USE OF SIMPLIFIED HCV TESTING, DIAGNOSIS AND GENERIC SOFOSBUVIR/VELPATASVIR TREATMENT LEADING TO 100% SVR12 IN MYANMAR (USAID/EQUIP Project)

Authors:
Thaung YM[1], Aung NM[1], Chasela C[2], Chew KW[3], Barnard T[2], Cavanaugh C[6], Kelly R[6], Lwin AA[5], Sein YY[4], Marange F[2], van der Horst C[3], Xulu T[2], Thwin HT[1], Sanne I[3], Kyi KP[4].

[1]Community Partners International
[2]EQUIP Central
[3]Right To Care
[4]Myanmar Liver Foundation
[5]Department of Medical Research
[6]USAID

Background:
Hepatitis C Virus (HCV) infection prevalence is 2.65% in Myanmar, highest amongst key population groups, particularly people who inject drugs (PWIDs). Access to HCV testing and treatment is costly and limited. This study explores a simplified HCV testing, diagnosis and treatment program using generic sofosbuvir/velpatasvir treatment for those with HCV infection with or without HIV co-infection.

Methods:
Targeting key populations, the study used rapid test kits for HCV/HIV/HBV screening and viral load for HCV diagnosis. Generic oral sofosbuvir/velpatasvir with or without ribavirin for 12 weeks was used for all HCV genotypes. The first 150 participant samples were tested for HCV detection and quantification using three methods (Roche, Gene Xpert and ABL). HCV viral load (VL) was obtained at baseline and week 24 (12 weeks after completion of treatment). Laboratory monitoring was limited to baseline and week 24 except for those on tenofovir and ribavirin, who had creatinine and hemoglobin monitored.

Results:
From December 2017 - May 2018, 533 patients of 1028 screened were diagnosed with HCV and 492 were initiated on treatment. Of those treated, the median age was 44.6 years, 190 (36%) PWID, 99 (20%) HIV co-infected, 23 (4.7%) HBV co-infected, most were male and had HCV genotype 3 and 6. To date, 111 patients reached week 24 with 100% SVR12 who received sofosbuvir/velpatasvir without adding ribavirin. We anticipate 285 patients including 96 (34%) PWIDs will have reached SVR12 in September. There was 96% correlation in quantitative HCV VL between Roche and Gene Xpert testing, and 100% sensitivity and specificity by GeneXpert compared to Roche for HCV detection.

Conclusion:
Generic sofosbuvir/velpatasvir was effective in treating HCV patients in Myanmar regardless of HCV genotype or HIV or HBV co-infection status and with minimal laboratory monitoring. Alternative low-cost, point of care HCV VL testing demonstrated excellent correlation with standard quantitative PCR.

Disclosure of Interest Statement:
USAID EQUIP Grant No. AID-OAA-A-1500070), no pharmaceutical industry funds