Appendix 4: Prevention and assessment of Hepatitis C (HCV) infection in refugees and migrants

Rationale

The majority of European Union and European Economic Area (EU/EEA) countries have a low prevalence of HCV infection with an average prevalence of ~1% but ranging from 0.1%-5%. An estimated 2 to 6.6 million individuals are estimated to be infected with chronic HCV in the EU/EEA. HCV is the leading cause of chronic liver disease and cirrhosis, and the most common indication for liver transplantation in most European countries. Mortality due to HCC has increased over the past four decades in many countries and is in part due to chronic HCV. Furthermore, chronic HCV has resulted in an enormous economic burden and lost productivity. HCV infected individuals often remain asymptomatic for 30 years or more until liver disease is advanced and is it estimated that ~ 70% of all cases in Europe are undiagnosed. Early detection and treatment can reverse this trend as it therapy eliminates the virus, prevents progression of liver disease, and decreases all-cause mortality.

Objective:

To determine if migrants from HCV intermediate and high prevalence countries be screened and treated for HCV infection.

Key questions

1. What is the prevalence of HCV in migrants from countries with low, intermediate and high prevalence of HCV?
2. What is the clinical effectiveness of screening and early treatment for HCV in terms of decreasing morbidity (SVR, hospitalizations, liver failure, HCC) and associated mortality?
3. What is the frequency of harms due to screening, such as false positive tests?
4. What is the risk of developing liver failure, HCC, liver transplantation if HCV positive?
5. What are the characteristics of screening tests for HCV?
6. What is the efficacy and harms (depression, anemia, rash) of new DDA HCV therapies?
7. What is the cost-effectiveness of screening and treatment of HCV in the general population and in the migrant population? What is the threshold seroprevalence at which it is cost-effective to screen for HCV? What is the certainty of the cost of the intervention?

Population important outcomes

1. Liver associated morbidity due to HCV including liver failure, hepatocellular carcinoma (HCC), liver transplants.
2. Hospitalizations due to HCV
3. Mortality due to HCV.
4. Quality of life
5. Sustained or improved virological response rates (SVR), histological improvements due to treatment.
6. Reduced HCV transmission
7. Harms of screening including- false positives and false negatives with associated anxiety
8. Harms of screening due to over diagnosis/overtreatment
Appendix 4 - Figure 1: Logic model, Hepatitis C

No Screening

Active HCV

HCV Negative

Screen

HCV Migrant population at risk

HCV prevalence in migrants - subgroups, age, sex, immigrant class

?prevalence in source countries

- Test Characteristics
  - False positive
  - False negative
  - Stigma/Discrimination due to positive test

HCV in Migrants

Absolute risk of developing complications (liver failure, HCC, liver transplant) if HCV +

Efficacy

Adverse events

Treat

OUTCOMES

- ↑ Liver failure, HCC, liver transplants
- ↑ Hospitalization
- ↑ Mortality
- SVR/histologic changes
- Transmission
- Health system Costs
- Quality of life

Quality of the Data

NNT/NNH

Patient Preferences

Resource use/Cost Effectiveness

Acceptability

Feasibility

Health Equity

HCV Migrant population at risk

HCV EIA + PCR+

HCV Negative

OUTCOMES

- ↓ Liver failure, HCC, liver transplants
- ↓ Hospitalization
- ↓ Mortality
- ↓ SVR/histologic changes
- ↓ Transmission
- Health system Costs
- Quality of life

Evidence to Decision

EtD

Quality of the Data

NNT/NNH

Patient Preferences

Resource use/ Cost Effectiveness

Acceptability

Feasibility

Health Equity