



# Learning guide

Women and clinical trials in HIV

This learning guide has been prepared in conjunction with the Women for Positive Action slide presentation and speaker notes resource concerning women and clinical trials in HIV.

The guide identifies the key learning objectives for this module and suggests topics for discussion and self-learning. The modules are intended for use by both health professionals and community representatives who want to create or participate in learning opportunities relating to improving the care of women with HIV.

## **Learning objectives**

After completing this module, participants will be able to discuss the following issues and appreciate their implications for both patients and providers of health care.

### **Women are under-represented in clinical trials of HIV**

- Women comprise almost half of the global number of people with HIV.
- Women's share of infection is rising.
- Most HIV-positive women are of child-bearing potential.
- Clinical trials in HIV have tended to extrapolate findings from male subjects to women. However, gender differences exist in treatment response due to a number of factors including pharmacodynamics and pharmacokinetics, adverse events, adherence, attitudes and behaviours, and social reasons for delaying treatment initiation.
- Women have different biological, social and behavioural factors that may make them more susceptible to HIV infection.
- Many clinical trials pose significant barriers to participation for women. The main concern for investigators is of causing foetal harm. As such, pregnancy is either an exclusion criterion or reason for withdrawal and protocols often require specified contraceptive use in women of child-bearing potential.
- Few studies to date have been sufficiently powered to examine gender differences in HIV treatment.

### **Certain gender-related trends in therapy may exist**

- Compared with HIV-positive men, women:
  - Tend to delay treatment initiation or do not start at all.
  - Are less adherent to medication.
  - Are more likely to be depressed.
- Being female is associated with increased risk of treatment-related disorders of glucose metabolism, morphological alterations, hypersensitivity reactions and toxicity.

### **Women are important subjects for clinical investigations of HIV**

- Women use more pharmaceutical resources than men.
- Women comprise a substantial proportion of the target patient group and drugs should be tested in populations that reflect the end-user.
- The role of biological and hormonal differences between men and women are important to evaluate.
- It is important to ensure women have equal access to successful treatment.
- Pregnancy is commonplace for women with HIV so should not represent a barrier to inclusion in clinical trials.
- Many pregnancies in HIV-positive women are unplanned. Pregnancy has important implications for treatment.

### **Women should be encouraged to be involved in clinical trials**

- Many barriers to clinical trials participation exist for women. These include pregnancy/contraception-related restrictions in study protocols, the time commitment involved, concerns about potential drug interactions with oral contraceptives, fear of causing harm to a developing foetus, social commitments, lack of autonomy in decision making, need for disclosure and communication issues.
- To encourage more women to participate in clinical trials it is important to understand the drivers of participation.
- Women should be enabled to make fully informed decisions about the study as this will increase the likelihood of commitment and compliance.
- The language style for the trial should reflect the specifics of the study and the patient population. Together these should generate a language of engagement to include the personal and wider social benefits of inclusion, ease of participation and a call to action.

- Specifically, protocols could be made more 'woman friendly' by reducing the requirements for contraception, including an open-phase for women who become pregnant, and improving the childcare facilities, transport support and confidentiality levels at study centres.

### **Alternatives to clinical trials may be useful for women**

- Randomized controlled trials provide the best level of evidence on which clinical advances can be based. However, these trials are limited in that they do not completely reflect the patient population in everyday clinical practice, nor do they reflect fully the clinical setting in which patients receive their treatment. The trials are often expensive and time-consuming. Finally, they are not ideal for answering broad questions.
- Alternatives to randomized clinical trials include post-hoc analyses, retrospective studies, chart reviews, registries, observational studies and case-control studies.

## **Discussion guide**

Consider the following questions when completing this module – the questions can be used for both reflective self-learning purposes and as a guide to discussion as part of a group learning experience.

### **Recognising gender differences in HIV**

Women are currently under-represented in randomized clinical trials of HIV, despite their higher propensity than men to contract the disease and their rising share of infection globally. As such, clinical trials evidence from primarily male study populations has tended to be extrapolated to women.

- In which ways could the scientific extrapolations prove inaccurate for women? Consider both biological and social factors.

### **Encouraging women to enrol in – and stay in – clinical trials**

A woman may be reluctant to join a clinical trial for many reasons.

- What barriers might a woman have and how might these be overcome? Consider personal, logistical, social, medical and psychological factors.
- How does this differ for:
  - A pregnant woman or woman planning a pregnancy
  - A young mother of three
  - A migrant woman who speaks little English
  - A woman who refuses to disclose her HIV-status to family and friends
  - A woman with substance use problems
- Which reasons might a woman give for quitting the study? How can these issues be overcome? Consider personal, logistical, social, medical and psychological factors.