

# SECTION 3: ANTIRETROVIRAL TREATMENT ADHERENCE

## General consideration

Adherence to ART is essential to maintain long-term health benefit and avoid development of drug resistance. It is not possible for health care providers to reliably predict which individuals will ultimately be adherent to their treatment plan. This is because adherence does not correlate with gender, cultural background, socio-economic or education level. Nor does it correlate with language barriers between provider and patient.

It is therefore essential to provide all patients with a comprehensive plan to support adherence. The plan must make use of multiple strategies and all members of the health care team, as well as family and community.

## Adherence assessment and monitoring

### Role of the health care team

There is evidence that there is less adherence as time progresses. Thus, monitoring and ongoing support of adherence is essential.

- New diagnoses or symptoms can influence adherence. For example, depression might require referral, management, and consideration of the short- and long-term impact on adherence.
- A trusting relationship between the patient and members of the health care team is essential.
- Optimal adherence requires full participation by the health care team: patient, family members and the community.
- Every patient interaction is an opportunity for reinforcement.
- Supportive and non-judgmental attitudes and behaviours will encourage patient honesty regarding adherence and problems.

### Clinicians should commit to the following:

- communication between clinic visits
- ongoing adherence, evaluation and monitoring
- timely response to any barriers such as adverse events or interim illness

Interim management during clinician holidays or other absences must be discussed with the patient. If there is sub-optimal adherence, there should be extra support e.g.:

- investigate new barriers
- recommend more visits
- enlist support of family/friends
- review teaching approach
- increase home visits

For all health care team members, specific training regarding ART and adherence should be offered and updated periodically. See Table 15 for adherence support methods, page 54.

## Adherence to ART

- Success of ART hinges on medication-taking behaviour.
- Ideal adherence means a patient must take more than 95% of their doses (i.e. missing less than 3 doses in a month).
- If a patient is taking less than 95% of their doses, they are at risk for developing viral resistance and ultimately virological failure.

**Patients taking <80% of their doses are unlikely to have any durable virological suppression. They should be targeted urgently for adherence improvement, and 6-month follow-up (see Table 16, page 54).**

**Table 16: Adherence strategies**

### Strategies to promote adherence

- Spend time with the patient. Explain the goals of therapy and need for adherence as many times as is necessary.
- Consider monitoring of medications such as co-trimoxazole or by an alternative method prior to ART initiation.
- Negotiate a treatment plan that the patient can understand and to which he/she commits.
- Encourage disclosure to family or friends who can support the treatment plan.
- Inform patient of potential side-effects – severity, duration and coping mechanisms.
- Establish ‘readiness’ to take medications before ART initiation.
- Provide adherence tools where available: written calendar of medications, pill boxes.
- Encourage use of alarms, pagers or other available mechanical aids for adherence.
- Avoid adverse drug interactions. The patient must disclose any over-the-counter drugs and traditional medicines. Other medications as well as some traditional medicines cannot be taken concurrently with ART because they may cancel each other out or may lead to unacceptable adverse effects.
- Anticipate, monitor and treat side-effects.
- Include adherence discussions in support groups.
- Develop links with community-based organisations to support adherence.
- Encourage links with support groups.
- Create links with patient advocates.

**Table 17: Correlation between adherence and virologic response to ART**

Adherence to ART*	Viral load <400 copies/mm <sup>3</sup>
>95% adherence	78%
90% to 95% adherence	45%
80% to 90 % adherence	33%
70% to 80 % adherence	29%
<70% adherence	18%

\* (number of doses dispensed minus tablets returned) over (number prescribed)  
e.g. (30-5)/28=25/28=0.9 (90%)

### Basic adherence package at initiation

#### Pre-treatment

- Pre-treatment information and education as per visit schedule.
- Patient is introduced to therapeutic counsellor and patient advocate, if available and agreed to or nominated by patient. The home visit is also arranged.
- Co-trimoxazole count is undertaken for one month prior to commencing therapy. This is not to be used to exclude people from ART. It is meant to reinforce daily medication-taking behaviour from the beginning. It is also meant to identify potential problems before starting ART.

### On treatment

#### At each visit the following needs to be done:

- ART pill-returns count (% doses missed) would be ideal, but this would depend on the clinic load and capacity to undertake this intensive activity. Adherence goal is >95% doses taken. Patients with adherence <80% require increased adherence support (see below).
- Tablet count may be done before the patient sees the doctor.
  - The count should be reviewed by the doctor during the early/initial visits to evaluate adherence.
  - This does take up time and might not be possible at all sites all the time.
- Missed/late clinic visits should trigger concerns about adherence.
- Routine adherence-discussion (education) with counsellor is of value. This should be an open-ended discussion, with time for questions and repetition.
- Feedback from therapeutic counsellors to the rest of team is important to get a better profile of the patient and their environment.
- Encourage participation in a support group.
- Continue monthly visit with therapeutic counsellors for first three months and quarterly thereafter.
- Arrange regular community visits by patient advocates.

### Step-up adherence package for people with reduced adherence or virological failure

This is necessary when the adherence assessment is <80% at any visit, with or without viral or clinical failure (see Table 11, page 41).

- The therapeutic counsellor/nurse or doctor needs to re-educate the patient (and their buddy) about the importance of adherence. The long-term benefits need to be re-emphasised.
- Evaluate the support structures in place.
  - Are they appropriate?
  - How can they be improved?
  - What alternatives are there?
- Consider the use of pillboxes and/or daily dosing diary.
- Insist on participation in a support group or link with a patient advocate.
- Consider doing a psychological profile.
- Check the family situation (through social worker and therapeutic counsellor).
- Redo the Case Assessment for alcohol abuse and other abused drugs.
- Increase home visits by therapeutic counsellors/patient advocates to daily or weekly, at a minimum (spot pill counts to be done at home).
- Consider directly-observed therapy for an agreed period.
- Promote self-efficacy training.