High prevalence and incidence rates contrast starkly with low detection and treatment uptake rates and that makes the hepatitis C epidemic among people who inject drugs (PWID) a serious public health issue. In expectation of new interferon (IFN)-free hepatitis C treatment regimens, Martin et al. present, in this issue of HEPATOLOGY, mathematical model calculations on an approach that is already well documented in the field of human immunodeficiency virus (HIV): treatment as prevention.\(^1\) Because future treatment regimens will be much better tolerated and even more efficient than current IFN-based dual or triple therapies, they have the potential of being widely used to treat PWID. Taking this into account, the model described in this study suggests that scaling up treatment uptake rates for people who inject drugs with the new direct-acting antivirals (DAAs) has the potential to, over time, significantly reduce the prevalence of chronic hepatitis C in this, so far, heavily underserved population. However, to increase treatment uptake rates in this major at-risk group requires drastic changes on several levels as well as the breaking of some taboos.

Martin et al. calculated the necessary scale-up rates among PWID to half the prevalence of hepatitis C virus (HCV) infections within the next 15 years.\(^1\) Their mathematical model has been applied to a variety of settings and takes into account different levels of baseline prevalence and treatment uptake as well as the varying levels of primary prevention measures, such as the provision of sterile injection equipment and opioid substitution therapy. In settings with a high baseline chronic prevalence, such as in Melbourne, Australia (50%) and Vancouver, Canada (65%), the use of future DAAs over the next 15 years would, at the current treatment rates, only have a very low effect on prevalence (less than 2%). A 13- to 15-fold increase of treatment uptake would be needed to half the prevalence in these settings. With a chronic baseline prevalence of 25%, such as in Edinburgh, Scotland, a mere 3-fold increase in treatment provision could reduce chronic HCV prevalence to less than 7%. As discussed by the researchers, various programs have proven that such annual numbers of treatment uptake rates are, in fact, feasible. However, from a more global point of view, such programs remain isolated examples of best practice in their respective regions and have, so far, had no relevant effect on the epidemic.

Many Western countries show similar hepatitis C prevalence levels to the ones in Melbourne and Vancouver,\(^2\) with similarly low levels of treatment uptake rates, but with reasonably high coverage of primary prevention measures. To achieve nationwide treatment uptake rates among PWID that relevantly affect prevalence, groundbreaking changes in the currently inefficient HCV care system for this vulnerable population are urgently needed.

First, and easiest to achieve: treating patients irrespective of their liver fibrosis stage, which is, in effect, treatment as primary prevention. Today, in many countries, fibrosis stage of at least F2 is a prerequisite to obtain antiviral treatment.

Second, a paradigm shift concerning reinfection must be made: Risk of reinfection is one of the most mentioned reasons why PWID are not treated. Looking closely at the model of Martin et al., risk of reinfection actually becomes an indication for treatment because people at risk of reinfection are also the most likely to further spread the virus. From a public health perspective, treating those at high risk of reinfection should be a priority and, if indicated, they should be treated repeatedly. Similar model calculations for dual-combination therapies with pegylated IFN and ribavirin have shown that this is a cost-effective approach and, in
many settings, even more cost-effective than treating patients without intravenous drug use.\(^3\)

Third, a relevant scale-up of treatment among PWID is impossible without massively reducing the barriers to hepatitis care. Low awareness, as well as low hepatitis and addiction literacy, among healthcare professionals and discrimination and stigmatization of drug users are all major barriers for PWID to access HCV care.\(^4\) Many of those barriers are a result of the criminalization of drug use,\(^5\) one of the taboos that need to be broken. The global war on drugs of today is hindering effective public health measures for PWID and therefore fueling the HCV and HIV epidemic in this population. Decriminalizing drug use would therefore be an important step toward eliminating hepatitis C (Fig. 1).

As discussed by Martin et al.,\(^1\) another taboo that has to be looked at is the highly limited access to HCV standards of care all over the world resulting from financial restrictions. The cost of today's standard-of-care HCV treatment is prohibitively expensive for middle- and low-income countries. Even in Western European countries, access to triple therapies is restricted because of the exorbitant cost of the medication. Prescriptions of IFN-free HCV treatment regimens at similarly high prices will inevitably be restricted by health authorities. High tolerability of those regimens will bring the potential of high applicability. But, their short- to medium-term extortionate cost will exceed even the healthcare budgets of rich countries. Offering hepatitis C treatment at affordable prices is crucial in the fight of the global hepatitis C crisis.

If IFN-free treatment regimens were to be made available at reasonable prices (i.e. only at only a fraction of today's cost), the number of patients eligible for treatment would rise accordingly. Millions of HCV patients in low- and middle-income countries could receive adequate treatment. Though it makes no difference to the pharmaceutical companies whether they get their money from a limited number of treatments at a very high cost or whether they make their profit from a much wider use globally at affordable prices, for the global burden of the disease, this could make all the difference.

If pharmaceutical companies do not take decisive steps to offer their medication at affordable prices, governments all over the world will face an HCV-induced public health emergency and will be permitted by the World Trade Organization Agreement on "Trade Related Aspects of Intellectual Property Rights" to use patent flexibilities. These flexibilities include the issue of compulsory licenses for the import or production of cheaper, generic versions of these urgently needed drugs, despite them still being under patent. This has already been successfully done to improve global access to HIV medication.\(^5\)

The excitement about the new, highly efficient, and well-tolerated treatment will reduce some of the current barriers to hepatitis C care. Testing rates and hepatitis C awareness will increase with the arrival and promotion of the new medication. But, to achieve the required treatment uptake rates to have any relevant effect on prevalence, as calculated by Martin et al.,\(^1\) drastic actions, coordinated by comprehensive national and regional plans, are now needed in the fight against hepatitis C.

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