

ASSESSMENT OF HEPATITIS C AT THE MALMÖ NEEDLE EXCHANGE PROGRAM, SWEDEN

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Objectives

The objective of this study was to assess the prevalence and duration of chronic HCV infection (CHC) among participants of the Malmö Needle Exchange Program (MNEP) during 2016. Assessment of liver fibrosis and evaluation of self-perceived health status was studied for a subset of viremic patients.

Background

The MNEP was opened in 1987 and approximately 4800 people who inject drugs (PWID) have registered so far. Around 600 individuals participate annually, approximately 75% are male. The prevalence of HCV at NEP enrolment has remained high (60%), despite a low prevalence of HIV and a decreasing prevalence of HBV exposure. Routine testing at the MNEP has been based on detection of anti-HCV antibodies, but in 2016 testing for HCV viremia was made available to all participants (figure 1). Examination by transient elastography with a mobile Fibrosan was also introduced on-site.

Methods

Results of HCV RNA PCR from anti-HCV positive visitors during 2016 were analyzed in correlation to age, gender and known duration of HCV infection. Data for self-perceived health status collected through 36-Item Short Form Survey and Fibrosan results were included for a subset (n=25) of the study cohort.

Results

Prevalence of chronic infection

The majority (74%) of the anti-HCV positive participants, were classified with chronic HCV infection (figure 2). For 23%, the duration from the first anti-HCV positive sample to viremia in 2016 was > 20 years.

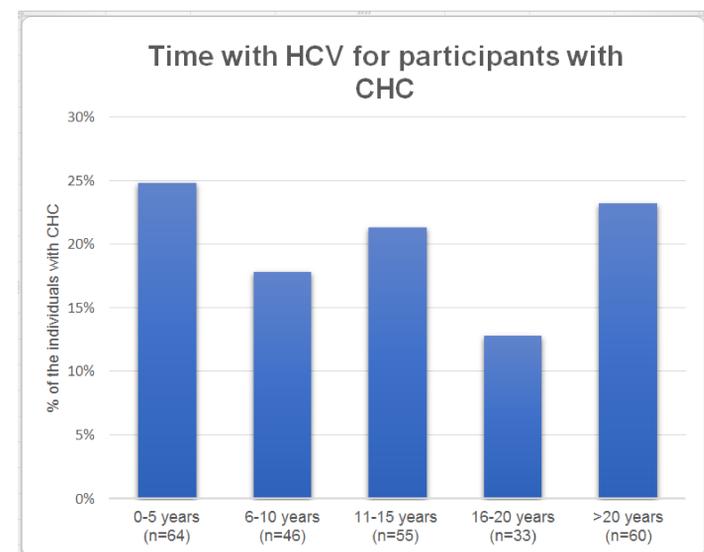


Figure 1. Hepatitis C testing algorithm, implemented at the MNEP in 2016-01-01.

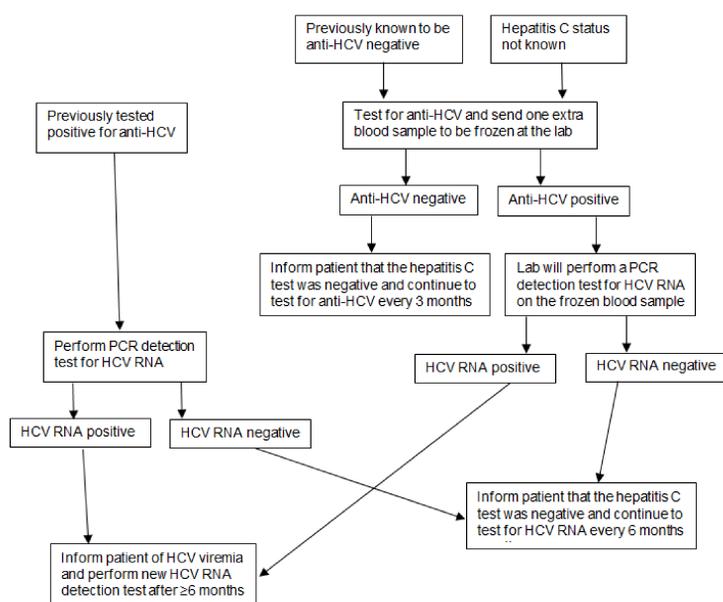
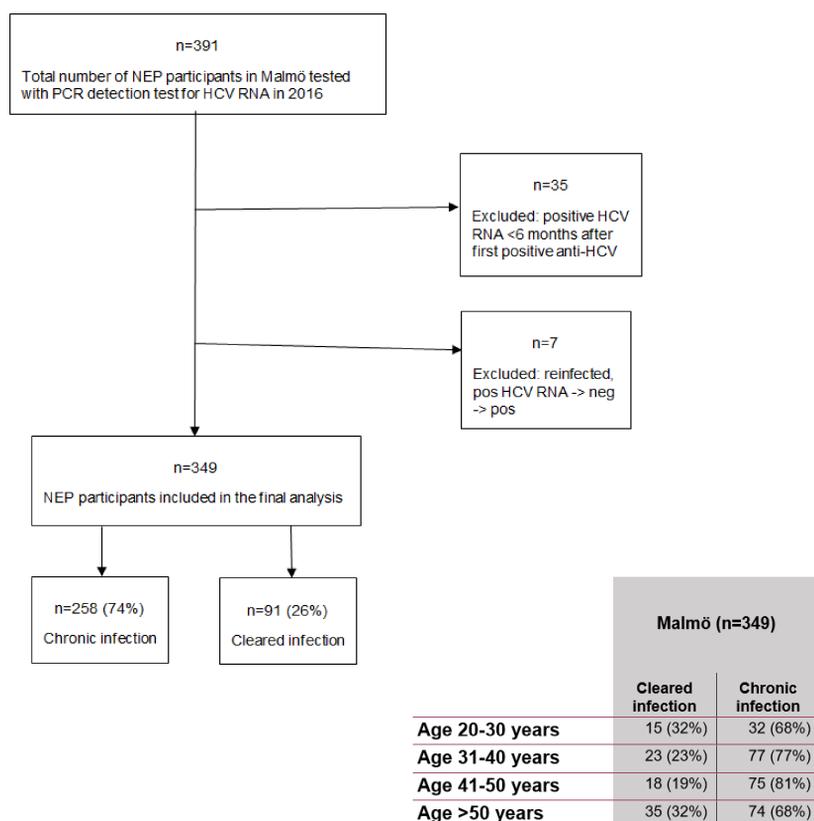


Figure 2. Overview of study cohort.



Subset assessed by Fibrosan and SF-36 (n=25)

The median duration from anti-HCV detection and viremia in 2016 among the 25 NEP participants examined with Fibrosan and answering to the SF-36 form was 20.5 years.

F0-1 (<7.3 kPa)	13 (52%)
F2 (7.3-9.4 kPa)	4 (16%)
F3 (9.5-12.4)	2 (8%)
F4 (>12.5)	6 (24%)

Self-perceived general health status (Q1 of SF-36) was considered excellent, very good or good by 8 (32%) individuals and fair by 11 (44%) and poor by 6 (24%). The SF-36 results did not correlate statistically to the Fibrosan results.

Conclusion

A NEP enables diagnosis of chronic HCV infection, assessment of liver damage and identification of patients in need of HCV treatment. Almost half of the examined subset (12/25) fulfilled the treatment indication criteria according to the current Swedish guidelines (>F2), 24% even with results indicating cirrhosis. The majority (68%) perceived their health as fair-poor, but the self-perceived health status was not correlated to the degree of liver fibrosis, indicating the influence of multiple factors.

Next Step Taken: Linkage to HCV treatment

The MNEP is part of the Dept. of Infectious diseases. All 6 patients with liver cirrhosis (3 with gt 1a, 3 with 1a) were transferred to the outpatient ward at the same department and prescribed HCV treatment by the NEP physician. With the aid and support of the nurses at the outpatient ward 3/6 patients now have successfully completed their treatment. Two are currently undergoing treatment, while treatment has temporarily been postponed due to psychiatric reasons for one person. Patients with F2-3 have also been referred to the ward for treatment.

Malmö Needle Exchange Program (MNEP)

Malmö NEP was initiated by the Department of Infectious Diseases in 1987 to prevent HIV transmission among people who inject drugs (PWID). The NEP provides sterile needles, syringes and paraphernalia, as well as risk reduction counselling, basic medical care and psychosocial support with the aim to prevent blood borne infections and to motivate to drug independency. PWID with age ≥ 18 years and signs of venipuncture may enroll in the NEP and are registered with name and social security number. The NEP is staffed by two nurses, an assistant nurse, a physician specializing in infectious diseases, a counsellor and a midwife. A baseline interview with questions on demographic facts and substance use completed with testing for HIV, hepatitis B (HBV) and hepatitis C (HCV) is conducted at registration and vaccinations for hepatitis A and B are provided. Participants are offered barrier contraceptives, pregnancy screening and treatment for sexually transmitted infections. Referral to detoxification or methadone/buprenorphine maintenance clinics is also offered. Participants are regularly tested for HIV, HBV and HCV infection throughout their participation in the program. All services are free of charge.

