INTERGRATION OF HEPATITIS C TREATMENT WITH HARM REDUCTION SERVICES FOR PEOPLE WHO INJECT DRUGS (PWIDs) IN KENYA: EXPERIENCE FROM TEST AND LINK TO CARE (TLC) STUDY

Mercy Nyakowa, Matthew J Akiyama, Abbe Muller, John Lizcano, Helgar Musyoki, Peter Cherutich, Anne E Kurth

13 October 2021

To begin with……..

- No Conflict of Interest to declare
- Thank all the people who inject drugs and peer navigators in Kenya who have generously participated in this research Study

Hepatitis C Virus (HCV)

- Global pandemic affecting 71 million people worldwide
- Undetected and untreated, chronic HCV infection results in cirrhosis, hepatocellular carcinoma, liver failure and death
- HCV prevalence varies across regions worldwide. Africa has among the highest estimated HCV prevalence at 2.9% (common genotypes are 1, 4 and 5)
- Most important risk for HCV is injection drug use
  - Globally, 52% of PWID have evidence HCV infection (anti-HCV)
  - PWID at high risk of HCV-related disease and transmission

HCV in Africa

- Not enough known about HCV in sub-Saharan Africa, where more people who inject drugs (PWID) becoming HIV & HCV+

- Antiviral medicines cure ~90% of persons with HCV infection, reducing risk of death from liver cancer and cirrhosis, but access to diagnosis and treatment is low

HCV in Kenya

- HCV prevalence in Kenya is not established definitively:
  - Ndetei et al. saw relationship between PWID behavior and HIV/HCV co-infection; in cohort of 120, 85% were PWIDs of whom 70.3% were HCV+
  - Muriuki et al. found in HIV clinic patient sample 15.3% (46/300) were HIV-1 co-infected with HCV, HBV, or both
  - Muasya et al. (2008) sample of 333 drug users (145 PWIDs), overall HCV prevalence 22.2% (n=74), confirmed two major genotypes among Kenyan drug users, 1a (73%) and 4 (27%)
  - Mwangi et al. (2015) 100 blood donor specimens from non-injectors, 16 donors were HCV antibody positive of whom 10 were viremic. One patient had genotype 1a and 9 had genotype 2b

TLC-IDU Sub -Study

- This was a Government of Kenya driven Study
- The goal was to establish HCV prevalence & genotype among PWIDs in TLC-IDU study of Kenya's NSP
  - **Seek**
    - Respondent-Driven Sampling (RDS) to find PWID
  - **Test**
    - Offer rapid HIV and HCV tests at NSP sites (N=10)
  - **Treat**
    - Offer PCR testing (venous blood for confirmatory test)
  - **Retain**
    - If HCV+ provide peer case manager (PCM) for linkage to care

Testing and Treatment at harm reduction center-Peer led

- At the Harm reduction centers the Study used the peer led model to offer HCV treatment
- The Peers were all recovering from substance use disorders
- The peers had been selected through a nomination process
- The peers were trained on basic facts about HCV
- The peers were meaningfully involved in training PWIDs about Hep C
- They supported HCV counselling prior to testing


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WORLD HEPATITIS DAY, JULY

Role of peers in HCV testing and treatment

- They provided Psychological support to the newly dragonized HCV patients
- Served as liaison between the clients and study/ health care teams
- Ensured appropriate and timely supply and administration of antiretroviral medications for admitted patients on antiretroviral therapy (ART)
- Supported patients on ART through follow-up to improve rates of retention, and adherence

HCV Results

- 2188 participants tested (817 Nairobi/842 Coast)
- 291 were reactive (105 Nairobi/183 Coast)
  - About 13% of total participants reactive using SD Bioline rapid test

Using Qualitative/Quantitative RNA:

- 284 were analyzed at partner lab KERMI/CDC
- 230 Positive (81%) viremic

HCV Results

- 200/230 viremias contributed blood for HCV genotyping by CDC Atlanta
  - 10 participants died, 4 were incarcerated, 16 could not be traced 175 (88%) specimens
- 175 (88%) specimens were able to be genotyped:
  - 89 (51%) were genotype 1a, 82 (47%) were genotype 4a, and four (2%) were mixed genotype (three 1a/4a, and one 1a/2b)

Direct Acting Antiviral Treatment

HARVONI (SOFOSBUVIR/LEDIPASVIR)
Genotypes 1, 4, 5, and 6

SOFOSBUVIR AND RIBAVIRIN
Genotypes 2 and 3

DACLATASVIR AND SOFOSBUVIR
Genotypes 1, 3, and 4

EPCLUSA (SOFOSBUVIR/VELPATASVIR) – NEW
Genotypes 1-6 (Pan-genotypic)

WHO 2016:

Global targets of reducing new viral hepatitis infections by 90% and reducing deaths due to viral hepatitis by 65% by 2030

www.hcvguidelines.org

Treatment With Harvoni

- We enrolled 95 PWID in Nairobi and Coastal Kenya
  - Participants were provided sofosbuvir/ledipasvir under directly observed therapy (DOT) at MAT n=65 clinics or NSPs n=30
- Among 92 who initiated treatment
  - 85 (92.4%) completed treatment
  - 79 (85.9%) achieved SVR
  - Among those not achieving SVR, 6 discontinued treatment, 4 were missing SVR labs, 3 were detectable at SVR

Lessons Learnt

- HCV treatment in MAT and NSP sites with peer support appears to be feasible with high SVR rates
- Peer navigators are potential solution to overcoming barriers to care and adherence for People with substance use disorders as they enhance service reach and accessibility

(*Both outreach workers and peer leaders are recovering people with substance use disorders)*

Conclusion

- HCV treatment in resource limited setting is feasible;
  - The Study demonstrated that IDUs can be successfully engaged in collocated treatment services.
  - DOT model is effective; however, there is a need to establish other effective care models.

Team Members

- NASCOP/MOH KENYA
- Expert Advisor, HCV
  - Matthew Akiyama
- YALE UNIVERSITY
  - Ann Kurth (co-PI)
  - John Lizcano
- NYU
  - Chuck Cleland

- NSP Implementers
  - MDM-MSF; SAPTA; NOSET
  - OMARI; MEWA; REACHOUT; TEANSWATCH
- Collaborating Labs
  - KNBTS; KERMI; CDC
- **Thanks to NIH – NIDA**
  - 1R01 DA032080
    - Redonna Chandler
    - Shoshana Kahana
    - Dionne Jones, PO

Thank You