ASIAN HARM REDUCTION NETWORK

INSHU2019 -Abstract 264

Effective DAA HCV Treatment and Care Model Among PWID in Most Hard-to-Reach Conflict Areas in Northern Myanmar

Aung, S[1], Sanne I[2], Kyi K[3], Kelly R[4], Chasela C[2], Hein K[1], Thaung Y[5], Chew K[6] and Bijl M[1]

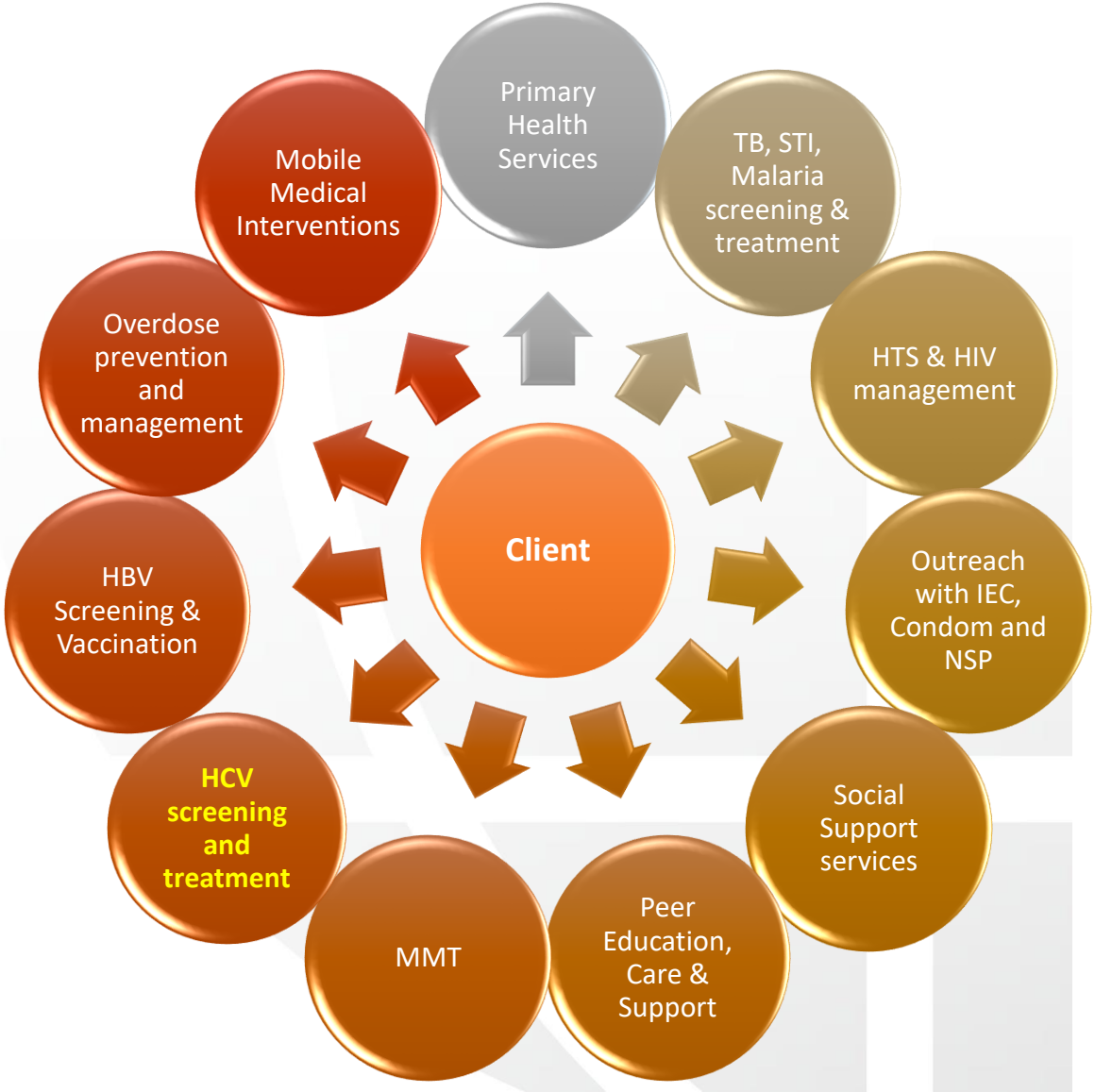
[1]Asian Harm Reduction Network | Myanmar, [2]Right to Care, EQUIP, [3]Myanmar Liver Foundation, [4]USAID Burma, [5]Community Partners International, [6]David Geffen School of Medicine at UCLA

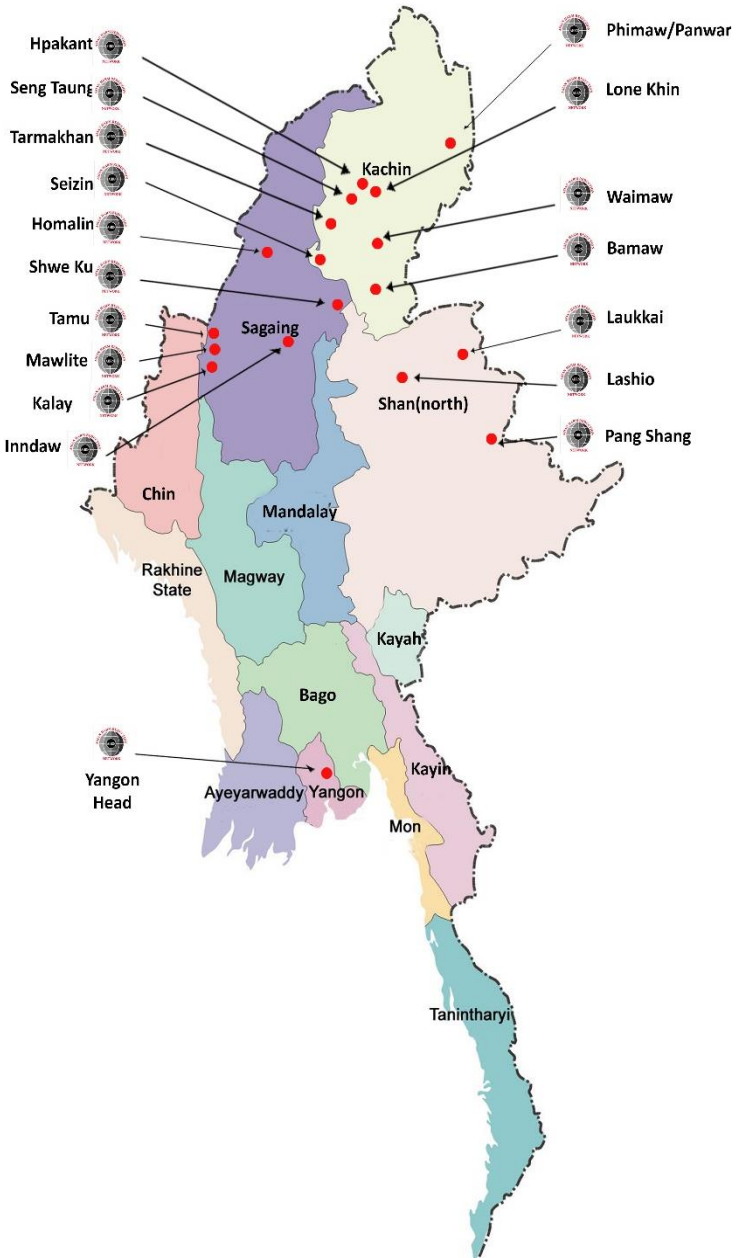
Background

- Myanmar is confronted with HIV/AIDS, viral hepatitis and drug use syndemic.
- Prevalence of HCV in Myanmar among general population: 2.65% and accounts for 25% of HCC[1].
- Estimated PWIDs in Myanmar – 93,215[2].
- HCV prevalence among PWID in Myanmar – 56%, Waimaw (Project) – 85%[2].
- HIV-HCV co-infection among PWID in Myanmar – 26.8%, Waimaw – 53.8%[2].

[1] Myanmar National Sero-prevalence survey May to November 2015, DMR & DOPH, MOHS 2015.
[2] Myanmar IBBS & Population size estimates among PWID 2017-2018, NAP, MOHS 2019.

AHRN's projects





Hepatitis C Demonstration project

- **Purpose**:

1. To assess the effect of direct-acting antiviral (DAA) HCV treatment, treatment and care model integrated with HIV testing and treatment among PWID in remote rural conflict areas of Kachin State in Myanmar.
2. To compare the SVR12 among Methadone (MMT), Non-MMT and HCV mono-infected and HCV-HIV coinfected PWIDs.

- **Project Location:** Waimaw, Kachin State, Myanmar.
- **Study period**: June 2018 to August 2019.
- **Study design**: open label, prospective implementation science.
- **Study size**: 300 participants enrolled in treatment.
- **Treatment regimen**: fixed-dose combination of sofosbuvir 400 mg/velpatasvir 100 mg (SOF/VEL) orally once daily for 12 weeks.

Study population

Inclusion criteria:

1. Ability and willingness of participant to provide informed consent.
2. HCV treatment naïve or experienced (pegylated interferon [PegIFN] and ribavirin [RBV] only).
3. HCV-infected men and women aged 18 years or older with HCV genotype 1, 2, 3, 4, 5 or 6, with or without HIV-1 co-infection.
4. Participants with compensated cirrhosis (Child-Pugh Class A) and hepatitis B infection will be eligible for HCV treatment.
5. HCV-infected patients identified through screening for this protocol who are not eligible for HCV treatment will be eligible for an observation arm.

Study population

Exclusion criteria:

1. Patients with decompensated liver cirrhosis (Child-Pugh Class B or C).
2. Known allergy/sensitive or any hypersensitivity to components of drugs or their formulation.
3. Active TB infection.
4. Renal impairment eGFR <30ml/min/1.73m^2 or end stage renal disease.
5. Prior treatment with HCV DAAs.
6. Unwilling to provide informed consent for participation in the project.
7. Unable or unwilling to adhere to the HCV treatment course and monitoring in the opinion of the investigator.

Project algorithm

PWID screening

- PWID screen for HCV antibody using SD bioline and HIV antibody testing.
- HBsAg, HBcAb, HBsAb for HCV antibody +ve PWID.

Enrollment

- Pre-treatment assessment included – clinical examination, APRI-score, blood investigation like CP, liver function test and renal function test.
- mHealth linkage to care.

Confirmation

- Cepheid Gene X-pert

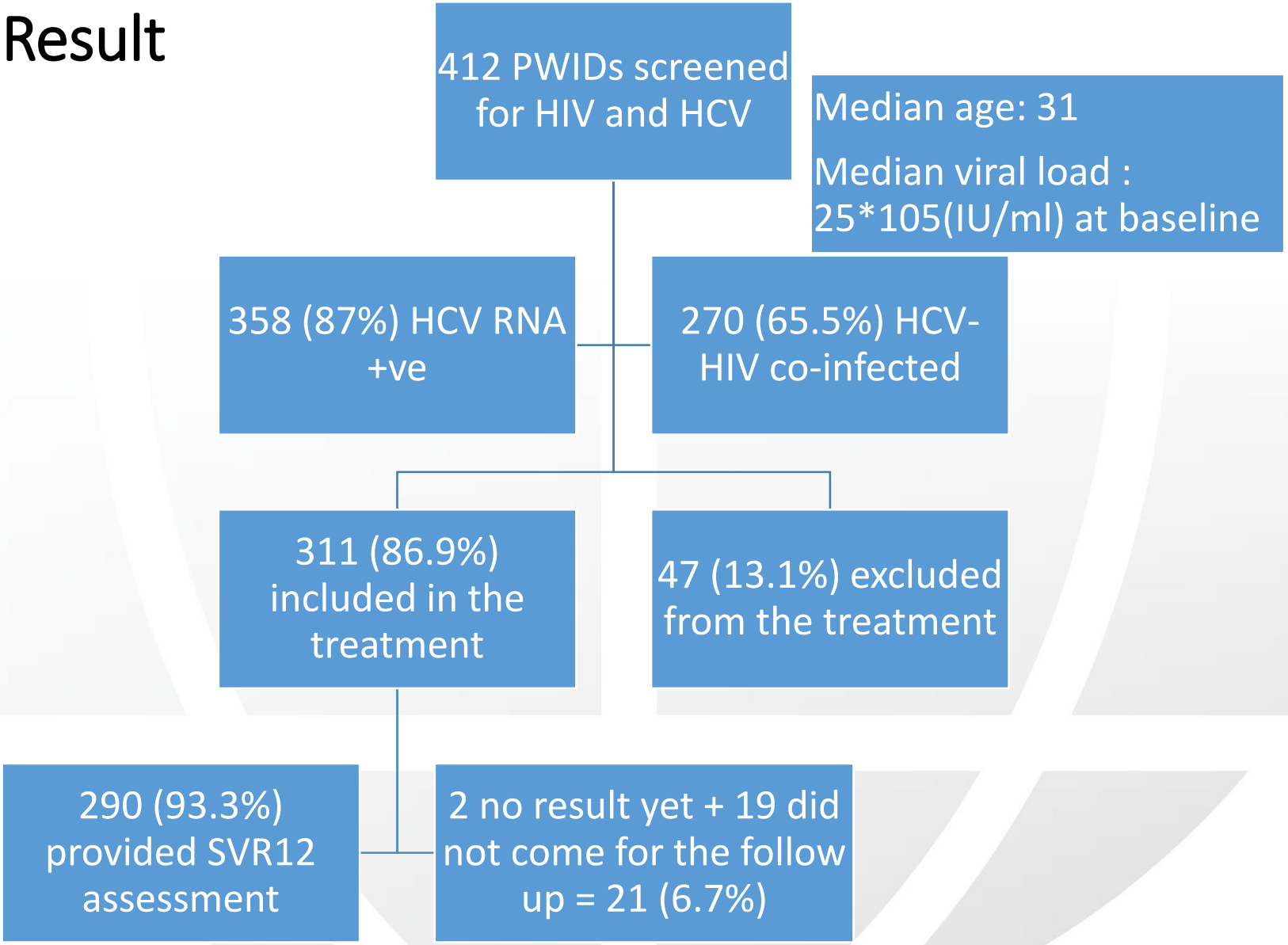
Treatment

- Sofosbuvir 400 mg/velpatasvir 100 mg (SOF/VEL) orally once daily for 12 weeks

Monitoring & Assessment

- Cepheid Gene X-pert HCV viral load monitoring
- Post treatment assessment for SVR12 and HIV outcome: HCV and HIV Viral load at week 24.

Result


412 PWIDs screened for HIV and HCV
Median age: 31
Median viral load : 25*105(IU/ml) at baseline
358 (87%) HCV RNA +ve
270 (65.5%) HCV-HIV co-infected
311 (86.9%) included in the treatment
47 (13.1%) excluded from the treatment
290 (93.3%) provided SVR12 assessment
2 no result yet + 19 did not come for the follow up = 21 (6.7%)

SVR12 Response

Types of Clients	SVR12 Response			SVR12 Non Response		Total
	MMT clients	Active PWIDs	Partners	MMT clients	Active PWIDs	
HCV mono-infection	37	2	0	1	1	41
HIV/HCV co-infected	87	90	7	9	56	249
Total	124	92	7	10	57	
Rate	**92.5%**	61.7%	100%	7.5%	38.3%	**290**
Treatment Response vs Non Response Rate	**77%**			**23%**		

Conclusion

- Treatment and adherence in rural conflict areas with oral DAA regimen is effective especially among MMT clients.
- In absence of blanket HCV treatment, increased effort need to ensure appropriate reach and harm reduction coverage, notably needle syringe program and MMT to mitigate transmission and reinfection of HCV.
- A simplified HCV testing and treatment care model integrated with HIV testing and treatment referral will improve access to care among at-risk populations to HCV treatment and enhance ART initiation and adherence in HIV/HCV co-infected.
- Relative low 61.7% of active PWID achieved SVR12, this needs further investigation as to the reasons and how we can best serve our patients in achieving improved SVR.

Thank You & Onwards!