

ANALYSIS OF AN EPIDEMIOLOGICAL MODEL FOR THE TREATMENT OF HEPATITIS C VIRUS (HCV) IN CO-INFECTED HIV/HCV DRUG ADDICTIONS VIA PARENTERAL

M.T. BRIEVA HERRERO¹, I. REYES TORRES¹, M. SÁEZ-TORRES DE VICENTE², P. LÓPEZ LÓPEZ¹, M. FRIAS CASAS¹, A. RIVERO JUAREZ¹.
¹INSTITUTO MAIMÓNIDES DE INVESTIGACIÓN BIOMÉDICA DE CORDOBA IMIBIC, CLINICAL VIROLOGY AND ZOOZOSIS RESEARCH GROUP, CORDOBA, SPAIN.
²HOSPITAL UNIVERITARIO REINA SOFIA, HOSPITAL PHARMACIST, CORDOBA, SPAIN.

Background

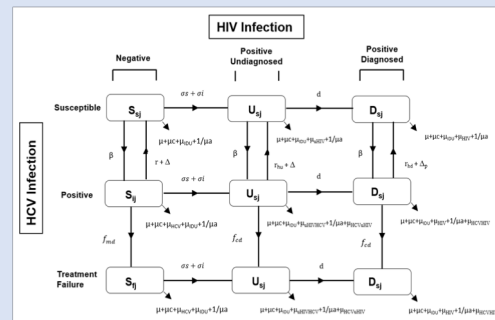
Scale-up of treatment/HCV is occurring, the majority with a history of injecting

Purpose

We assess the implications for achieving the World Health Organization (WHO) elimination target (80% reduction from 2015-2030) among-infected(HIV+) people who inject drugs (PWID) and all PWID, using dynamic modeling.

Material and methods

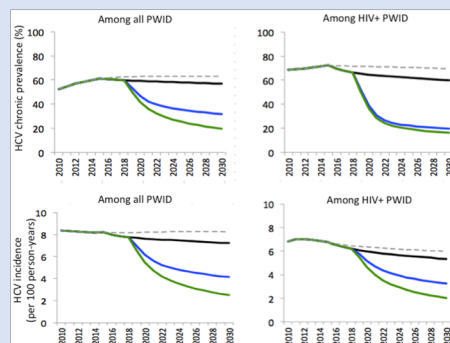
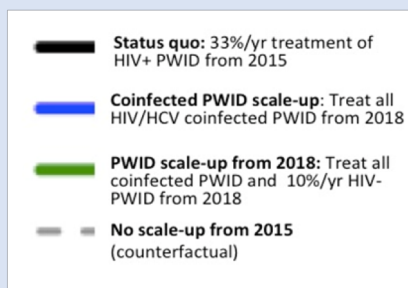
- > A joint HIV/PWID was based on published data and the HERACLES cohort (prospective cohort of HCV in care from 2015 to 2017).
- > The stratified by HIV stage, and PWID status (young PWID [<10 years injecting], old PWID [>10 years injecting], ex PWID). We simulate: %/60% chronic and 20%/40% among PWID injecting for <10 years and >10 years, respectively, 54% chronic+ ever-PWID (PWID + ex-PWID).
- > We assumed among diagnosed-PWID of 10.5%/year from 2004-2014, and 33%/year from 2015 (from HERACLES).
- > We project the impact of current, and scaled-up treatment (among+ PWID or all PWID) from 2018 on prevalence/incidence among+ PWID and all PWID.



Results

We project that 28% and 32% of+ PWID and+ ex-PWID, respectively, were HCV in 2015. Current could reduce the number of diagnosed by 75% from 2015-2030. However, this would only reduce incidence by a relative 25% and 16% among+ PWID and all PWID, respectively.

If all were diagnosed and treated annually from 2018, this could reduce chronic by 74% among+ PWID by 2030, but only halve incidence. Greater impact could be achieved through scaling-up treatment all PWID.



Conclusion

HCV among+ PWID will not be achieved by treating alone; efforts should focus on and both mono-infected PWID.

