ADHERENCE AND PSYCHOSOCIAL SUPPORT FOR CHILDREN AND ADOLESCENTS

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CHS
Outline

- Definition of adherence
- Why adherence
- Forms of non-adherence
- ART preparation in children and adolescents
- Factors influencing adherence
- Adherence monitoring
- Strategies to promote adherence
- Psychosocial support
Introduction

• Strict adherence to Antiretroviral Therapy (ART) is key to ensure
  – Sustained viral suppression
  – Reduced emergence of drug resistance
  – Improved overall health
  – Decreased risk of HIV transmission.

• Poor adherence is the major cause of therapeutic failure.

• Critical determinant of long-term outcome in HIV infected patients.
What is Adherence

- **Adherence** the "extent to which a client's behavior coincides with the prescribed health care regimen as agreed through a shared decision-making process between the client and the health care provider"
  
Adherence

1. Right drug
2. Right amount
   - Dose formulation
   - Duration/intervals
3. Right circumstance
   - With food or without food
   - Not with other drugs
Why is Adherence Important

- Achieve viral suppression
- Minimize the chance of viral resistance
- Prevent recurrence of OIs

A patient’s best chance of ART success is to remain on their first-line regimen of ART
How Much Adherence Is Required for Optimal Results of ART?

<table>
<thead>
<tr>
<th>% Adherence to PI Therapy</th>
<th>% of Clients/Patients with Virologic Failure</th>
</tr>
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<tbody>
<tr>
<td>&gt;95</td>
<td>21.7</td>
</tr>
<tr>
<td>90–94.9</td>
<td>54.6</td>
</tr>
<tr>
<td>80–89.9</td>
<td>66.7</td>
</tr>
<tr>
<td>70–79.9</td>
<td>71.4</td>
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</tbody>
</table>

### Viral Load Suppression and Adherence

#### NNRTI VS PI

<table>
<thead>
<tr>
<th>Adherence by Pill Count, %</th>
<th>NNRTI Group, %</th>
<th>PI Group, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 to 100</td>
<td>~90</td>
<td>~65</td>
</tr>
<tr>
<td>74 to 93</td>
<td>~60</td>
<td>~60</td>
</tr>
<tr>
<td>54 to 73</td>
<td>~75</td>
<td>~30</td>
</tr>
<tr>
<td>0 to 53</td>
<td>~30</td>
<td>~12</td>
</tr>
</tbody>
</table>

After a median 9.1 months of follow-up, most people on NNRTI therapy had a viral load below 400 copies/mL even with adherence as low as 54%, while substantially fewer PI takers had viral loads that low if their adherence was shaky (Table)

**Source:** Bangsberg D, Weiser S, Guzman D, Riley E. 95% adherence is not necessary for viral suppression to less than 400 copies/mL in the majority of individuals with NNRTI regimens. Program and abstracts of the 12th Conference on Retroviruses and Opportunistic Infections; February 22-25, 2005; Boston, Massachusetts. Abstract 616.
Sub-Optimal Adherence Predisposes to Resistance

Sub-optimal adherence → Sub-therapeutic drug levels → Incomplete viral suppression → Generation of resistant HIV strains by selection for mutant viruses

The association between poor adherence and antiretroviral resistance is well-documented\(^1,2\)

Before HIV treatment:
Viral load is high

Skipping/missing doses:
Viral load increases, HIV virus mutates, and resistance occurs

Sticking with HIV treatment:
Viral load is undetectable

VIRAL LOAD

TIME

Original HIV
Mutated HIV
Forms of Non Adherence

1. Consistent Underdoser
   • Regularly neglects to take one of the prescribed doses, such as the morning dose
   • Regularly takes only some of the prescribed medications

2. Consistent Overdoser
   • Regularly takes a drug more often or in larger doses than is prescribed

3. Random Doser
   • Takes the medications when she or he thinks of it.
Non- Adherence

4. Abrupt Overdoser
   • Does not take medications properly and then takes an overdose prior to a clinic visit
   • Doubles up for missed doses

5. Tourist (takes “drug holidays”)
   • Abruptly stops all medications for a few days or weeks
   • Takes one day off per week
ARVs Adherence in Children and Adolescent

Most children dislike medicine! But ARVs are difficult and must be taken for life!
ART Preparation

• Psychosocial criteria for patients and caregivers
• Support system criteria for patient and caregiver
• Positive Health Dignity and Prevention (PHDP)
  – Disclosure
  – Family and partner testing
  – STI screening
  – Condom use
• Medical criteria
FACTORS INFLUENCING ADHERENCE

Child/Family Factors

- **Child’s lifestyle**
  - Fitting ARVs around school & friends

- **Child’s lack of understanding**
  - Why do I need medicine (Disclosure)
  - How long will I take this medicine

- **Children relay on their parent or carer for ARVS**
  - Is the parent sick/unable to administer ARVs?
  - Has the parent had any negative experiences of ARVs?
  - Is the parent adherent?
  - How is the parent coping with own diagnosis AND child’s?
  - What is the parent’s perception of the child’s illness?
Medication Factors

- Dietary requirements
- Plenty in number
- Difficult to swallow
- Taste bad
- Unpleasant side effects

Pill Burden
Caregiver Factors

**Parent must GIVE the medications**

- Parents/caregivers may be dealing with their own illness and medications
- Parents/caregivers may have job obligations
- Parent/caregivers may have lack of understanding about HIV
- Lack of HIV disclosure to the child

**Child must TAKE the medications**

- Previous medication history of the child
- Ability of child to swallow tablets, and the taste/texture, etc.
- Developmental stage of child
- Child may refuse or fight about it
Adherance Monitoring

• The objectives of adherence monitoring is to:
  – Evaluate and reinforce the Childs/Adolescents adherence to ART
  – Elicit any barriers to the same
  – Develop a plan with the child/caregiver to address any of the barriers identified. These may include
    • incorrect knowledge of HIV infection and ART
    • unsupportive psychosocial factors
    • difficult home or school environment
    • substance use and poor motivation for taking medication...
Methods of Adherence Monitoring

- Morisky medication adherence scale - 4
- Morisky medication adherence scale - 8
- Pill Counts
- Pharmacy refill records
- Viral load monitoring
- Home visits
Adherence analysis using (MMAS-4)

Adherence rating among patients current on ART (n=84)

- **Good**: 83%
- **Inadequate**: 17%
- **Poor**: 0%

Reasons for Inadequate adherence (n=84)

- **Forget taking medicine**: 11%
- **Careless at times about taking your medicine**: 8%
- **Stop taking medication due to drug side effect**: 1%
- **Stop taking medication when client get better**: 0%

**Period**: As at June 2017

**Data Source**: Patient file (MMAS-4 Form)

**Data collected from 6 health facilities**
Adherence analysis using (MMAS-8)

<table>
<thead>
<tr>
<th>Adherence rating among patients current on ART with High VL (n=43)</th>
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<tbody>
<tr>
<td>Inadequate</td>
</tr>
<tr>
<td>91%</td>
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<table>
<thead>
<tr>
<th>Reasons for Inadequate adherence (n=43)</th>
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</thead>
<tbody>
<tr>
<td>Pressure to sticking to medication plans</td>
</tr>
<tr>
<td>Stop taking medication due to drug side effect</td>
</tr>
<tr>
<td>Stop taking medication when client get better</td>
</tr>
<tr>
<td>Stop taking medication when symptoms are under control</td>
</tr>
<tr>
<td>Forgot taking medicine yesterday</td>
</tr>
<tr>
<td>Careless at times about taking your medicine</td>
</tr>
<tr>
<td>Forget taking medicine</td>
</tr>
<tr>
<td>Difficulty in remembering to take medication</td>
</tr>
</tbody>
</table>

**Period:** As at June 2017  
**Data Source:** Patient file (MMAS-4 Form)  
**Data collected from 6 health facilities**
Multidisciplinary Adherence Team

- Clinician
- Adherence Nurse
- Pharmacist
- Counselor
- Social worker
- Nutritionist
- Other Health Workers
- Expert patients
- Family / Friends
- Religious leaders
- Peer educators
- Community health workers
Strategies to promote medication adherence

- Pill boxes
- Alarm reminders
- Direct administration
- Phone application reminders
- Treatment buddies
- Color coding of medications
- Fix dose combinations
Psychosocial Support

Definition

- Psychosocial well-being refers to the social and emotional well-being of an individual and the ability to fulfill his/her potential as a human being.
- Psychosocial Support (PSS) is interventions that helps the child and adolescent live and cope with life and its stressors and helps build resilience.
# Psycho VS social

## Psychological Aspects
- Emotional
- Cognitive
- Mental
- Spiritual

## Social Aspects
- Relationships with:
  - Others
  - Environment
  - Society

These aspects of well-being also influence physical health and how the patient engages in his/her own antiretroviral treatment (ART) particularly with reference to adherence, treatment and disclosure issues.
PSS in the Health Setting

PSS in health care settings focuses on the following factors affecting children and adolescents and their primary caregivers:

- Emotional factors such as HIV-related issues like disclosure, adherence and treatment literacy (PHDP)
- Social factors including stigma and discrimination
- Physical health
- Mental health and well-being
- Spiritual experiences.
Why the need for PSS

- Unmet basic needs (including shelter and food) protection and safety
- Inconsistent or no day-to-day care by a primary caregiver
- Lack of encouragement and affirmation
- Unfulfilled need for a sense of belonging in the family
- Unequal sharing of resources within the family resulting in neglect
- Stigma, discrimination and bullying
- Inability to participate in the management of one’s own health care
PSS activities in health setting

- Support groups and PHDP massages
- Individual counselling sessions
- Life skills coaching
- Spiritual guidance
- Income-generating projects
- Peer educator programmes
Support Groups – OTZ clubs
CONCLUSION

• Recognize that adherence to treatment is difficult! If you are to help your client, it is important to understand that difficulty.

• Decisions about ART require consideration of multiple issues.

• ART requires a high level of adherence to achieve adequate immunologic improvement.

• Adherence is a critical component of ART treatment, vital to the successful care and positive treatment outcomes of clients with HIV and AIDS.
References

• Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infection in Kenya. 2016 Edition
• B. Ndyanabangi. 2007: Adherence to ART PPT Slides.
• Adherence to Treatment for HIV. 2006: A Training Curriculum for Counselors; Engender Health.
Acknowledgement

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Thank you!

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