

Prevalence of Chronic Kidney Disease Among Residents of the City of Kaunas: Initial Data from the biomedical epidemiological study "Chronic diseases and their risk factors in the adult population"

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Background:

Cardiovascular diseases, malignant tumors, type 2 diabetes are the most common chronic non-infectious diseases affecting Lithuanian residents. The biomedical epidemiological study "Chronic diseases and their risk factors in the adult population", was performed in Kaunas city following the methodology of the MONICA study.

Aim:

To assess the prevalence of CKD in a group of Kaunas residents.

Methodology:

The study sample of 6000 individuals aged 25-64 years, stratified by gender and age group, was randomly selected from the Lithuanian Population Register. The 3435 Kaunas residents responded to the invitation to participate in the survey. Renal function was assessed by measuring serum creatinine level and calculating GFR using the CKD-EPI equations (2009 and 2021). The albumin-to-creatinine ratio was assessed in a spot urinalysis. Subjects with GFR <60 ml/min/1.73 m² and/or pathological albuminuria were invited to our hospital for a more detailed nephrological examination.

Results:

Since nephrologists joined the study later, we evaluated the creatinine concentration in the blood serum of 1617 patients and calculated the GFR. GFR < 60 ml/min/1.73 m² was found in 48 (3%) patients. Urinalysis was performed for 828 patients, pathological albumin-to-creatinine ratio (> 3 mg/mmol) was found in 16 (1.9 %) patients.

Conclusion:

Single evaluation of GFR and albumin-to-creatinine ratio revealed low number of patients with suspected CKD. More examinations during longer follow-up period are needed. Detailed results will be presented later.