *febuxostat*.

### **Results and discussion**

The results of the study of three groups patients with CKD-5 QL showed that the 1 group is of the greatest interest, as, in our opinion, it is a risk group for the disease progression. Therefore, the most thorough research was related to this group.

Restrictions in exercise, nutrition and daily lifestyle in patients of the hemodialysis group have a negative impact on their QL and it is demonstrated in our study. It should be noted that HD patients are most often persons of working age (in our study the average age was 49.2 years, and the duration of the patient's stay on HD did not exceed one year). In other words, even with a relatively short period of stay on HD QL of CKD patients significantly worsens. I. A. Vasilieva et al. in [4] also recorded a decrease of QL total physical component of QL (p <0.0001) with CKD progression. In addition, the authors showed a decrease in physical activity, patient's satisfaction with health and the negative dynamics of all parameters of QL physical component during long-term HD.

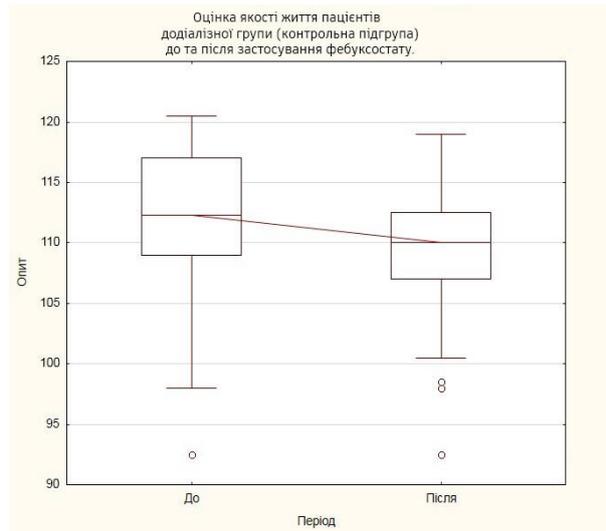
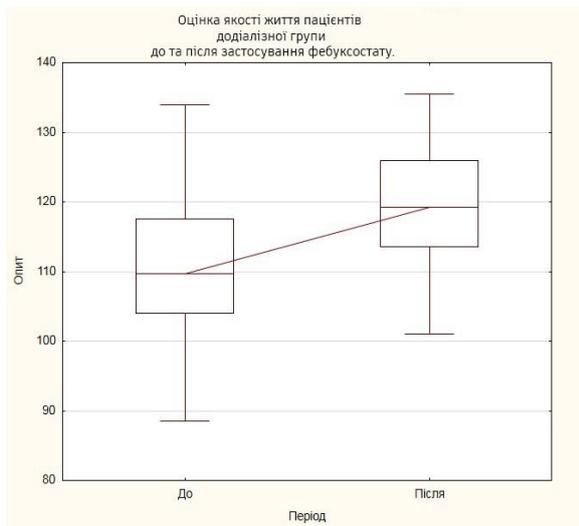


Fig. 1. Assessment of the 1 group patients (predialysis) quality of life

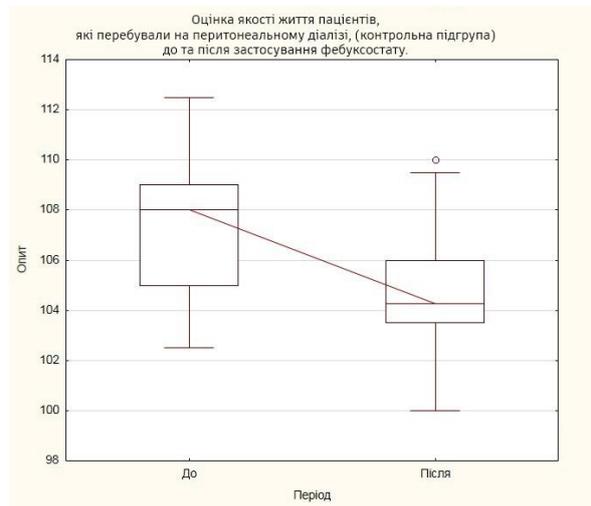
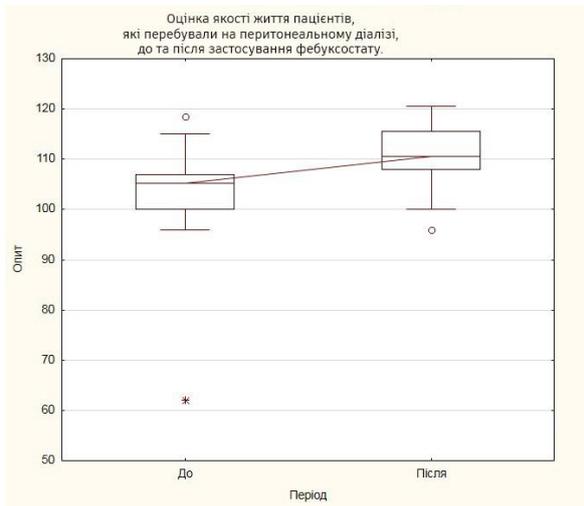


Fig. 2. Assessment of quality of life of the 2 (hemodialysis) group of patients

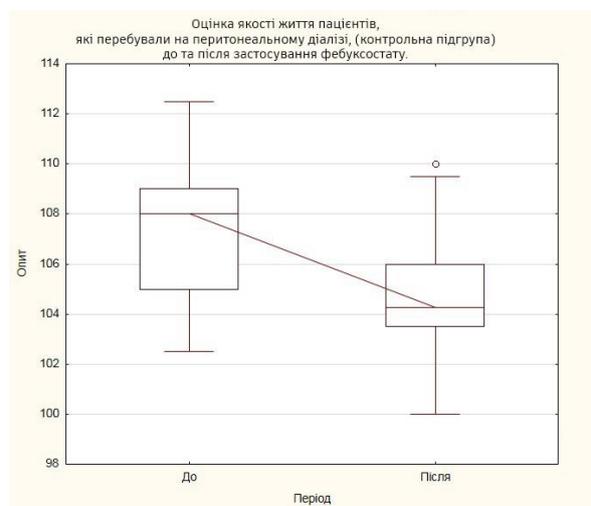
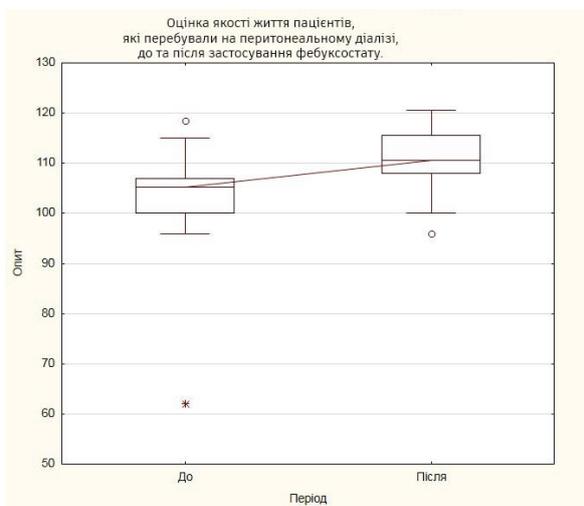


Fig. 3. Assessment of quality of life of the 3 (peritoneal dialysis) group of patients

CKD can impose restrictions on many areas of the patient's life. In stage 5 CKD, QL deficiency may be more pronounced due to progressive complications of end-stage renal disease, restriction of freedom of movement, diet and the need to control fluid intake, narrowing the circle of communication, etc.

The use of modern methods of dialysis therapy allows to increase the life expectancy of once doomed patients by an average of 10-12 years, even without a kidney transplant. CKD in its terminal stage is a typical chronic disease, but unique due to the specifics of treatment. However, end-stage renal disease and HD treatment lead to serious changes in physical, psychological and social spheres. The lifelong nature of therapy, dependence on the device "artificial kidney", the need to spend a lot of time in HD sessions, restrictions on freedom of movement, strict diet, the need for a sharp reduction in fluid intake, disability, lack of communication, change of appearance all these are powerful stress factors which accompany the treatment with HD inclusion.

HD patient QL is not only a reflection of his comorbid pathology. This is a complex phenomenon in which the physical component is supplemented, or even corrected, by psychosocial one. Factors of psychological, social and biological nature in different ways affect the formation of QL of patients who are on HD. The role of individual psychological properties can be leading.

By assessing physical activity, performance, clinical and laboratory data, the doctor can make an objective assessment of QL. The patient's subjective perception of his illness and social adaptation makes it possible to determine with great accuracy the measures necessary for the medical and social rehabilitation of patients on program and peritoneal dialysis.

It is established that in the terminal stage of CKD, the patients' QL and its individual components deteriorate significantly. Moreover, according to such indicators as general health, physical, mental well-being, social functioning, the lowest assessment of QL was found in patients of the HD group.

Thus, QL assessment should be considered as a mandatory component of the analysis of the quality and effectiveness of management of patients with chronic kidney disease at the terminal stage.

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