
LETTER TO EDITOR

HEPATITIS C VIRUS SCREENING AND LINKAGE TO CARE IN MENTAL HEALTH UNITS: AN OPPORTUNITY FOR HCV ELIMINATION.

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Dear editor,

Hepatitis C Virus (HCV) affects approximately 71 million people infected, with 1.75 million people being diagnosed each year, according to the World Health Organization (WHO) estimates¹. HCV infection leads to cirrhosis, hepatocellular carcinoma (HCC), liver failure and death². HCV treatment has changed from difficult to adhere injected interferon regimens, with low cure rates and extensive side-effects, to short (8 to 12 weeks) all oral direct-acting antiviral agents (DAAs), which are highly efficacious and very limited side effects³. DAAs combinations that are currently recommended as first-line treatment of HCV-infected patients by international guidelines⁴ reach sustained virological response (SVR) rates >95% for all HCV genotypes. For those patients failing first-line therapy, retreatment is possible, and again >95% SVR rates are also reached. Achieving SVR in hepatitis C treatment means that a patient is cured from hepatitis C; as immune response against hepatitis C is not protective, reinfection in patients with risk behaviours to be exposed to

HCV may occur.

World-wide vaccination programmes are the only way to attain HCV eradication. Unfortunately, due to virological heterogeneity of HCV we are far away from a vaccine against all HCV variants. However, treatment as prevention, this is, treatment with highly efficacious drugs and with little or no side effects makes it feasible to reach HCV elimination. WHO has set to diagnose 90% of the patients infected by HCV and 90% of them treated as elimination goals. Reaching these targets will attain a 65% reduction in HCV associated mortality. WHO has proposed 2030 as the year to achieve HCV elimination.

Non restricted access to HCV treatment is key for HCV elimination. While some countries (Iceland, Spain, Italy,.....) understood this very soon, and are now on track to elimination⁵, diagnosis is becoming now key for elimination. Modelling⁶ has shown that elimination may not be possible without appropriate health policies to diagnose all HCV infected patients. To avoid diagnosis burnout there is a need to prioritize HCV diagnosis, focusing first, but not only, on those populations with a higher prevalence of HCV infection. This new approach leads to the HCV "micro-elimination" concept⁷, proposing to achieve WHO elimination goals locally in special "micro" populations.

There are various risk factors for HCV infection: intravenous/intranasal substance use, patients receiving blood donations prior to 1990, patients on haemodialysis, new-borns from HCV infected mothers, HIV or HBV infected patients, sex with blood exposure (anal intercourse and other practices -fisting, slamming-), baby boomers, persons with HCV infected sexual partners.

HCV treatment is only needed for patients with active HCV infection, which means that only patients in whom the virus is detected in blood (HCV viremia) will be candidates for treatment. Accurate diagnostic protocols including reflex testing (antibody testing and if positive viral load testing in the same sample) is mandatory for effective linkage to care of the patients. In addition, an effective communication system with the physician responsible for HCV treatment is also a key to avoid losses and to effectively achieve micro-elimination.

Patients attending mental health units represent a unique opportunity for HCV micro-elimination⁸. Patients with mental disorders are prone to risk situations for the acquisition of infections, including HCV. In fact, people with certain psychiatric diseases, for example schizophrenia⁸, are more likely to establish risk relationships and there is an important comorbidity with substance use. There is strong evidence of an increased risk of HCV infection with

an odds ratio of 1.72 compared to the general population, which implies almost double the risk patients with a serious mental illness⁹. As an example, in Spain, HCV infection in the general population is 0.85%, so extrapolating the results, so we can expect that approximately 2% of patients with mental disorders could be infected with HCV. Treatment in these patients is as efficacious as in the general population; in addition, drug-drug interactions between DAAs and the drugs usually used in these patients are, if they happen, easy to manage¹⁰.

In summary, as mental health units are for some patients the only contact with the health system, screening of hepatitis C, with appropriate diagnostic protocols that include reflex testing for rapid active infection, together with an active communication with HCV treating units represent a unique opportunity for HCV micro-elimination. In order to attain HCV elimination, specific programmes to promote HCV screening and linkage to care among professionals taking care of mental health disorders should be mandatory.

Disclosure Statement

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