Module 1: Principles of Viral Load Monitoring

**Session Objectives**

By the end of this session, participants will be able to:

- Understand the dynamics of viral load during the course of HIV infection
- Understand how viral load affects risk for transmission and progression of HIV
- Explain how viral load responds to antiretroviral therapy
- Identify treatment failure using viral load
- Describe schedule of viral load testing

**Session Overview**

- Understanding Viral Load
- Viral Load and HIV Infection
  - Disease Progression
  - Disease Transmission
- Viral Load Measurement and Reporting
- Viral Load Response to ART
- Treatment Failure
  - Criteria
  - Routine and Targeted Viral Load Monitoring
- Schedule of Viral Load Monitoring

**Materials Needed**

- Slides
- Adult Counseling Flipchart

**45 minute Lecture**

- Explain the concept of viral load
- Describe how viral load relates to HIV infection, including:
  - How viral load changes according to disease progression
  - How viral load affects disease transmission
- Discuss how to measure viral load and interpret results
- Describe how viral load responds to ART
- Explain the definition of treatment failure, including:
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<tr>
<th>10 minute Activity</th>
<th>Activity: Knowledge Assessment</th>
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<td>Facilitator will conduct a 3-question knowledge assessment with the participants.</td>
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<tr>
<th>5 minute Wrap-up</th>
<th>Key points to emphasize in summary:</th>
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<td>• Viral load predicts progression of disease in an individual, and onward transmission of HIV to sex partners or from mother to baby</td>
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<td>• In most individuals, viral load will drop to below levels detectable by viral load blood tests after 6 months of ART</td>
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<td>• Viral load testing is the preferred method for detecting treatment failure for ART patients and should be checked after 6 months on ART</td>
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<td>• Viral load &lt;1000 copies/ml indicates acceptable response to ART</td>
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<td>• Virologic treatment failure: persistent (2 or more VL test results &gt;1,000 with the initial test being performed &gt;6 months on ART and the 2nd test performed after adherence counseling and a minimum of 3 months of good adherence)</td>
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Methodologies

1. Lecture
2. Activity: Knowledge Assessment

Advance Preparation for Trainers

- Trainer must update slides 27, 28, 29, and 31 with the schedule for routine viral load monitoring and CD4 testing according to their country’s national guidelines.