Global progress towards hepatitis elimination – An update

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Global Hepatitis programme, WHO

Strategic Information Workshop, Uganda, March 2019
The World Health Assembly pledged to reach elimination

5 core interventions with sufficient coverage would lead to elimination (incidence - 90%, mortality -65%)

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Indicator</th>
<th>2015</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 dose HBV vaccine</td>
<td>Coverage</td>
<td>84%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>HBV PMTCT</td>
<td>Coverage</td>
<td>39%</td>
<td>50%</td>
<td>90%</td>
</tr>
<tr>
<td>Blood / injection safety</td>
<td>Screened donations</td>
<td>97%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Safe injections</td>
<td>95%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Harm reduction</td>
<td>Sets/PWID/year</td>
<td>27</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>HBV and HCV testing and treatment</td>
<td>% diagnosed</td>
<td>9/20%</td>
<td>30%</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>% treated</td>
<td>8/7%</td>
<td>N/A</td>
<td>80%</td>
</tr>
</tbody>
</table>

- 2016: World Health Assembly endorses elimination
- Major initiatives in some countries, little in others
- Need to review the status

Traffic light system reporting

- No progress to date
- Incomplete, minor actions taken
- Incomplete, but major actions
- On track, gaps
- On track, only minor gaps
Input, process, outputs
Investments, deliverables and service coverage
WHO delivered most of the global goods needed

2015
✓ Elimination strategy
✓ HBV Guidelines

2016
✓ Revised HCV Guidelines
✓ National plan manual

2017
✓ Baseline estimates: Global Hepatitis Report
✓ HBV/HCV testing Guidelines
✓ Injection safety campaign

2018
✓ Global hepatitis reporting system
✓ HCV treatment Guidelines: Treat All
✓ Cost effectiveness calculators (HBV/HCV)

2019
✓ Consolidated strategic information guidelines (Feb 2019)
  ➢ HBV PMTCT recommendations on antiviral medicine use in pregnancy
More and more national strategic plans, and global reporting initiated

As of February 2019, 124 countries had national hepatitis plans; 44 of which at the draft stage. In 2017, 58% of plans included some domestic funding.

14 of 27 focus countries (51%) have reported data in the new global reporting system for hepatitis (45 countries reported in total, including through ECDC).

Source: WHO

Source: Global Reporting System on Hepatitis

ECDC: European Centre for Disease Control and Prevention
Prevention interventions: Low coverage for harm reduction globally and for timely birth dose in Africa

Coverage of interventions as proportion of 2030 target at baseline

- **Harm reduction (2017)**
  - No progress to date

- **HBV timely birth dose (2017)**
  - Incomplete, major actions

- **3rd dose HBV vaccine (2017)**
  - On track, gaps

- **Injection safety (2010-2015)**
  - On track, gaps

Source: WHO / UNICEF, Demographic and Health Surveys, and Lancet publication
Cascade of care for HBV infection by WHO region, 2016

- 257 million people living with HBV
- Many infected people remain undiagnosed
- 4.5 million people were receiving HBV treatment in 2016 (1.7 million in 2015)
- WHO systematic review in progress to estimate the proportion of those infected that are eligible for treatment

Source: WHO based on Center for Disease Analysis/Polaris

No new data since 2016. Missed opportunities to use Tenofovir, available at $30 per year
Cascade of cure for HCV infection by WHO region, 2017

- 2014: < 200,000
- 2015: 1.1 million
- 2016: 1.7 million
- 2017: 2.1 million
- Total: ~5 million treated with DAA (by 31 Dec. 2017)

Most treatments in ~10 ‘champion’ countries

Source: Center for Disease Analysis/Polaris
Missed opportunities to optimize procurement of generic Direct Acting Antivirals (DAAs) to cure HCV infection

62% of people with HCV live in countries which have access to generic DAAs for as low as US$90 (in green)

In reality, the price of a 3-month course of generic DAA varies greatly by location

Source: amfAR August 2018, MSF and MoH Malaysia
Impact monitoring

Reduction of incidence and mortality that gets us closer to elimination
0.8% of children under 5 in 2017 worldwide had chronic HBV infection

All regions except for Africa reached the 2020 1% target

Source: London School of Tropical Medicine & Hygiene for WHO [systematic review by Cochrane centre, with modelling inferences], schematic map of the WHO regions

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>Prevalence of HBsAg</th>
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<tbody>
<tr>
<td>African region</td>
<td>2.34%</td>
</tr>
<tr>
<td>Region of the Americas</td>
<td>0.07%</td>
</tr>
<tr>
<td>Eastern Mediterranean Region</td>
<td>0.69%</td>
</tr>
<tr>
<td>Western Pacific Region</td>
<td>0.38%</td>
</tr>
<tr>
<td>South East Asia</td>
<td>0.26%</td>
</tr>
</tbody>
</table>

Prevalence of HBsAg in children under 5, by WHO region:

- Under 0.1%
- 0.1% - 0.3%
- 0.31% - 0.5%
- 0.51% - 1%
- > 1%

No progress to date
Incomplete, minor actions taken
Incomplete, but major actions
On track, gaps
On track, minor gaps
Monitoring impact on mortality needs both vital statistics and attributable fraction data

1. NATIONAL MORTALITY STATISTICS / CANCER REGISTRIES
1.2M deaths from cirrhosis
0.83M deaths from liver cancer

2. ATTRIBUTABLE FRACTION IN CENTRES OF EXCELLENCE IN HEPATOLOGY
39% cirrhosis from HBV
19% cirrhosis from HCV
46% HCC from HBV
14% HCC from HCV

1.22 million deaths from chronic HBV and HCV infections in 2016 (1.38 million hepatitis deaths in total)

Together towards a public health approach

Hepatologists can help the scale up of key interventions

- Advocate for the importance of hepatitis B vaccine, including timely birth dose
- Role-model good infection control, including blood and injection safety
- Train health care workers to facilitate task shifting
- Support simplified service delivery models
- Monitor the fraction of cirrhosis and HCC attributable to HBV and HCV

WHO will continue to lead and monitor progress

- Convene implementing partners, set up regional platforms
- Support policy uptake and monitor progress
- Position hepatitis elimination within Universal Health Coverage (UHC)
With gratitude and appreciation to all global partners, Ministries of Health, and WHO country/regional staff

World Hepatitis Alliance

CDC, UNITAID, MSF, CHAI, C+, FIND, MdM, ...

Government of Korea

Zeshan Foundation, Hong Kong

Center for Disease Analysis (CDA/Polaris)

London School of Hygiene and Tropical Medicine

Other partners

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