

MORTALITY AND CAUSES OF DEATH AMONG PEOPLE WHO INJECT DRUGS LIVING WITH CHRONIC HEPATITIS C VIRUS INFECTION IN OSLO, NORWAY

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Background

There is a paucity of data on mortality among people who inject drugs (PWID), particularly in those with recent drug use. This study aimed to assess all-cause and liver-related mortality in a population of PWID living with chronic hepatitis C virus (HCV) infection.

Methods

In this retrospective observational study, we included consecutive HCV RNA positive individuals at a low-threshold HCV clinic in Oslo 2013 - 2020. Clinical data was linked to the Norwegian Causes of Death Registry at the end of the study period. Unadjusted mortality rates per 100 person-years (PY) of observation with 95% Poisson confidence intervals were calculated.

Results

- 506 individuals were included for a total observation time of 1773 PY
- Median age 49 years, 28% female, 72% opioid agonist therapy, 77% recent injecting drug use, 15% liver cirrhosis, 23% untreated HCV infection
- 39 participants (8%) were deceased by 31 Dec 2020
- The primary cause of death was drug-related (28%), followed by unknown (18%), liver disease (8%) and infectious diseases (8%)
- All-cause mortality was 2.11/100 PY (1.50-2.88)
- All-cause mortality was significantly lower among those who had received HCV treatment (1.37/100 PY [0.83-2.10]) compared to untreated individuals (4.2/100 PY [2.58-6.54])
- All-cause mortality was highest among those aged 50-59 years (2.6/100 PY [1.57-4.0])
- Liver-related mortality was 0.16/100 PY (0.03-0.47) overall and 1.01/100 PY (0.21-2.96) among those with liver cirrhosis

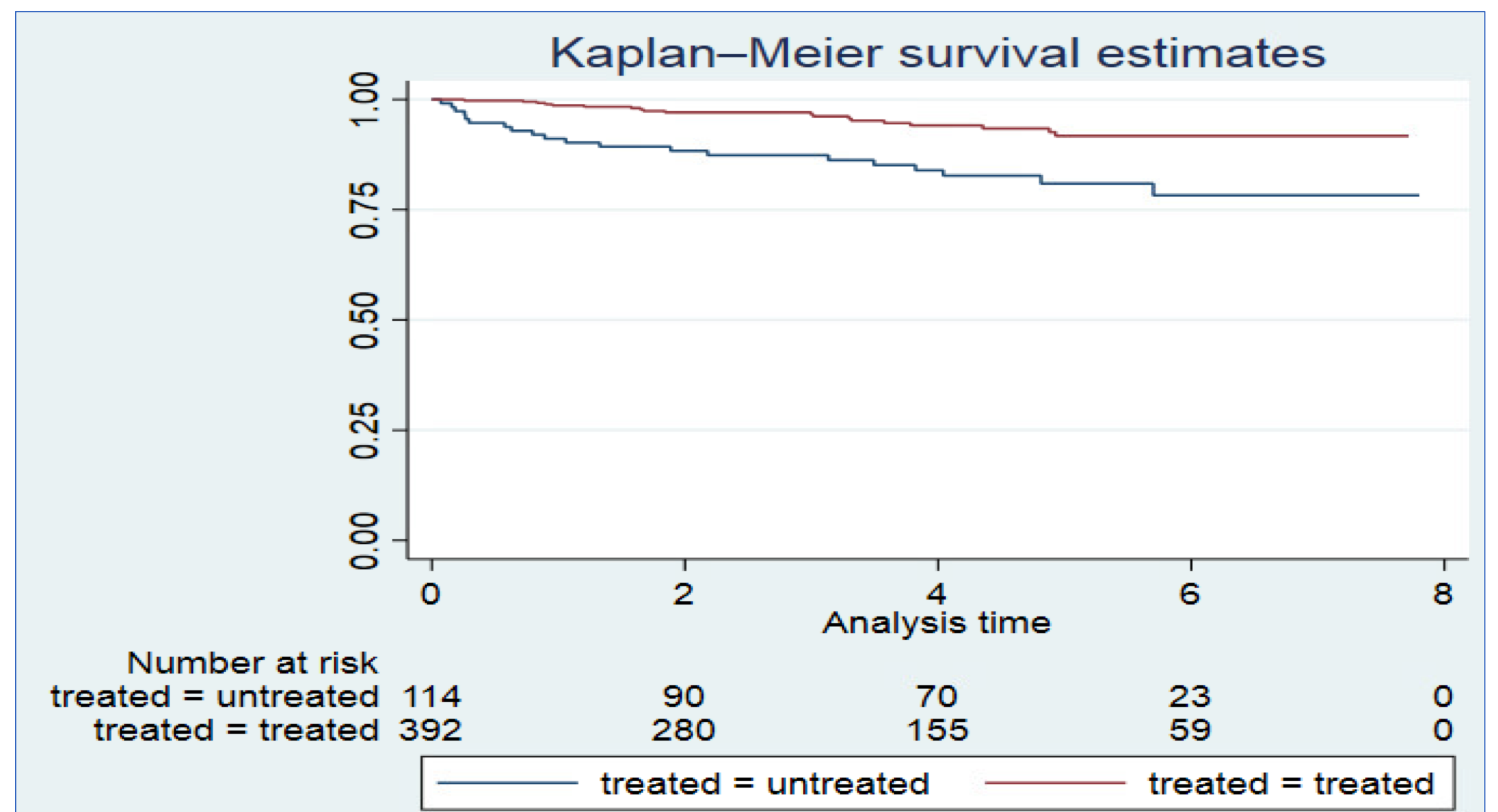


Figure 1A. Kaplan-Meier plot showing overall mortality in the cohort among those treated for chronic HCV infection vs. untreated individuals.

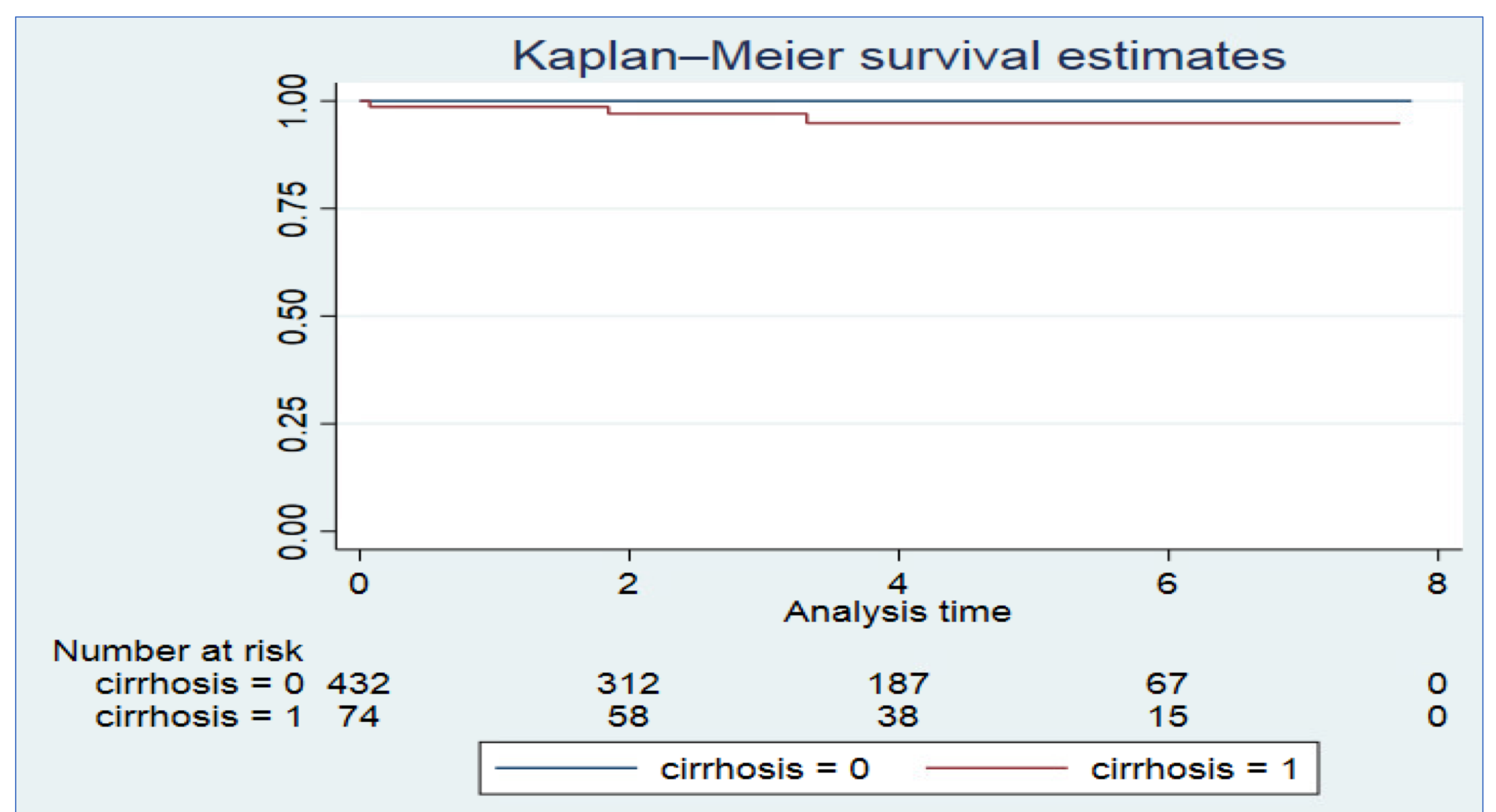


Figure 1B. Kaplan-Meier plot showing liver-related mortality among participants with liver cirrhosis vs. individuals without liver cirrhosis.

Conclusion

This study demonstrated high all-cause mortality among PWID with chronic HCV infection, particularly among untreated individuals. Strategies aimed at reducing mortality in this vulnerable population are essential.