Abstract Number 85
FALL IN HCV INCIDENCE IN HIV+ MSM IN LONDON FOLLOWING WIDER ACCESS TO DAA THERAPY
Lucy J. Garvey1, Colette J. Smith2, Christof Stingone3, Indrajit Ghosh4, Alison Rodger2, Lakshmi Jain4, Chandni Sood1, Tabitha Mahungu3, Carolyn Freeman1, Subathira Dakshina4, Filippo Ferro3, Laura Waters4, Ashley Brown1, Graham S. Cooke5, Sanjay Bhagani3

Background:
Modelling of the London HCV epidemic in HIV+ MSM suggested early access to DAA treatment plus risk-behaviour modification may reduce incidence. With high rates of linkage to care and treatment access, micro-elimination of HCV within HIV+ MSM may be realistic, ahead of 2030 WHO targets. Data from European cohorts have shown a reduction in HCV incidence amongst HIV+ MSM. We examine the effect of HCV treatment access (in the pre- and post-DAA era) and risk-behaviour modification upon incidence of HCV first and re-infections in HIV+ MSM in three large London clinics.

Methods:
A retrospective cohort study was conducted at 3 London HIV clinics (Royal Free and St Mary's Hospitals, Mortimer Market) between July 2013 and June 2018. During each 6-month period the following data were collected [1] number of first acute HCV diagnoses [2] number of subsequent acute HCV diagnoses (re-infections) [3] denominator of HIV+MSM under active follow up [4] number of PEG IFN/RBV or DAA-based HCV treatments for acute/early HCV (<12m since diagnosis) [5] number of PEG IFN/RBV or DAA-based HCV therapies for chronic HCV (>12m since diagnosis). Incidence rates (acute HCV diagnoses/ HIV+ MSM 1000 PYFU) and re-infection rates (re-infections/all incident infections x 100) were calculated for each time-period.

Results:
293 acute HCV infections were identified (246 first infections and 47 re-infections). DAA treatment became widely available in late 2015. All centres adopted risk-reduction behaviour intervention with counselling/psychology. Incidence of first HCV episode peaked at 17.72/1000 HIV+MSM PYFU [95%CI 12.81–22.64] in 2015. Rates fell to 4.64 [95%CI 2.53–7.78] by 2018. Re-infection rates increased from 9% to 16% during the study period. Supervised early HCV treatments (<12m of diagnosis) increased from 22% to 61% between 2013 and 2018. Supervised chronic HCV/HIV treatment rates increased from 2.8/month in pre-DAA era to 15.6/month in post-DAA era. Time from diagnosis to starting any HCV treatment reduced from average of 40.9 months (2013) to 3.1 months (2018).

Conclusion:
There has been a 74% reduction in incidence of first HCV infection and 62% reduction of overall HCV incidence in HIV+MSM since the epidemic peak of 2015 which coincides with wider access to DAA-based therapy across London. However re-infection rates remain high and maybe increasing. Further interventions to reduce ongoing transmission including access to treatment for reinfection are likely needed if micro-elimination is to be achieved.