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 HERREDO1, I. REYES TORRES1, M. SÁEZ TORRES DE VICENTE2, P. LÓPEZ LÓPEZ1, M. FRIAS CASAS1, A. RIVERO JUAREZ1.
1INSTITUTO MAIMÓNIDES DE INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA IMIBIC, CLINICAL VIROLOGY AND ZOONOSIS RESEARCH GROUP, CÓRDOBA, SPAIN.
2HOSPITAL UNIVERSITARIO REINA SOFIA, HOSPITAL PHARMACIST, CÓRDOBA, SPAIN.

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 HIV 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.