EXPANDING HEPATITIS C VIRUS TEST UPTAKE USING SELF-TESTING AMONG MEN WHO HAVE SEX WITH MEN IN CHINA: TWO PARALLEL RANDOMIZED CONTROLLED TRIALS

Authors:
Wang C[1,2,3], Zhao P[1,2,3], Weideman AM[4,5], Xu W[1,2,3.6], Ong JJ[7,8], Muhammad SJ[9], Yang B[1,2,3], Tucker JD [7,10,11]

[1]Dermatology Hospital of Southern Medical University, Guangzhou, China, [2]Southern Medical University Institute for Global Health, Guangzhou, China, [3]Guangdong Provincial Center for Skin Diseases and STIs Control, Guangzhou, China, [4]Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, USA, [5]Center for AIDS Research Biostatistics Core, University of North Carolina at Chapel Hill, Chapel Hill, USA, [6]School of Public Health, Southern Medical University, Guangzhou, China, [7]Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, UK, [8]Central Clinical School, Monash University, Melbourne, VIC, Australia, [9]Global HIV, Hepatitis and STIs Programmes, World Health Organization, Geneva, Switzerland, [10]University of North Carolina Project-China, Guangzhou, China, [11]Institute for Global Health and Infectious Diseases, School of Medicine, University of North Carolina at Chapel Hill, Chapel Hill, USA

Background:
HCV self-testing (HCVST) may be an effective strategy to address low rates of HCV test uptake among men who have sex with men (MSM). We evaluated the effectiveness and cost of providing HCVST to increase HCV test uptake among MSM in China.

Methods:
Two parallel, unmasked, individual-level randomized controlled trials were conducted. HIV-negative MSM and MSM living with HIV were enrolled from 22 cities in China. Men in both trials were randomly assigned (1:1) into standard-of-care (SOC) or HCVST arms. The primary outcome was the proportion of participants who tested for HCV during the trial period. Intervention effects were estimated using multiply imputed data in the main analysis. Costs were measured using a micro-costing approach.

Results:
A total of 84 men who were HIV-negative (trial 1) and 84 men living with HIV were enrolled (trial 2). Overall, the proportion of individuals who underwent HCV testing during the trial period was higher in the HCVST arm compared to SOC in trial 1 (estimated risk difference (RD): 71.1%, 95% CI: 54.6 to 87.7%) and trial 2 (estimated RD: 62.9%, 95% CI: 45.7 to 80.1%). Over half (58.6%, 34/58) of HCV self-testers reported the self-test was their first HCV test. The cost per person tested in trial 1 was $654.52 for SOC and $49.83 for HCVST, and in trial 2 was $438.67 for SOC and $53.33 for HCVST.
Conclusion:
Compared to the standard of care, providing HCVST significantly increased the proportion of MSM testing for HCV in China, and was cheaper per person tested.

Disclosure of Interest Statement:
The authors declare that they have no competing interests.