

UPSCALING PREVENTION TO CONTROL HEPATITIS C AS A PUBLIC HEALTH THREAT IN TANZANIA

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Background:

Limited access to direct-acting antiviral treatments (DAAs) for hepatitis C virus (HCV) is often considered a barrier to the control of HCV as a public health threat. We estimate the progress that could be achieved towards the WHO's HCV incidence reduction target by scaling up harm reduction among people who inject drugs (PWID) in Dar es Salaam, Tanzania, a setting with no access to DAAs.

Methods:

A mathematical model of HCV transmission, liver disease progression and the cascade of care was calibrated to local epidemiological and clinical data. Scenarios were projected for NSP and OST coverage among PWID ranging from 0% to 50% to determine the possible impact on prevalence, incidence and healthcare costs.

Results:

Compared to projections with no harm reduction coverage, maintaining existing coverage (6%) was estimated to: reduce 2030 prevalence among PWID from 45% to 24%; avert 11,000 incident HCV cases; and save US\$80,000 in cumulative healthcare costs. The WHO target of an 80% reduction in incidence by 2030 was achievable without DAAs by scaling up harm reduction from 6% to 50% coverage among PWID, saving a cumulative US\$270,000.

Conclusion:

Primary prevention among PWID can control HCV transmission in the absence of treatment availability. Even small improvements in NSP and OST coverage are likely to produce substantial long-term HCV-related healthcare cost savings.

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