

Influence of the Factor of Employment on the Quality of Life Indicators of Renal Transplant Recipients

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Abstract In renal transplant recipients (RTR) who gave informed consent to the study, indicators of health-related quality of life (QOL) were studied using a modified SF-36 questionnaire, taking into account the socio-demographic and clinical and laboratory characteristics of patients. The study and evaluation of the QOL indicators of the RTR, taking into account the level of education received and the availability of employment, showed that in the group of RTRs with higher education (30.7%), the QOL indicators on most scales of physical and mental health, as well as the components "general physical health" and "general mental health" significantly exceeded the indicators of the GPT with secondary or secondary specialized education. Significantly high rates were demonstrated both in terms of mental and physical components of QOL in RTRs who continued to work, when compared with unemployed; a higher degree of positive correlation of QOL indicators with the predominantly mental nature of work and the presence of higher professional education was noted. Our conclusions coincide with the conclusions of most other researchers on this issue and clarify the priority of the influence of labor employment and the predominantly mental nature of labor on the QOL of the RTR. Thus, such socio-demographic factors as the presence of higher education, employment and the predominantly mental nature of work act as independent factors that have a positive effect on QOL and the functioning (survival) of the graft, providing better medical and social rehabilitation of RTR.

Keywords Kidney transplant recipients, Quality of life, Education, Employment

1. Introduction

In the Republic of Uzbekistan, the prevalence of end-stage chronic kidney disease (CKD) requiring renal replacement therapy is 149 cases per 1 million population. With a need for kidney transplantation of 30 cases per 1 million population per year (according to referral, taking into account the possibility of only related transplantation), an average of 8-9 transplants per 1 million population per year are performed in the republic.

In recent years, various researchers and international working groups have noted that the study of health-related quality of life (QOL) is an important tool for assessing the effectiveness and quality of care provided by patient-centered RTR [1,2,3]. In the vast majority of international studies of QOL in RTR, the universal health-related quality of life questionnaire SF-36 was used. In studies that studied the impact of socio-demographic parameters on the QOL of the RTR, significantly high rates of both mental and physical components of QOL were found in the RTR who continued their labor activity, compared

with the unemployed, a higher degree of positive correlation of QOL indicators with the predominantly mental nature of work and the presence of higher professional education [4]. An important task of RTR rehabilitation is the ability to return the patient to the previous social interaction. Factors such as education and employment are significant here.

Lilly Kirkeskov et al conducted a systematic review and meta-analysis of 31 studies including 137,742 participants who underwent kidney transplantation between 1966 and 2020 (mean age 46.7 years, 59.8% men). For kidney transplant recipients, the pre-transplant occupancy rate (weighted average) was 36.9% (range: 25-86%) and 38.2% post-transplant (range: 14.2-85%). Employment predictors for RTR were male gender, age, absence of diabetes, and higher educational attainment, as well as pre-transplant employment, living-donor kidney transplantation, and absence of depression [5]. The authors concluded that patients with renal insufficiency receiving renal replacement therapy, including those after kidney transplantation, had low employment and this category of patients, in addition to clinical and medical measures, needs social support to help maintain or continue their employment.

The presence of education implies the opportunity to fully realize oneself in any type of activity, employment, respectively, to provide oneself with the necessary material level. This is especially true for young recipients, because

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These data are in good agreement with the results of the majority of foreign studies, which found a higher subjective assessment of QOL in RTRs who continued to work [5,7,8]. So, Pikalova N.N. notes that employment causes a higher assessment of the QOL of the RTP on the scales of physical and mental health (PF, BP, MH), according to M. Neipp [9] the QOL indicators of working RTR on three scales of the physical component of health (PF, BP, GH) and on three scales of the mental component of health (VT, SF, MH) exceeds the QOL indicators of unemployed RTRs. Employability is a factor influencing not only the survival of recipients and graft [10], but also the quality of life. The predominantly mental nature of labor allows you to save physical resources, which indirectly affects a higher subjective assessment of physical health. Employment, being a vital necessity for every person, makes it possible to more fully realize their abilities, to assert themselves, feeling their usefulness in the family and society.

4. Conclusions

The results of the study show that in the group of RTRs with higher education and employment, the indicators of QOL, on most scales of physical and mental components of health, as well as on the integral indicator of mental health, significantly exceed similar indicators of QOL of RTRs with secondary education and unemployed.

Thus, such socio-demographic factors as the presence of higher education, employment, as well as the predominantly mental nature of work act as independent factors that have a positive effect on QOL and the functioning (survival) of the graft, providing better medical and social rehabilitation of RTR.

REFERENCES

- [1] Wang Y, Hemmelder MH, Bos WJW, Snoep JD, de Vries APJ, Dekker FW, Meuleman Y. Nephrol Dial Mapping health-related quality of life after kidney transplantation by group comparisons: a systematic review. *Transplant.* 2021 Dec 2; 36(12): 2327-2339. doi: 10.1093/ndt/gfab232.
- [2] Verberne WR, Das-Gupta Z, Allegretti AS et al. Development of an international standard set of value-based outcome measures for patients with chronic kidney disease: a report of the International Consortium for Health Outcomes Measurement (ICHOM) CKD Working Group. *Am J Kidney Dis* 2019; 73: 372–384.
- [3] Tong A, Gill J, Budde K et al. Toward establishing core outcome domains for trials in kidney transplantation: report of the Standardized Outcomes in Nephrology-Kidney Transplantation consensus workshops. *Transplantation* 2017; 101: 1887–1896.
- [4] Jordakieva G, Grabovac I, Steiner M, Winnicki W, Zitta S, Stefanac S, Brooks M, Sunder-Plaßmann G, Rosenkranz AR, Godnic-Cvar J. Employment Status and Associations with Workability, Quality of Life and Mental Health after Kidney Transplantation in Austria. *Int J Environ Res Public Health.* 2020 Feb 15; 17(4): 1254. doi: 10.3390/ijerph17041254.
- [5] Kirkeskov, L., Carlsen, R.K., Lund, T. et al. Employment of patients with kidney failure treated with dialysis or kidney transplantation—a systematic review and meta-analysis. *BMC Nephrol* 22, 348 (2021). <https://doi.org/10.1186/s12882-021-02552-2>.
- [6] Aasebo, W. Life situation and quality of life in young adult kidney transplant recipients / W. Aasebo, N. A. Homb-Vesteraas, A. Hartmann [et al.] // *Nephrol. Dial. Transplant.* – 2009. – Vol. 24, № 1. – P. 304–308.
- [7] Niu, S. F. Quality of life of patients having renal replacement therapy / S. F. Niu, I. C. Li // *J. Adv. Nurs.* – 2005. – Vol. 51, № 1. – P. 15–21.
- [8] White, C. Effect of patient coping preferences on quality of life following renal transplantation / C. White, P. Gallagher // *J. Adv. Nurs.* – 2010. – Vol. 66, № 11. – P. 2550–2559.
- [9] Neipp, M. Quality of life in adult transplant recipients more than 15 years after kidney transplantation / M. Neipp, B. Karavul, S. Jackobs [et al.] // *Transplantation.* – 2006. – Vol. 81, № 12. – P. 1640–1644. 137.
- [10] Stolyar A.G. Occupational rehabilitation of patients after kidney transplantation / A. G. Stolyar // *Nephrology and dialysis.* - 2012. - T. 14, No. 3. - S. 181-184.