

The nutrition status fared better in monitored patients: BMI (26 versus 23.3 kg/m<sup>2</sup>) and serum albumin (3.8 versus 3.5 g/dL).

Serum calcium levels were higher (8.8 versus 8.3 mg/dL) and serum iPTH levels were lower (264 versus 331 pg/mL) in monitored patients, suggesting a better control of CKD-MBD, but serum phosphate was higher (5.7 versus 4.64 mg/dL), possibly reflecting a better nutrition status.

The number of hospital admissions, COVID-19 cases and deaths are hard to compare, given the different observation periods that covered different periods and waves of the COVID-19 pandemic. However, hospital admissions and COVID-19 cases seemed more frequent in those that were not monitored.

The 4 year survival rate was significantly higher (59% versus 51%) in the Kaplan–Meier analysis for those monitored through the outpatient. In the multivariate analysis, statistically significant associations with mortality were observed for diabetic and unmonitored patients.

A major bias in our analysis is the difference between the periods of follow-up, which featured different periods of the COVID-19 pandemic.

**CONCLUSION:** This is the first observational analysis on a nephrological patient population from Romania, which was followed through outpatient units until the initiation of RRT.

Patient monitoring before RRTi potentially allows: for a better control of the main complications of CKD (anaemia, CKD-MBD), a better preparation for RRTi (a more frequent use of an AVF) and possibly for an improvement in morbidity and mortality, as suggested by previous studies on the benefits of nephrological monitoring before RRTi [4, 5].

## REFERENCE

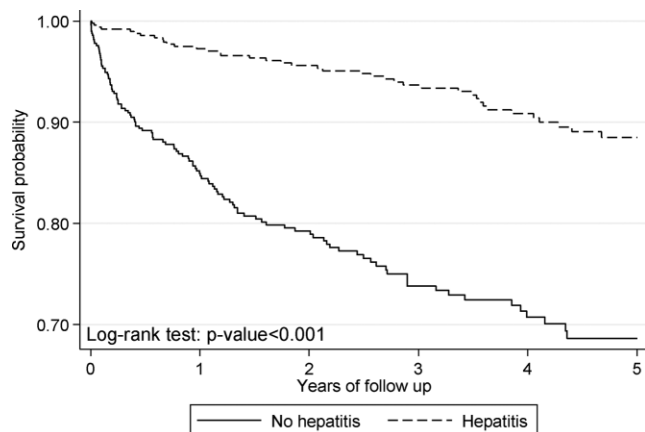
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### MO834 THE EPIDEMIOLOGY OF HEPATITIS B AND C INFECTION IN HEMODIALYSIS PATIENTS IN KAZAKHSTAN

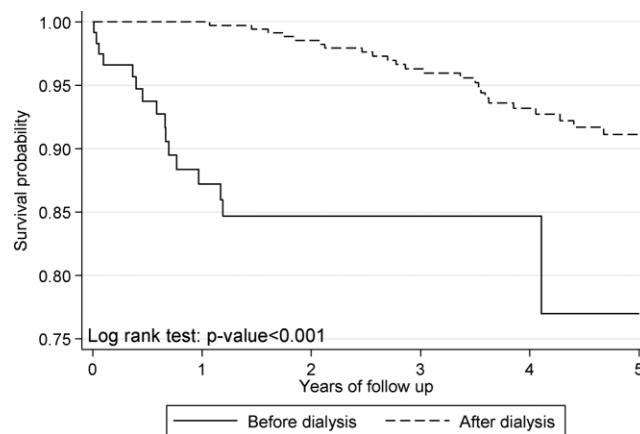
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**BACKGROUND AND AIMS:** Hemodialysis patients are more likely than the general population to contract hepatitis B virus and hepatitis C virus. In Kazakhstan, there is no research on HBV and HCV in this population. The major goal of this study is to find out how common HBV and HCV infections are among hemodialysis patients in Kazakhstan, as well as their risk factors, the impact of hepatitis on the survival of patients with ESRD undergoing hemodialysis survival analysis was conducted using Kaplan–Meier method and Cox proportional hazards regression modelling. Data from the Unified National Electronic Health System (UNEHS) for the period of 2014–9 were used to study the epidemiology of viral hepatitis in patients with ESRD receiving hemodialysis in Kazakhstan.



**FIGURE 1:** Kaplan–Meier survival probability of dialysis patients stratified by hepatitis status.



**FIGURE 2:** Kaplan–Meier survival probability of dialysis patients with hepatitis stratified by time of hepatitis diagnosis relative to dialysis initiation.

**METHOD:** The study population consisted of 9310 patients with ESRD undergoing hemodialysis, whose individual records were obtained from the ‘Registry of Chronic Kidney Disease’ (RCKD) within UNEHS for the period of 2014–8. This cohort was cross-referenced with a cohort of hepatitis patients based on population registry number (RPN) for the purpose of identifying ESRD patients undergoing hemodialysis who had been diagnosed with hepatitis before the end of 2018. Utilizing one-to-one closest neighbor propensity score matching, a control group from among the dialysis patients with no diagnosed hepatitis was derived with sufficient bias reduction based on age, gender, education, region and ethnicity. Crude survival analysis was conducted using Kaplan–Meier method to compare the survivability of dialysis patients based on the presence of hepatitis and relative time of hepatitis diagnosis. Hepatitis diagnoses that took place in the 120 days since dialysis initiation were classified as prior hepatitis. Any later hepatitis diagnoses were considered as infection developed after the start of dialysis. All statistical analyses were conducted using STATA 15 MP/IC Version (STATA Corporation, College Station, TX). The study was approved by the Institutional Review Ethics Committee (NU-IREC 203/29 112 019), with exemption from informed consent.

**RESULTS:** Among the dialysis patients, 500 were diagnosed with hepatitis in 2014–8 or earlier. Propensity score matching resulted in a loss of two cases due to lack of appropriate controls, resulting in a final cohort of 996 patients with 498 cases and 498 controls. Within this cohort, survival analysis was conducted. Figure 1 illustrates the Kaplan–Meier survival probability curves, where a consistently and significantly lower survivability is apparent among dialysis patients without hepatitis, as compared with those with hepatitis. Figure 2 shows the comparison of survival probabilities of patients diagnosed with prior or consequent hepatitis infection, relative to the time of dialysis initiation. A significantly lower survivability is visible among patients with prior hepatitis infection, as compared with those with consequent hepatitis infection. Both graphs are limited to 5 years of follow-up, with dates of patients’ dialysis initiation as the start points of individual follow-up periods. Both graphs contain the *P*-values of log-rank significance tests of the difference between the survival curves.

**CONCLUSION:** Viral hepatitis continues to be a serious complication in patients with HD, with HCV being the most common. Internationally, HCV infection is almost never treated in patients on HD. Our data inform in incident (<120 days) patients undergoing HD, HCV prevalence was around 5.4%. Patients with HBV and HCV on HD survival rate is higher than in patients without hepatitis receiving HD. The key to reducing the incidence of viral hepatitis in patients with HD is the development of an infection control system and interaction between the dialysis center and the hepatology center.

### MO835 PHYSICAL ACTIVITY MEASURED BY Pedometer AND HUMAN ACTIVITY PROFILE IN HEMODIALYSIS PATIENTS

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**BACKGROUND AND AIMS:** Physical inactivity is associated with increased mortality in hemodialysis patients and the level is still unclear. Several studies have