Subject: HIV-HCV Co-Infections, Clinical Presentations and Treatment Preferences HIV-HCV Co-Infections, Clinical Presentations and Management of HIV/AIDS

- Anytime a patient has HIV, you need to know their HCV (hepatitis C viral) status
- HIV/HCV is easily treatable, ART treatment should be modified to include a regimen for HCV treatment. One can decide to either treat both at once or start treating one disease first
- Watch for drug-drig interaction when co-treating
- It is possible to eliminate Hep C in both the US and Pakistan with current tools and enough dedication

HIV Clinical Presentations and Management of HIV/AIDS

Treating HCV in HIV co-infected patients: a Success Story from Rhode Island

- In the United States, the highest risk group for HCV infection is people who inject drugs, followed by individuals born between 1945 and 1965 (also known as baby boomers)
- In RI, HCV deaths surpassed that of HIV and 59 other diseases combined
- RI Department of Health (RIDOH) HCV Prevention Program
  - Provide uninsured and underinsured high-risk Rhode Islanders with training, counseling, and referrals about viral hepatitis prevention.
  - o Ensure that educational materials and trainings are culturally and linguistically appropriate.
  - Provide clean needles to individuals.
  - Fund community-based sites to provide rapid hepatitis C testing.
  - o Provide condoms at community distribution sites.

## **HCV** in Pakistan

- Pakistan has one of the highest HCV infection levels in both MENA and worldwide.
- HCV prevalence in the population at large is at about 5%-one in every 20 Pakistanis has been already exposed to HCV infection.
- History
  - HCV Initial cases detected on screening of blood donors: 1989-1993
  - 2007-2008: the first national survey was conducted to estimate the prevalence of hepatitis B and C in Pakistan.
  - A total of 47,043 individuals were tested and the overall prevalence of hepatitis B was 2.4% and of hepatitis C was 4.8%.
  - The highest prevalence of hepatitis B was found in the province of Baluchistan (4.3%) followed by the province of Sindh (2.5%).
  - Highest prevalence of hepatitis C was found in the province of Punjab (6.7%) followed by Sindh (5.0%6).

## Transmission

 Primarily driven by healthcare-related exposures, such as therapeutic injections, intravenous infusions and poor sterilization of medical equipment

## Co infection

- HIV, HCV and HBV share common routes of transmission and can be observed in a single patient
- Leads to immune suppression, decreased CD4 cell counts and liver damage
- No evidence of decline in HCV in Pakistan despite reduced cost of treatment
  - o Due to absence of population wide screening to identify potentially millions of people