

Introduction

Drug adherence is a key part of highly active antiretroviral therapy (HAART). It refers to the whole process from choosing, starting, managing to maintaining a given therapeutic medication regimen to control HIV viral replication and improve function of the immune system. Non-adherence is the discontinuity or cessation of part or all of the treatment such as dose missing, underdosing, or overdosing, and drug holidays.¹ The significance of adherence to treatment has become recognised, which is important in optimising the patient's response to therapy. In contrast, non-adherence can lead to treatment failure, a rise in plasma viral load, and the development of drug-resistant HIV strains..

<https://www.aids.gov.hk/pdf/g190htm/13.htm>

Drug adherence counselling programme development

A systematic approach is essential in promoting drug adherence in HIV patients. The aim of a drug adherence counselling programme is to enhance adherence to HAART for maximising treatment outcome. This would achieve the target of improving individual health clinically and lowering HIV infectivity on a public health level. Drug adherence counselling is preferentially integrated in other targeted risk reduction measures, which serve the purposes of sustaining the maintenance of a low HIV risk in the community.. The main objectives of drug adherence counselling are, to:

- (a) Support patients in making informed choice on HIV treatment according to individual needs
- (b) Assist patient in adopting drug adherence behaviour
- (c) Enhance patient's ability in managing and maintaining the treatment

Health care providers play an important role in drug adherence. Counselling is normally conducted by nurse counsellors in accordance with established protocols. Throughout the course of disease, drug adherence counselling is conducted in a patient-centred and non-judgemental approach. Patients are encouraged to participate in their disease management and treatment plan. Resource materials are important. Information booklets and posters can be used to enhance patients' understanding of the importance of drug adherence. Standardised assessment forms are useful in tracking patients' progress. The recent development of an electronic pill planner assists the nurse counsellors and the patient to plan the drug schedule that fits into patient's lifestyle..

Stage one: general preparation

This stage serves to determine treatment readiness, characterise potential and actual barriers to adherence, and provide relevant treatment knowledge and educational interventions. A trusting and caring relationship between health care provider and patient have to be established in order to achieve mutual understanding of the treatment goal.¹ Stage One counselling is offered when a patient first attends the clinic e.g. the newly diagnosed patient. This may also be required throughout the course of disease on subsequent visits.. Key issues covered at this stage are:

- (a) Thorough assessment is important to explore the potential and actual factors in a patient's life that could influence drug adherence. These include: health status, social background, and one's perception of illness and treatment.
- (b) Treatment information is provided in the same setting, covering the nature of combination therapy (HAART), their availability, effects, and the importance of adherence.
- (c) Ongoing assessment shall follow, to track the patient's knowledge on the subject, his/her understanding of the treatment process, and to evaluate one's readiness to initiating and adhering to a complex regimen.

Stage two: treatment initiation

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The most important time to address the importance of adherence to treatment and medication regimens is before starting therapy. Patient's commitment to medication adherence should be assessed. Before HAART is begun, the risks and benefits of treatment must be discussed. The potential and actual factors that could influence adherence are again addressed and intervened as appropriate prior to initiation of therapy.

Treatment is about to be initiated when CD4 count falls in a downward trend or to around 200/ μ L. The key objective at this stage is to ensure that the patient understands the benefits of HAART and the possible side effects associated with the treatment. At the end of the counselling session, he/she should be able to make a self-determined choice to start therapy. Counselling shall cover the following issues:

- (a) Assessment of factors that may influence one's adherence - Patient's perception of illness and desire for treatment; social stability, including such factors as housing status, regularity of life-pattern, job nature, need to travel, and behavioural risk factors like substance abuse; mental status; baseline knowledge.
- (b) Identification of potential facilitators and barriers to drug adherence - counselling is conducted to remove such barriers, while special support system is identified that may be utilised, such as family network or NGOs.

Stage two: treatment initiation (cont)

- (c) Development of treatment care plan.
 - (d) Discussion on the planned regimen.
 - (e) Obtaining patient's agreement to have HAART initiated.
- On the day of treatment initiation, the objectives of counselling become even more focused by addressing the specificities of the prescribed drug regimen. The patient shall agree on the drug dosing schedule. The contents of the counselling are therefore:
- (a) Assessment to check the patient's understanding of the provided information and the importance of adherence.
 - (b) Discussion on the treatment regimen.
 - (c) Development of an individualised medication schedule - assessment of one's life pattern is made, followed by the establishment of a schedule for medications. The mutually agreed medication schedule is written down on the information and scheduling sheets and would be given to the patient.
 - (d) A two-week drug taking diary exercise is introduced. The patient would be requested to record the drug taking behaviour and side effects identified on the drug taking diary in the following two weeks. He/she is encouraged to bring back the remaining drugs for pill count at every visit.
 - (e) Psychological support.
 - (f) Agreement is reached with patient on the treatment plan. Drug information sheet and schedule are given to patient to reinforce memory.

Stage three: consolidation

- The initial phase of starting treatment is a critical period for the patients in establishing the confidence and adopting a drug taking behaviour. They may be unfamiliar with the treatment schedule and encounter adverse effects. The support of the healthcare worker is important for enhancing patient drug adherence and their management of adverse effects. Consolidation counselling is started once the antiretroviral therapy is initiated and within the period of one to three months, the objectives of which are:.
- to monitor the drug adherence level of patient
 - to reinforce patient's drug adherence behaviour
 - to assess and manage the adverse effects of HAART
- Counselling at this stages cover the following areas:
- (a) One's knowledge of HAART is assessed.
 - (b) One's drug taking behaviour and adherence is monitored, and the drug adherence level is calculated (Box 13.1).
 - (c) Factors which may affect adherence are explored.
 - (d) Provision of adherence support.

Stage four: maintenance

- When the HAART regimen is stabilised, frequent and regular monitoring of drug adherence is important to maintain optimal behaviour. The nurse counsellor measures and assesses adherence on an ongoing basis to allow comparison of a given patient's adherence across time. This also serves as opportunity to evaluate side effects, identify barriers and provide support and reinforcement to patient. The objectives of maintenance counselling are:
- to optimise patient's adherence to HAART
 - to reinforce patient's drug taking behaviour
- Counselling at this stage therefore covers the followings:
- (a) Assessment of drug adherence is made, using the regular drug adherence assessment form. The nurse counsellor assesses patient's knowledge on HAART, drug taking behaviour, barriers and facilitators to drug adherence on a half yearly basis.
 - (b) During assessment, the nurse counsellor watches out for any new side effects, identifies barriers to drug adherence such as change in life pattern and such undesirable practices as drug holiday, partial dose omissions.
 - (c) Encouragement and reinforcement are given to reinforce adherence. This is done in conjunction with the provision of information on the results of viral load and CD4 count. This can also served as a reward to his adherence to the drug schedules. Specific strategies to improve drug adherence may also be considered, which include:1
- Review with patient about his perception of health goals.
 - Review the regimen and the medication schedule and simplify the regimen to facilitate a better match of schedule to life pattern.
 - Assessment and management of side effects.