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END-STAGE CHRONIC KIDNEY DISEASE IN BELARUS: ETIOLOGIC PATTERNS AND GLOBAL COMPARISONS

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Relevance. End Stage Chronic Kidney Disease represents one of the leading causes of morbidity and also presents a large healthcare burden globally. By determining local patterns of etiology we can optimize prevention, diagnosis and planning for treatment resources across Belarus.

Aim: this study aimed to define the predominant causes of ESKD from a single hospital in Minsk, Belarus and compare these with the global findings referenced in the literature.

Materials and methods. The study used medical records of 61 patients with ESKD, who had been treated at the hospital, to determine the etiology of ESKD by way of assigning patients' etiologies into diagnostic categories and thereafter to compare the findings with previously published global distributions.

Results and their discussion. Within the patients that were studied, 21/61 (34.43%) were diagnosed with chronic glomerulonephritis; 11/61 (18.03%) were related to etiology of arterial hypertension; 10/61 (16.39%) were diagnosed as diabetic; 5/61 (8.20%) were classified with hereditary or cystic kidney disease; 5/61 (8.20%) as having an unknown cause or mix of causes; and 9 (14.75%) had other underlying causes. Comparing regional patient records to literature data (diabetes 34-54%, hypertension ~27.2%, chronic glomerulonephritis ~10.3%, chronic tubulointerstitial nephritis ~3.6% and hereditary or cystic ~3.1%), significantly more patients in the Minsk population had etiology of ESKD due to glomerulonephritis and significantly fewer due to diabetes or hypertension. Similar to our study, other regional studies also identified different predominant causes of CKD across several geographical locations. The high rate of glomerulonephritis here means more research is needed to find out why it is so common in Minsk/Belarus compared to other regions.

Conclusions. The etiology of ESKD at this hospital in Minsk, Belarus differs markedly from the global average, with ESKD being predominantly caused by chronic glomerulonephritis. Therefore, it is essential to conduct further etiologic research on CKD at a regional level and develop regionally specific prevention, diagnostic, and treatment strategies.