Community based HCV Intervention/Model in Nepal

PRAWCHAN K.C Sr. Program Manager SPARSHA Nepal





SPARSHA Nepal at a Glance:





2012

Runs One-Stop Community based Service Model for HIV, Hepatitis and TB (All components as recommended in the **Technical Guide of WHO**, UNODC and UNAIDS)2012

SPARSHÀ



SPARSHA Comprehensive Community based Service Model





Hepatitis C is a death sentence

Why Hepatitis Counseling, Referral and Treatment Center Was Needed?



People cannot tolerate the side effects from current HCV medications





Hep C, you can't get it again!



The Situation In The PLHIV/Drug User Community



High mortality among PLHIV PWID going to India to access Interferon based treatment without any know

People who got treatment based on Antibody Test results 0

No treatment was available in Nepal & Treatment was very expensive (Market Monopoly)



Using Google doctor caused a panic situation and fear among infected population



Prevalence of HCV in general population was estimated at 0.6%

Mid-1990s

130,000 individuals were infected with HCV

2016

Among the total HCV population, only 6% have been treated

2020

0.3% of total adult population inject drug in Nepal. Prevalence of anti HCV 80%-85%

Prevalence of detectable HCV RNA of 42% among PWID.

Lack of awareness, limited knowledge and infrastructure, high rate of diagnostic and treatment cost as a barrier



different region



SPARSHA Community HCV Treatment Model



National, District and **Province Level** Stakeholders,

- Continuous coordination with **SPARSHA** and Medical expert in their respective district.
- **Database Entry**
- **Client follow-up** update
- **Reporting to SPARSHA** Nepal

Routine blood sample collection for RVR ,SVR,ETR

Data feed and Database management

Development of HCV Treatment in Nepal Phase I



Screened 838 patients for a treatment cohort of 600 individuals with HCV infection and past or current drug use.



During phase 1, patients were treated with interferon/rib based regimens , (n=46), 12-24 weeks



Prediction Model was established for HCV Screening and INF based Treatment for mono and co-infected patient, first evidence based model



Community Care Centre was utilized to provide HCV treatment and care for coinfected patients. HCV Treatment PEG-Interferon+

Deceased

Detectable

Drop out

Out of Contact

Undetectable (S)

Response with Fribavirin	n= 46
	-
	5 (10.9)
	3 (6.5)
	-
/R)	38 (82.6)



HCV Screening and Treatment Outcome—Flowchart



Treatment Outcome					
	Phase 2		Phase 3		
79	n	%	n	%	uration
1.8%	1	0.7%	9	2.1%	
84.7%	131	97.0%	338	80.7%	
3.6%	2	1.5%	18	4.3%	
8.8%	0	0.0%	49	11.7%	
1.1%	1	0.7%	5	1.2%	
	135		419		

Community Engagement Led to...

- New HIV drug (Raltegravir
- and Azatanavir) was made
- accessible under HIV
- program



- Evidence based advocacy through TWG
- Involvement and representation in STAG



Partnership with private agencies to provide testing and treatment in subsidized rate



- National HCV Treatment Guideline
- Treatment Strategic Plan and Cost Action Plan

- Nominated NCASC as focal point of Hepatitis
- Provision of treatment to 350-400 patients (Sofo/Val)





- HCV Community based Guideline in collaboration with NCASC
- Community-Led HCV
- Testing (CLT) feasibility study

Community Based Model As Micro Elimination Strategy

- □ The community-based HCV treatment can result in excellent treatment outcome in a difficult-totreat population in a low-income country regardless of the patient's profile, disease severity and HIV status.
- Case example of community HCV model demonstrated that HCV treatment screening and treatment service can be provided with very high treatment response rates despite the severe 2015 earthquakes in Nepal. Which means the model can be efficient in rendering services in situation like COVID-19 or unforeseen challenging situation.
- The model can be easily replicated with low cost in existing harm reduction or HIV prevention and treatment program.
- □Since HCV is concentrated in specific group like PWID and PLHIV, community-based HCV model as be used as one of the micro-elimination strategy to complement the goal to "eradicate" viral hepatitis by 2030
- □Parallel approach of screening and vaccinating key population for Hepatitis B is most effective approach of Hepatitis prevention that can be built or interlinked in existing HIV and harm reduction program.

"A stitch in time saves nine"

References

- Kinkel H-T, Karmacharya D, Shakya J, Manandhar S, Panthi S, Karmacharya P, KC P, et al. Prevalence of HIV, Hepatitis B and C Infections and an Assessment of HCV-Genotypes and Two IL28B SNPs among People Who Inject Drugs in Three Regions of Nepal. PLoS ONE. 2015;10: e0134455
- KC S, Murphy H, Dixit S, Rai A, Pradhan B, KC.P, et al. (2020) Hepatitis C (HCV) therapy for HCV mono-infected and HIV-HCV co-infected individuals living in Nepal. PLOS Neglected Tropical Diseases 14(12): e0008931. https://doi.org/10.1371/journal.pntd.0008931https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0008931
- Ojha SP, Sigdel S, Meyer-Thompson HG, Oechsler H, Verthein U (2014) 'South Asian cocktail'-the concurrent use of opioids, benzodiazepines and antihistamines among injecting drug users in Nepal and associations with HIV risk behaviour. Harm Reduct J 11: 17. pmid:24886095
- Karki S, Ghimire P, Tiwari BR, Rajkarnikar M. Seroprevalence of anti HCV antibodies among blood donors in Kathmandu valley, Nepal. Kathmandu Univ Med J (KUMJ). 2008;6: 491–496. pmid:19483431
- World Health Organization. Global hepatitis report, 2017. Available: http://apps.who.int/iris/bitstream/handle/10665/255016/9789241565455eng.pdf; jsessionid=E9368CACF39E5C73CDFE6C442423BB8B ?sequence=1
- Polaris Observatory HCV Collaborators. Global prevalence and genotype distribution of hepatitis C virus infection in 2015: a modelling study. Lancet Gastroenterol Hepatol. 2017;2: 161–176. pmid:28404132
- WHO. Combating hepatitis B and C to reach elimination by 2030. [cited 17 November2021]. Available: http://www.who.int/hepatitis/publications/hep-elimination-by-2030-brief/en/
- NCASC.Routine HIV Status During COVID19 Pendamic in Nepal. [Factsheet. 2020]. Available: http://www.ncasc.gov.np/WAD2020/Factsheet-2020-S.pdf

