



## EDITORIAL

## Public health interventions for reducing HIV, hepatitis B and hepatitis C infections in people who inject drugs

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Injecting drug use is an important public health issue worldwide causing morbidity due to the consequences of haematological infection and transmission of blood-borne viruses (BBV).<sup>1</sup> Human immunodeficiency virus (HIV), hepatitis B (HBV) and hepatitis C (HCV) infections are all transmitted by sharing contaminated injecting equipment. HIV causes morbidity and mortality by severe immunosuppression, infectious disease, neoplastic disease, inflammation sequelae and treatment side effects. HBV and HCV cause cirrhosis and hepatocellular carcinoma. The social and physical effects of BBV lead to affected individuals being disproportionately affected by mental health conditions.<sup>1</sup>

It has been estimated that there are 15.6 million people who inject drugs (PWID) globally, and the geographical distribution is widening, with increasing reports from Africa and the Pacific Islands.<sup>2</sup> Among the PWID, 17.8% are living with HIV, 9.1% with HBV and 52.3% with HCV.<sup>2</sup> PWID are mostly using opiates, 27.9% are aged <25 years, 21.7% have recently experienced homelessness, 57.9% have a history of incarceration, 16.8% of recent sex work and 37.4% report recent sexual risk-taking behaviours.<sup>2</sup> PWID are subject to marginalisation and stigmatisation, which creates social and economic barriers to access to public health interventions.<sup>1–5</sup> Between 1990 and 2013, there was a four-fold increase in disability-adjusted life-years (DALYs) attributable to PWID for HIV, HBV and HCV (10.08 million DALYs attributable to HIV, HBV and HCV in 2013 alone).<sup>1</sup>

Successful public health intervention programmes for PWID rely on a combination of peer education programmes, safe-injecting practice support, accessible, clean-injecting equipment, opiate substitution therapy and proactive testing and treatment of BBV.<sup>4</sup> Understanding the patterns and behaviours of PWID and BBV prevalence is vital for the design, implementation and evaluation of successful public health intervention programmes. Ideally, public health interventions need to be locally designed and implemented to show beneficial health outcomes, particularly in lower- and mid-

dle-income settings, where cultural and social barriers to such interventions may exist.<sup>4</sup> In this edition of the journal, researchers from Myanmar present data on the uptake of BBV testing from two methadone replacement programmes demonstrating high rates of testing (78–90%) and expected prevalence rates of HIV (15–17%), HBV (4–7%) and HCV (53%).<sup>5</sup> Importantly, they have documented retention in care rates from enrolment, showing that 76% were accessing care at 6 months, 65% at 1 year and 53% at 2 years.<sup>5</sup>

As global politics evolve and public health resources are threatened, the tide is against this highly marginalised group. Not only are PWID at risk of general poor health outcomes, they are also at very high risk of HIV, HBV and HCV.<sup>2</sup> We need to increase access to testing and treatment for BBVs, maintain PWID in treatment programmes worldwide over time if we are to reduce the incidence, prevalence, morbidity and mortality of BBV. Collecting data on existing programmes is important and can highlight areas for improvement. We need to be innovative by providing bespoke programmes that are locally acceptable to PWID. We need to work on reducing stigma and marginalisation of PWID to support their return to health.

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