WHO 2016-2021 draft Global Health Sector Strategy on Viral Hepatitis

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World Health Organization
Presentation Outline

• Epidemic and Response – some snapshots
• Why a global strategy?
• Towards elimination – defining global targets
• Strategy framework
• WHO – what we can/want to contribute to a global elimination “movement”
Number of deaths/year from selected conditions, Global Burden of Disease Study 2010 and 2013

- HIV/AIDS
- Viral hepatitis
- Tuberculosis
- Malaria

No. of deaths (millions)

Leading causes of global mortality 2013

- IHD
- LRTI
- Stroke
- Diarrhoea
- Road injury
- HIV
- Viral hepatitis
- Preterm birth
- Malaria
- Neonatal encephal.
- Congenital anomalies

Source: GBD Lancet (2014); Adapted from Cooke G JVH 2013

7th leading cause of death
Hepatitis-related mortality, 2013

1.45 million deaths from viral hepatitis per year

Temporal trends in global liver disease mortality

Source: B Cowie, EASL 2015 based on data from Global Burden of Disease Study
Hepatitis mortality rates and virus distribution, by Global Burden of Disease region

Courtesy of Graham Cooke based on Global Burden of Disease 2010
Prevalence of HCV infection, Egypt, 2008

Demographic Health Survey
Estimated proportion of new HCV infection by route of transmission

- Low-prev. PWID driven: e.g. W. Europe
- Low-prev. mixed: e.g. Kenya
- Hih-prev. mixed: e.g. Ukraine
- High-prev. generalized: e.g. Egypt

Vickerman P, unpublished data
Prevalence of HCV among persons who inject drugs

HCV prevalence in PWID >50% in most countries; between 60-80% in 25 countries and >80% in 12 countries

# Health care related risk factors among acute hepatitis C cases and controls, Cairo, 2002-2007

<table>
<thead>
<tr>
<th>Procedure</th>
<th>HCV cases %</th>
<th>HAV controls%</th>
<th>Family controls %</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital admission</td>
<td>16</td>
<td>3</td>
<td>5</td>
<td>3.8 (1.6-8.8)</td>
</tr>
<tr>
<td>Surgery</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>5.3 (1.4-20.1)</td>
</tr>
<tr>
<td>Stitches</td>
<td>22</td>
<td>6</td>
<td>3</td>
<td>5.1 (2.2-11.5)</td>
</tr>
<tr>
<td>IV injections</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>4.3 (1.3-14)</td>
</tr>
<tr>
<td>IM injections</td>
<td>14</td>
<td>13</td>
<td>19</td>
<td>0.8 (0.4-1.7)</td>
</tr>
<tr>
<td>IV cannula</td>
<td>14</td>
<td>5</td>
<td>4</td>
<td>3.3 (1.3-8.5)</td>
</tr>
</tbody>
</table>
How many people need HCV treatment?

- ~185 million persons with history of HCV infection
- ~130-150 million persons with chronic HCV infection
- ~26-30 million persons with F3-F4 stage fibrosis
Global burden of co-infection

Burden of co-infection with HIV and HCV by region, 2013

3.2 million (IQR: 1.4-4.3 million)

Burden of hepatitis B surface antigen and HIV by region, 2013

2.6 million (IQR: 1.5-5.5 million)
## Global estimates of HCV infection among People living with HIV by WHO region

<table>
<thead>
<tr>
<th>Region</th>
<th>No. PLHIV</th>
<th>Prevalence</th>
<th>Regional distribution</th>
<th>Estimated no (IQR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>2,482,860</td>
<td>5% (1-6%)</td>
<td>43%</td>
<td>1,374,400 (270,000-2,098,300)</td>
</tr>
<tr>
<td>Latin America</td>
<td>1,884,200</td>
<td>10% (6-15%)</td>
<td>9%</td>
<td>279,900 (150,200-359,900)</td>
</tr>
<tr>
<td>North America</td>
<td>1,576,800</td>
<td>10% (6-11%)</td>
<td>10%</td>
<td>320,000 (227,000-359,900)</td>
</tr>
<tr>
<td>South East Asia</td>
<td>4,216,500</td>
<td>6% (5-8%)</td>
<td>16%</td>
<td>494,500 (320,700-715,300)</td>
</tr>
<tr>
<td>Eastern Europe/CAR</td>
<td>1,788,000</td>
<td>13%</td>
<td>19%</td>
<td>589,600 (375,500-651,000)</td>
</tr>
<tr>
<td>Western Europe</td>
<td>87,500</td>
<td>12% (7-14%)</td>
<td>1%</td>
<td>46,500 (28,900-51,500)</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>308,600</td>
<td>12%</td>
<td>1%</td>
<td>29,600 (17,700-41,500)</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>892,900</td>
<td>13% (6-63%)</td>
<td>2%</td>
<td>48,300 (36,700-60,800)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3,558,3100</strong></td>
<td><strong>5% (3-9%)</strong></td>
<td></td>
<td><strong>3,182,700 (1,426,800-4,373,000)</strong></td>
</tr>
</tbody>
</table>
### What can/must be done? HBV and HCV

<table>
<thead>
<tr>
<th>Intervention</th>
<th>HBV</th>
<th>HCV</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV vaccine</td>
<td>✓</td>
<td></td>
<td>HBV vaccine coverage:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 81% for childhood immunization</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 38% for birth dose</td>
</tr>
<tr>
<td>Safe blood</td>
<td>✓</td>
<td>✓</td>
<td>39 countries without universal testing of blood donations</td>
</tr>
<tr>
<td>Infection control practices</td>
<td>✓</td>
<td>✓</td>
<td>Significant risk in some countries due to overuse of injections and re-use of syringes</td>
</tr>
<tr>
<td>Harm reduction</td>
<td>✓</td>
<td>✓</td>
<td>Insufficient coverage of services</td>
</tr>
<tr>
<td>Safer sex practices</td>
<td>✓</td>
<td>✓</td>
<td>Condom promotion, partner reduction</td>
</tr>
<tr>
<td>Prenatal interventions</td>
<td>✓</td>
<td></td>
<td>Inadequate coverage or HBV birth dose, role of HBIG, antivirals?</td>
</tr>
<tr>
<td>Treatment</td>
<td>✓</td>
<td>✓</td>
<td>Very low coverage</td>
</tr>
</tbody>
</table>

*NB: W/H represents the World Health Organization.*
Evaluation of injection practices, 2000 and 2010

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of healthcare injections (per person per year)</td>
<td>3.40</td>
<td>2.88</td>
</tr>
<tr>
<td>Proportion of re-use during healthcare injections</td>
<td>0.398</td>
<td>0.055</td>
</tr>
<tr>
<td>Number of unsafe healthcare injections (per person per year)</td>
<td>1.35</td>
<td>0.16</td>
</tr>
</tbody>
</table>

Regional and Global estimates of the coverage of harm reduction interventions (Mathers, et al. Lancet 2010)

**NSP Coverage**

- Eastern Europe (18/18)
- Western Europe (23/27)
- East and SE Asia (10/16)
- South Asia (6/9)
- Central Asia (5/5)
- Latin America (5/18)
- Canada & US (2/2)
- Australia & NZ (2/2)
- Middle East & N Africa (8/21)
- Sub-Saharan Africa (2/16)
- Global (82/151*)

**OST Coverage**

- Eastern Europe (16/18)
- Western Europe (25/27)
- East and SE Asia (7/16)
- South Asia (5/9)
- Central Asia (2/5)
- Latin America (2/18)
- Canada & US (2/2)
- Australia & NZ (2/2)
- Middle East & N Africa (4/21)
- Sub-Saharan Africa (4/16)
- Global (70/151*)

* (Number of countries reporting implementing OST, of those with injecting drug use identified)

Courtesy of S. Hutchinson
Estimated chronic HCV prevalence, diagnosis and treatment rates in 2013

Most low- and Middle-income countries
Viral hepatitis

Why a global hepatitis strategy?
And why now?
A Global Health Sector Strategy for Hepatitis:

Why?

- Major global public health threat
- Progress is inadequate, uneven and inequitable
- New opportunities: medicines, technologies and approaches
- New era of advocacy for viral hepatitis
Why now...?

• **World Health Assembly requested** (May 2014)
  - “Feasibility of and strategies needed for the elimination of hepatitis B and hepatitis C with a view to potentially setting global targets”

• **Sustainable Development Goals**
  - “End the epidemics of AIDS, TB, malaria and .. and combat hepatitis, water-borne diseases and other communicable diseases”
  - Hepatitis alongside HIV, TB, Malaria –

• **Growing movement around hepatitis**
  - Treatment “revolution”; country momentum; patient demand
World Health Assembly Hepatitis Resolution (May 2014): *a powerful tool for action*

- Unanimously adopted with 49 countries speaking in favor
- Broad set of recommended actions including:
  - Support development of national viral hepatitis strategies
  - Enhance strategic information
  - Promote access to prevention and treatment services
  - Assess feasibility of elimination of HBV and HCV
The Global Hepatitis Strategy will be developed for consideration by the World Health Assembly in May 2016.

Will cover the period 2016-2021.

Will guide actions to meet ambitious 2030 targets focused on elimination targets.
WHO is developing three separate, yet interlinked strategies

**HIV:** End the AIDS epidemic in 2030

Aligned to UNAIDS strategy

**STIs** End STI epidemics in 2030

**Viral hepatitis:** *Eliminate hepatitis B and C in 2030*
Feasibility and focus of Elimination

- **Vision of elimination** “Towards a hepatitis-free generation” supported in technical and political consultations, but not seen as business as usual
  - Strategy consultations and Civil Society Reference group

- Elimination as a **public health issue of concern** - remove sustained transmission, remove hepatitis as a leading cause of mortality:
  - In line with HIV, TB, malaria and other health issues in post 2015 agenda
  - Elimination and not eradication: long wave of prevalence will remain for decades

- **Technically feasible** by scaling up 6 key interventions to high coverage
  - Not just aspirational, i.e. supported by technical interventions, including vaccines, cure and treatment
  - Still very ambitious, requires major changes in costs, diagnostics, delivery.
For the first time: global hepatitis targets

• **Impact targets** across hepatitis B and C – incidence and mortality by 2030
• Supported by **coverage targets** for key interventions
  ➢ Balance **feasibility** with **ambition**
  ➢ Set agenda to 2030 with milestones for 2020
### Draft Impact and coverage targets
(in 6 key intervention areas)

#### Impact targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2030</th>
<th>2020</th>
<th>Baseline 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td>New infections of chronic Hepatitis B and C</td>
<td>90% reduction</td>
<td>30%</td>
</tr>
<tr>
<td>Mortality</td>
<td>Hepatitis B and C deaths</td>
<td>70% reduction</td>
<td>10%</td>
</tr>
</tbody>
</table>

#### Intervention targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2030</th>
<th>2020</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HBV vaccination</td>
<td>Childhood vaccine coverage</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>2. HBV MTCT (mother to child)</td>
<td>Birth dose vaccine coverage (or other approach to prevent MTC)</td>
<td>90%</td>
<td>50%</td>
</tr>
<tr>
<td>3. Safe injection</td>
<td>Injections administered with safety engineered devices (Safe injection coverage in and out of health facilities)</td>
<td>90%</td>
<td>50% coverage</td>
</tr>
<tr>
<td>4. Harm reduction</td>
<td>Number of needles/PWID/year (as part of effective harm reduction package)</td>
<td>300 (75% coverage)</td>
<td>200 (50% coverage)</td>
</tr>
<tr>
<td>5. HBV Treatment</td>
<td>Treatment eligible persons with chronic HBV treated</td>
<td>80%</td>
<td>8 million treated</td>
</tr>
<tr>
<td>6. HCV Treatment</td>
<td>Treatment eligible persons with chronic HCV treated</td>
<td>80%</td>
<td>(Est. 5m HBV, 3m HCV)</td>
</tr>
</tbody>
</table>
What does it mean by 2020 and 2030?

- **By 2030**, 90% reduction in incidence and universal access to key services
  - Reduction from 6-10 million new cases to under 1 million
  - 80% of eligible people receiving treatment
  - Universal access to vaccination, birth dose, safe injection and harm reduction
  - Number of deaths reduced from 1.4 million to under 500,000

- **By 2020**, 8 million provided treatment, 30% reduction in incidence
  - Major innovations in treatment costs, case finding, standard package
  - Prevention Hepatitis B: at least 90% coverage vaccination, 50% birth dose
  - Prevention Hepatitis C: at least 50% coverage safe injections, 50% harm reduction
5 Challenges for the Hepatitis Elimination

The draft strategy poses five critical questions to achieve impact:

- What is the situation we face?
- What interventions need to be delivered?
- How can we optimally deliver?
- How can we cover the costs?
- How can we change the trajectory?
Frameworks for action: **Universal health coverage** and the **continuum of care**

**Goal, targets and milestones**

- **Strategic Direction 1:** Information for focus and accountability
  - The “who” and “where”

- **Strategic Direction 2:** Interventions for impact
  - The “what”

- **Strategic Direction 3:** Delivering for quality and equity
  - The “how”

- **Strategic Direction 4:** Financing for sustainability
  - The financing

- **Strategic Direction 5:** Innovation for acceleration
  - The future

**Strategy Implementation:** Leadership, Partnership, Accountability, Monitoring & Evaluation
GHSS Development Timeline

- 136th WHO Executive Board
- WHA68
- WHO Regional Consultations
- Regional Committees
- Development and Donor Partner Consultations
- Finalization Process
- 137th WHO Executive Board
- WHA May 2016

January
February
March
April
May
June
July
August
September
October
November
December

Online Consultation
STAC Meetings
Civil Society Reference Groups

Side events and conferences (HIV, HEP, STI)

DRAFT 1
DRAFT 2
DRAFT 3
DRAFT 4
WHO’s role/aspirations in improving access towards HCV elimination

Screening > Care > Treatment

Advocacy
World Hepatitis Day
National planning
Prevalence estimates

Prequalification of diagnostics
Screening/testing guidelines

Prevention, including
Injection safety
Hospital infections
Safe blood products
Needle sharing programmes

Strategic information guide
Chronic care
Access to controlled medicines
Operational research

Treatment Guidelines
Prequalification of medicines
Essential Medicines List
Strategic Information – Prices, Patents
Price reduction strategies

Advocacy, Guidance, Capacity Building, Technical Assistance, M&E
Spirit of the elimination agenda: commitment and innovation

Ask not:
Is it feasible?

Ask rather:
How can we make it feasible?
28 July: World Hepatitis Day

In partnership with WHO and Egypt; Multiple country events

Global media event in Cairo; Social media: Thunderclap and “ask WHO”
Acknowledgements

- Stefan Wiktor
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