9% (n = 75) were female). Genotype 3 HCV = 49%, Genotype 1a HCV = 45%. 24% having liver stiffness >9.5%. 98% report a history of injecting drug use. More than 60% of prisoners assessed to date have been eligible for treatment within the program based on sentence duration. 20% of prisoners have required hepatologist review. From March 1st – 31st October 2016, 356 prisoners have been commenced on DAAs – sofosbuvir + ledipasvir (43%), sofosbuvir + daclatasvir (52%), other (5%). The SVR12 results for all prisoners completing treatment before 31st December 2016 will be presented at the conference. One case of documented reinfection has been observed to date.

Conclusions: Treatment for HCV can be delivered safely, effectively and in high numbers in the prison setting using an innovative nurse-led model of care. Prisoner uptake and treatment response rates have been excellent. The prison setting provides an excellent opportunity to engage and treat high risk individuals, and should be part of public health platforms that support the elimination of HCV.

PS-127

High BMI in late adolescence predicts future severe liver disease: a national, population-based cohort study in 1.2 million men

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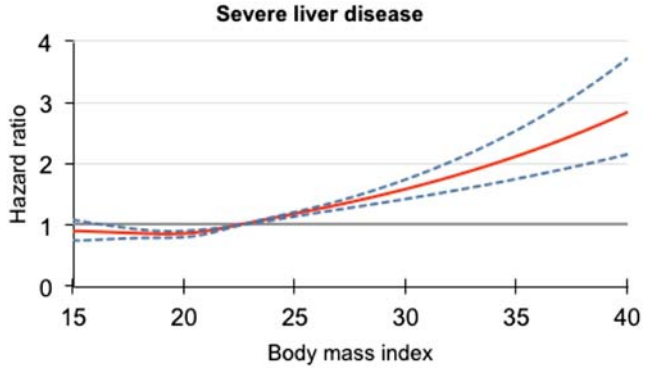
Background and Aims: A high body mass index (BMI) is associated with an increased long-term risk for severe liver disease. It is unclear if this risk differs across BMI categories, and if the association is partially attributed to development of type 2 diabetes mellitus (T2DM).

Methods: We used register-data from more than 1.2 million Swedish men enlisted for conscription 1969–1996 with complete baseline data on BMI and covariates. Data regarding new events of liver diseases and T2DM during follow-up were obtained by record-linkage of population-based registers. We used Cox regression to estimate adjusted hazard ratios (HR) for future inpatient care or mortality in severe liver disease and incidence of hepatocellular carcinoma (HCC) across BMI categories, using BMI of 18.5–22.5 kg/m^2 as reference.

Results: During a follow-up of more than 34 million person-years, 5,281 cases of severe liver disease including 251 cases of HCC were identified. An association with severe liver disease was found for overweight (HR 1.49, 95% CI 1.35–1.64) and for obese men (HR 2.17, 95% CI 1.82–2.59). Men with obesity and T2DM had a higher risk of severe liver disease (HR 4.64, 95% CI 3.21–6.72) than men with obesity free of T2DM (HR 1.86, 95% CI 1.47–2.37). The risk of HCC increased with a higher BMI, and was highest in men with obesity (HR 3.59, 95% CI 1.85–6.99).



Conclusions: A high BMI in late adolescent men was associated with an increased risk of future severe liver disease, including HCC. The risk of severe liver disease was highest in men with T2DM and obesity.

PS-128

Treatment cascade of hepatitis B and C in general, migrant and Roma populations

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Background and Aims: WHO targets for eliminating viral hepatitis include diagnosis of 90% of chronic hepatitis infections and treatment of 80% of eligible cases by 2030. Accurate estimates of diagnosis and treatment rates for chronic hepatitis B (HBV) and C (HCV) infections are lacking, especially among vulnerable populations. We estimated the prevalence of HBV and HCV and the Cascade of treatment in the general, migrant and Roma adult populations in Greece.

Methods: Data were derived from Hprolipsis, a Greek Health Examination Survey (2013–2015). Multistage stratified random and non-probability multistage quota sampling were applied in the general population and migrants/Roma populations, respectively. Trained personnel made home (general population) or community (Roma/migrants) visits. HBsAg and anti-HCV tests were performed in the collected blood samples. General population prevalence rates were age and sex standardised and corrected for study design.

Results: 4176, 508 and 519 individuals from the general, migrant and Roma populations were interviewed and had a blood test result. The estimated prevalence (95% CI) of HBV was 1.8% (1.4, 2.3), 7.3% (5.3, 10.0) and 7.5% (5.5, 10.1) for the general population, migrants and Roma respectively (Table). The corresponding estimates for HCV were 0.8% (0.5, 1.2), 3.0% (1.8, 4.9) and 1.3% (0.6, 2.8). The prevalence of HBV and HCV differed by age, country of origin (migrants) and type of residence (Roma). Table. Basic characteristics, prevalence, awareness and treatment proportions of HBV/HCV for the general, migrant and Roma adult populations in Greece.

	General population (N = 4176)*	Migrants (N = 508)	Roma (N = 523)
Male [N(%)]	1810 (49.4)	273 (53.7)	243 (46.5)
Age [Mean (SD)] years	49.4 (17.9)	38.6 (12.0)	37.8 (15.0)
HBsAg positive [N(%)]	71 (1.8)	37 (7.3)	39 (7.5)
Aware of HBV [N(%)]	21 (32.4)	15 (40.5)	9 (23.1)
Treated for HBV [N(%)]	4 (6.1)	4 (10.8)	2 (5.1)
Anti-HCV positive [N(%)]	31 (0.8)	15 (3.0)	7 (1.3)
Aware of HCV [N(%)]	8 (26.7)	5 (33.3)	1 (14.3)
Treated for HCV [N(%)]	3 (13.7)	1 (6.7)	0 (0.0)

*Weighted percentages for the general population.

Conclusions: Prevalence of HCV and HBV is relatively low in the general population but higher in the vulnerable populations. The

undiagnosed fraction was 68% (HBV) and 74% (HCV) in the general population and higher in the vulnerable populations. Of those with diagnosed infections, only few had been treated. Efforts to increase access to diagnostic testing as well as to recognize and reduce barriers to treatment should be intensified, in particular in vulnerable populations.

PS-129

Treatment as prevention for hepatitis C in Iceland (TRAP HEP C). A real-world experience from a nationwide elimination program using direct acting antiviral agents

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Background and Aims: Hepatitis C virus (HCV) infection is associated with significant morbidity and mortality world-wide. Iceland, with a population of 330,000 has a HCV seroprevalence of 0.3% (estimated total of 800–1000 patients). The most common genotypes are 1 (45%) and 3a (50%). At the current rate of treatment uptake the effect on prevalence and long term burden of the disease will be limited. Direct-acting antiviral agents (DAAs) have made treatment on a larger scale feasible which may reduce spread and near-eliminate HCV in communities.
Methods: A nationwide treatment effort was launched in Iceland in January 2016, where all patients infected with HCV are offered treatment with DAAs according to national guidelines with SOF/LDV+/−RBV through October 2016 and SOF/VEL+/−RBV thereafter. People with recent injection drug use (IDU), prisoners and patients with advanced liver disease are prioritized for treatment. People who inject drugs receive additional support to facilitate compliance. Various strategies are employed to enhance surveillance and strengthen harm reduction. We aim to initiate treatment for up to 20% of the total HCV-infected population every 4 months so that every patient in Iceland will be treated within a 36 month period (end-2018). The goal of the program is a reduction in domestic transmission of HCV.
Results: On November 11th, nine months after launching the nationwide program 479 patients have been evaluated, or 48–60% of the estimated total patient population. The mean age was 41 years (range, 17–70 years), with 323 males and 161 females. The reported main route of infection was IDU (90%). At the time of evaluation, 38% of patients had a history of recent (within 6 months) IDU. Treatment with DAAs has been initiated in 406 patients (41–51% of total) and 292 (29–37%) have finished treatment. Results of HCV RNA at 12 weeks are available for 188 of whom 180 were negative, SVR12 96%. Nearly all (>90%) infected incarcerated individuals, HCV-HIV co-infected and known cirrhotic patients have been initiated on DAA treatment. So far, 22 (5%) patients have discontinued treatment and 2 (0.5%) are lost to follow-up.
Conclusions: TRAP HEP C in Iceland has been well received by patients and the community. Our experience indicates that by a well organized nationwide approach a relatively large proportion of infected patients in the community, including people actively injecting drugs, can be initiated on treatment in a short period of time.

PS-130

The PREVAIL Study: intensive models of HCV care for people who inject drugs

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Background and Aims: People who inject drugs (PWID) are the main drivers of hepatitis C virus (HCV) infection yet many PWID are denied HCV treatment, even if they are in opiate agonist treatment (OAT). While data suggest that PWID, including those actively using drugs, can be effectively treated for HCV, optimal models of care for promoting sustained virologic response (SVR) in PWID have not been developed.
Methods: PREVAIL is a randomized controlled trial that enrolled HCV-infected (genotype 1) PWID maintained on OAT, including those actively using drugs. Participants were randomized to one of three models of HCV care delivered on-site in an OAT program: (1) directly observed treatment (DOT), (2) group medical visit (Group), or (3) individual treatment as usual (TAU). Participants received DAA regimens according to AASLD guidelines: telaprevir/pegylated interferon/ribavirin (TVR/PEG/RBV), sofosbuvir/ribavirin (SOF/RBV), sofosbuvir/pegylated interferon/ribavirin (SOF/PEG/RBV), sofosbuvir/simeprevir (SOF/SMV), or sofosbuvir/ledipasvir (SOF/LDV); duration of treatment ranged from 8 to 24 weeks. The primary outcome was SVR12 and secondary outcomes were end of treatment response (ETR) and SVR4. Drug use (opiates, cocaine, and benzodiazepines) was assessed through urine screens. Differences by arm were tested by a Fisher exact test, and the 95% confidence interval (CI) for virological outcomes were determined by the Clopper-Pearson method.
Results: 158 prospective trial participants were enrolled and randomized, and 150 initiated treatment: DOT (n = 51), Group (n = 48), and TAU (n = 51). Participant characteristics include: mean age 51.3 (±10.6); male, 64%; Latino, 56%; African-American, 27%; cirrhotic, 27%; HIV-infected, 14%; and depression, 25%. 65% used illicit drugs within 6 months of treatment and 47% had positive baseline urine screens. Overall, 96% (95% CI 92–99%; 144/150) achieved ETR and 94% (95% CI 89–97%; 141/150) achieved SVR4: TVR/PEG/RBV (n = 3, SVR4 = 100%); SOF/RBV (n = 17, SVR4 = 88%); SOF/PEG/RBV (n = 15, SVR4 = 93%); SOF/SMV (n = 11, SVR4 = 100%); and SOF/LDV (n = 104, SVR4 = 94%). SVR12 for the 1st 136 participants was 93% (95% CI 88–97%; 127/136) with no significant differences among arms (p = 0.19): DOT 98% (45/46), Group 93% (42/45), and TAU 89% (40/45).
Conclusions: HCV care delivered on-site in an OAT program resulted in high rates of SVR among PWID despite ongoing drug use. Intensive models of care (DOT and Group) were more likely to result in SVR than TAU, but these differences were not significant.

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HIV/HCV-coinfected cirrhotic patients are no longer at higher risk of hepatocellular carcinoma or end-stage liver disease as compared to HCV-monoinfected patients (ANRS CO12 CirVir and ANRS CO13 HEPAVIH cohorts)

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