Training workshop on screening, diagnosis and treatment of hepatitis B and C
Session 17

WHO Monitoring and Evaluation Framework for Viral Hepatitis

To be adapted following national data reporting formats and M&E systems, where available
Learning objectives

At the end of this session, learners would understand:

• the public health response to viral hepatitis
• the Global Health Sector Strategy on Viral Hepatitis and its service and impact targets for the year 2030
• various aspects of WHO’s Monitoring and Evaluation Framework for Viral Hepatitis, and reporting towards the WHO Global Reporting System for Hepatitis (GRSH)
5 STRATEGIC DIRECTIONS

1. Information for focused action
2. Interventions for impact
3. Delivering for equity
4. Financing for sustainability
5. Innovation for acceleration

7th leading cause of death globally (2013)
Four main hepatitis viruses

A E B C

95% of burden

Faecal-oral route Exposure to blood/body fluids

Acute hepatitis

Chronic infections

Sequelae
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### GLOBAL HEALTH SECTOR STRATEGY ON HEPATITIS – TARGETS

<table>
<thead>
<tr>
<th>Targets</th>
<th>Interventions</th>
<th>2030 target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Service coverage</td>
<td>1. Three doses of hepatitis B vaccine</td>
<td>90%</td>
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<tr>
<td></td>
<td>2. HBV PMTCT</td>
<td>90%</td>
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<td></td>
<td>3. Blood and injection safety</td>
<td>100% screened donations</td>
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<td></td>
<td></td>
<td>90% reuse-prevention devices</td>
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<td></td>
<td>4. Harm reduction</td>
<td>300 injection sets/PWID/year</td>
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<td></td>
<td>5. Treatment</td>
<td>90% diagnosed</td>
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<td></td>
<td></td>
<td>80% eligible treated</td>
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<tr>
<td>2. Impact</td>
<td>A. Incidence</td>
<td>90% reduction</td>
</tr>
<tr>
<td></td>
<td>B. Mortality</td>
<td>65% reduction</td>
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</tbody>
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PMTCT: prevention of mother-to-child transmission  
PWID: person who injects drugs

One of the reasons we do viral hepatitis surveillance is to evaluate programmes. Each of the three domains of viral hepatitis surveillance will help us evaluate different types of programmes.

First, information from surveillance for acute hepatitis can be used to evaluate programmes to prevent new infections, which includes vaccination, food and water safety, blood safety, condom distribution, harm reduction and infection control.

Second, information from surveillance for chronic hepatitis can be used to evaluate programmes for testing and treatment.

Third, information from surveillance of sequelae can be used to evaluate the ultimate impact a programme on mortality.
In a given country, there will usually be an existing system for viral hepatitis surveillance. For this reason, WHO suggests to improve the existing system rather than creating a new system. The steps to improve the system are the following:

First, make an inventory of what is already there. This may include some form of acute hepatitis surveillance or ad hoc surveys that estimated the prevalence of HBV or HCV infection.

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When these three points are reasonably covered, it make sense to examine options to obtain data on sequelae.
This slide shows the 10 core indicators for viral hepatitis along the result chain.

At the top of the slide, in light orange, you can see the progression from context, to input, to output and outcome, and finally impact.

The context and needs will inform about epidemic patterns, stigma and population in need. The key indicators (C1) are the prevalence of HBV and HCV infection.

The input will inform about policy, laws, health systems, input and financing. The key indicator (C2) is about the infrastructure for testing.

Then, we enter the cascade of prevention and care, including prevention, testing, care and treatment and cure / viral suppression. Prevention indicators measure vaccination (C3), needle and syringe distribution (C4) and injection safety (C5). Then, the cascade of testing, care and treatment is reflected by C6 (proportion of persons diagnosed), C7 (initiation [HCV] or coverage [HBV] of treatment) and C8 (cure [HCV] or viral suppression [HBV]).

The result based framework finishes with impact indicators, including (a) incidence of HBV and HCV infection (C9) and (b) mortality (C10).
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INFORMATION NEEDS AT EACH PHASE

1. Assessment
- Prevalence estimates (C.1)
- Prevention indicators (C.3 to C.5)
- (Mortality and incidence baseline) (C.9 and C.10)

2. Planning
- Estimation of the size of the population that needs treatment
- Investment case

3. Implementation
- Prevention indicators (C.3, C.4 and C.5)
- Cascade (Testing, C.7 and C.8)

4. Evaluation
- Prevention indicators (C.3 to C.5)
- Testing capacity (C.2)
- Cascade (C.6 to C.8)
- Impact (C.9 and C.10)

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The first purpose is to detect outbreaks, monitor trends in incidence and identify risk factors for new, incident infections. **This will be done with surveillance for acute hepatitis.**
One of the reasons we do viral hepatitis surveillance is to evaluate programmes. Each of the three domains of viral hepatitis surveillance will help us evaluate different types of programmes.

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1. Detect outbreaks, monitor trends in incidence and identify risk factors for new, incident infections

2. Estimate the prevalence of chronic infections and monitor trends in sentinel groups

3. Estimate the burden of sequelae

The second purpose is to estimate the prevalence of chronic infections and monitor trends in sentinel groups. This will be done with surveillance of chronic infections.
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WHO launched the Global Reporting System for Hepatitis (GRSH) for national reporting which supports reporting back towards SDGs on hepatitis elimination.
SUMMARY

- Strategic information is essential to start and maintain a public health programme.
- Several components
  - Infection and disease indicators
    - incidence of acute infection
    - prevalence of chronic infection
    - burden of sequelae
  - Programme indicators
    - prevention indicators
    - Patients’ registries
- How can a country develop its monitoring and evaluation (M&E) system?
  - Start gradually and build up
  - Keep feasibility in mind

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<tr>
<td><strong>CORE indicators</strong></td>
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<tr>
<td>C.1–C.10</td>
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<tr>
<td><strong>ADDITIONAL indicators</strong></td>
</tr>
<tr>
<td>A.1–A.27</td>
</tr>
<tr>
<td><strong>ADDITIONAL indicators for hepatitis</strong></td>
</tr>
<tr>
<td>(A.1–A.10)</td>
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<tr>
<td><strong>ADDITIONAL indicators from other</strong></td>
</tr>
<tr>
<td>programmes (A.11–A.27)</td>
</tr>
</tbody>
</table>
10 ADDITIONAL INDICATORS FOR HEPATITIS (A.1–A.10)

1. Hepatitis D coinfection among people living with HBV infection
2. Experience with discrimination
3. Availability of essential medicines and commodities
4. National system for viral hepatitis surveillance
5. Hepatitis B testing
6. Hepatitis C testing
7. HCV genotyping
8. Viral hepatitis B and C care coverage
9. Equitable access to hepatitis treatment
10. Documentation of treatment effectiveness
17 ADDITIONAL INDICATORS FROM OTHER PROGRAMMES

A.11–A.14: HIV/STI
A.15–A.16: Immunization
A.17–A.18: Blood safety
A.19–A.23: Injection safety and infection control
A.24–A.25: Harm reduction, HIV
A.26–A.27: Noncommunicable diseases, cancer