HCV Elimination Program in Georgia: Successes and Challenges

Nikoloz Chkhartishvili, MD, MS, PhD
Deputy Executive Director for Research
Infectious Diseases, AIDS and Clinical Immunology Research Center
Georgia

Area: 69,700 km²
Population: 3.7 million
GNI per capita: $4,160
Upper-middle income economy
Hepatitis C Epidemiology in Georgia

HCV in General Population

<table>
<thead>
<tr>
<th></th>
<th>Estimated number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 Tbilisi Survey</td>
<td></td>
</tr>
<tr>
<td>anti-HCV+</td>
<td>6.7%</td>
</tr>
<tr>
<td></td>
<td>200 000</td>
</tr>
<tr>
<td>2015 National Survey</td>
<td></td>
</tr>
<tr>
<td>anti-HCV+</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>208 800</td>
</tr>
<tr>
<td>HCV RNA+</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>150 300</td>
</tr>
</tbody>
</table>

HCV Genotype Distribution

- G1: 41%
- G2: 25%
- G3: 34%
Prevalence of Chronic HCV Infection by Gender and Age Categories: 2015 National Survey

Gamkrelidze A. Burden of HCV and risk factors for transmission: Implications for targeted interventions and screening and linkage to care EASL2017
HCV in Key Populations

- PWID: 66%
- HIV+ PWID: 69%
- HIV+ persons: 34%
- TB Patients: 21%
- STI Patients: 11%
- MSM: 7%

National Hepatitis C Elimination Program

- Free PEG/RBV for HIV/HCV co-infected (2011)
- Free PEG/RBV for prisoners (2013)
- 60% price reduction on PEG/RBV for general public (2014)
- Gilead
- CDC
Rationale for Choosing Georgia

- High prevalence of HCV infection in general population
- Small size and population of the country
- Strong Governmental commitment towards ending HCV epidemic
- Existing human and technical capacities
- Availability of effective systems for implementing large-scale health programs
- Best practice experience in the field of HIV/AIDS
The Goal of the National Hepatitis C Elimination Program

Elimination of HCV infection in the country through identifying and treating all hepatitis C patients strengthened by effective prevention interventions

- Detection
- Treatment
- Prevention

Reducing the HCV prevalence by 90% (to 0.5%) by 2020
2020 Targets

- 90% Diagnosed
- 95% Treated
- 95% Cured
Strategic Plan on Hepatitis C Elimination

**Strategic Directions**

1. Promote advocacy, awareness, education and partnership
2. Prevent HCV transmission
3. Identify people living with HCV
4. Improve HCV laboratory diagnostics
5. Provide treatment and care
6. Improve HCV surveillance
Hepatitis C Elimination Strategy: National Budget Allocations (USD)

57,160,850 USD to be allocated by government over 2016-2020

Source: 2016-2020 National Hepatitis C Elimination Strategy
Partnership

• National hepatitis C elimination commission
  – Established by ministerial decree
  – Ministry of health, NCDC, public health and clinical experts, researchers, civil society

• U.S. Centers for Disease Control and Prevention (CDC)
  – Technical assistance
  – International Technical Advisory Group (TAG)

• Gilead Sciences
  – Donation of SOF and LDV/SOF

• LIFER and ECHO Projects
  – Development of national treatment protocols
  – Education and human capacity strengthening
Awareness

#Join  #Cure  #Future without C
Prevent HCV Transmission

• Decrease HCV incidence among people who inject drugs (PWID)
  – Promote harm reduction (Syringe/needle exchange; Opioid substitution treatment)
  – Intensify HCV detection in PWID
  – Ensure linkage to care and treatment of HCV positive PWID

Challenge: Repressive drug policy
Drug Policy Reform

Georgian Prime Minister Giorgi Kvirikashvili addressed the parliament of Georgia to make the legislative changes to the current drug policy and make it more human and European by the autumn sessions.

http://agenda.ge/news/81136/eng
Prevent HCV Transmission

• Prevent healthcare related transmission of HCV
  – Improve blood safety
  – Improve prevention and control in healthcare and non-healthcare settings
  – Approved regulations on IPC
    • “Approval of nosocomial infection surveillance, prevention, and control regulations” Ministerial order №01-38/N of September 7, 2015
    • “Approval of technical regulations on disinfection and sterilization in medical, public health, and public facilities” Governmental decree №185 of April 24, 2015
    • “Technical regulation - Approval of sanitary norms of IPC in public facilities on performing esthetic and cosmetic procedures” Governmental resolution №473 of September 14, 2015
    • “Technical regulation – Approval of sanitary regulations on waste collection, storage, and treatment in medical-prophylactic facilities” Governmental decree №64 of January 15, 2014
Identify People Living with HCV

- 472,890 persons screened in 2015-2016
- 50,962 (10.8%) positive for anti-HCV

Source: National Center for Disease Control and Public Health
HCV Treatment
HCV Treatment Sites within Elimination Program, December 31, 2016 (Total=27)

Increase from four (4) sites when program launched in April 2015

Total: 27 sites
139 physicians

Source: Hepatitis C Elimination Program Treatment Database
Health Information System: C Elimination

http://elimination.moh.gov.ge/
Number of Patients Starting HCV Treatment (Apr 2015-Dec 2016)

Source: Hepatitis C Elimination Program Treatment Database

- Treat F3 or F4 fibrosis, HIV/HCV, Severe extrahepatic
- SOF Introduced (n=7,193)
- LDV/SOF Introduced (n=20,402)
- 27,595 Persons Started Treatment
SVR among Patients Treated with SOF-based Regimens (Dec 31, 2016, n=4,774)

- **All**: 79.5% (p<0.0001)
- **Genotype 1**: 80.3% (p<0.0001)
- **Genotype 2**: 80.4% (p<0.0001)
- **Genotype 3**: 80.3% (p<0.0001)

Data for 7 G4 patients not shown

Source: Hepatitis C Elimination Program Treatment Database
SVR of SOF-based Treatment by Cirrhosis (Dec 31, 2016)

<table>
<thead>
<tr>
<th>Genotype</th>
<th>All (n=2781)</th>
<th>Genotype 1 (n=1089)</th>
<th>Genotype 2 (n=542)</th>
<th>Genotype 3 (n=1150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cirrhosis</td>
<td>74.2%</td>
<td>59.7%</td>
<td>78.8%</td>
<td>85.9%</td>
</tr>
<tr>
<td>No Cirrhosis</td>
<td>86.8%</td>
<td>80.7%</td>
<td>82.2%</td>
<td>94.9%</td>
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</tbody>
</table>

Source: Hepatitis C Elimination Program Treatment Database
SVR among Patients Treated with LDV/SOF-based Regimens (Dec 31, 2016 n=1588)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Cirrhosis</th>
<th>No cirrhosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1588</td>
<td>1559</td>
<td>1059</td>
</tr>
<tr>
<td>Genotype 1</td>
<td>597</td>
<td>432</td>
<td>627</td>
</tr>
<tr>
<td>Genotype 2</td>
<td>979</td>
<td>446</td>
<td>634</td>
</tr>
<tr>
<td>Genotype 3</td>
<td>98,8%</td>
<td>99,2%</td>
<td>100%</td>
</tr>
</tbody>
</table>
| Source: Hepatitis C Elimination Program Treatment Database
Progress and Projected Impact
Progress Towards 90-95-95

Source: Hepatitis C Elimination Program Treatment Database
Progress Towards 90-95-95

Source: Hepatitis C Elimination Program Treatment Database
Modeling study shows that Georgia is on the path to achieving the HCV elimination target by 2020

Impact on prevalence

- Current Treatment (25,200 per year)
- Treat 30,000/year
- Current Treatment, Target Cirrhosis
- Treat 12,000/year
- No treatment

% reduction in prevalence 2015 to 2020

Impact on incidence

- Current Treatment (25,200 per year)
- Treat 30,000/year
- Current Treatment, Target Cirrhosis
- Treat 12,000/year
- No treatment

% reduction in incidence 2015 to 2020

Acknowledgement

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