

Tutorial letter 201/2/2016

HIV/Aids care and counselling PYC2605

Semester 2

Department of Psychology

Feedback on Assignment 01.

BAR CODE

1 INTRODUCTION

Dear Student,

We hope that you are enjoying your module in *HIV/Aids care and counselling*. If you find the course helpful, please tell your friends and colleagues about it. Remember, it is possible for students to enrol only for this one module for non-degree purposes, if they wish to do so. The only prerequisite for the course is matric (Standard 10/Grade 12). It may also interest you to know that almost 6 000 students enrol for the *HIV/Aids care and counselling* course (PYC2605) per year!

The main purpose of this tutorial letter is to give feedback on Assignment 01. However, before we do so, let's address some other issues first.

Assignment issues

In the previous semester, many students did not get examination admission because (a) their assignments were never received by Unisa; (b) the assignments reached Unisa after the closing date; and (c) the assignments were submitted in the wrong semester. Please note that it is your own responsibility to make sure that Unisa has received and marked your assignments. Please check *myUnisa* regularly to see if your assignment has been received and marked. If you check the system regularly and it seems that your assignment was not received or marked, **please direct your enquiries to the Students Assessment and Assignment Department**. Please do not contact your lecturers to find out what happened to your assignments. Your multiple choice assignments go directly to the Assignment section to be marked by computer. Unfortunately, lecturers do not see your multiple choice assignments at all.

Please note that you have to submit Assignment 01 to gain examination admission. Together Assignments 01 and 02 contribute 20% to your final year mark.

Please take careful note of your assignment closing dates. In each semester there are two multiple choice assignments each with a specific closing date and unique number.

Make sure that you know exactly if you are registered for the **first** or for the **second** semester. Use the **assignment closing date** and **unique number** of that specific semester **ONLY** on your mark reading sheet. If you are registered for the 2nd semester, please do not use the 1st semester unique numbers. *Your assignment will NOT be registered on the system and it will get lost.*

Electronic Learning Units and Open Electronic Resources

Do you enjoy the online module? We surely had a lot of fun compiling it! Some students find the online approach a bit daunting but keep in mind that the purpose of the online module is only to *guide you through the prescribed book* and to challenge you to think differently about HIV and Aids and to motivate you to do things in your communities. There will be neither examination questions directly on the content of the electronic learning units, nor on the open educational resources (e.g. videos and webpages).

The **examination questions are based on your prescribed book only**, and Tutorial Letter 101/2016 (Section 7.1 Syllabus: What to study for the exam) indicates what to study in your prescribed book.

Declaration Letters

As discussed in Tutorial Letter 101/2016, you will *automatically* receive a Declaration Letter after successful completion of this module. Please note that we cannot re-issue this Letter of Declaration if you do not receive it the first time or lose it. Please make sure that you receive your Declaration Letter by following three simple steps:

- (a) Make sure that Unisa has your most recent postal address. We will send your Declaration Letter to the address that you registered with Unisa. If your address changed, please notify Unisa (not the Psychology Department) to change your address on the student system (fill in the form at the back of **my Studies @ Unisa** and send it to The Registrar (Academic), PO Box 392, UNISA 0003). You can also change your details by logging into *myUnisa*.
- (b) Please make sure that all outstanding fees are paid. If your study fees are in arrears, Unisa will unfortunately not release your exam results, and we will not be able to issue the Declaration Letter either.
- (c) Return all your library books that are outstanding. Unisa will not release your exam results if you still have library books in your possession.

Note: We do **NOT** print or issue the letters of declaration in our offices in the Department of Psychology. Please do not visit us on campus to issue the letters because we are not able to do so.

The examination paper

Tutorial Letter 102 contains a practice examination paper to familiarise you with what to expect in the examinations. Please make use of the opportunity to see if you can complete it (without your prescribed book) within the two hours allowed for the paper. **DO NOT** send your answers to Unisa to be marked. You will find the answers at the back of the tutorial letter for you to mark your own paper. Old examination papers for this module are available on *myUnisa*.

Feedback on Assignment 01

The purpose of this assignment was to help you to assess where you are in terms of your HIV and Aids reading and comprehension skills, knowledge and attitudes at this early stage of your studies. Use your assignment mark and our feedback to sensitise you to possible problems in your learning. Table 1 gives a summary of the correct answers to Assignment 01.

Table 1: Correct answers to Assignment 01.

Question	Assignment 1 correct answer	Question	Assignment 1 correct answer
1	2	9	2
2	3	10	3
3	4	11	1
4	3	12	1
5	3	13	3
6	1	14	2
7	3	15	1
8	4		

Students generally did very well in Assignment 01. I will now discuss each one of the questions in more detail.

QUESTION 1

Which HI virus type is predominant in Southern Africa?

- (1) HIV 1 Subtype B
- (2) HIV 1 Subtype C
- (3) HIV 2 Subtype B and C in combination
- (4) HIV 2 Subtype C

Feedback on Question 1

The correct answer is option 2. This subtype dominates in countries such as South Africa, Zimbabwe, Malawi, and Botswana. West Africa is dominated by HIV Type 2. Please read p.6 in the prescribed book.

QUESTION 2

How do viruses (including HIV) reproduce?

- (1) Viruses can reproduce in any warm and humid environment; the cells of the virus divide to form new viruses.
- (2) Viruses reproduce in the open air; they cannot reproduce in anaerobic conditions.
- (3) Viruses 'inject' their genetic material into a living cell and then use the cell to reproduce more viruses.
- (4) Viruses first kill cells, then enter them and then use the remains of the cell as 'food' for the new viruses.

Feedback on Question 2

The correct answer is option 3. Viruses cannot reproduce on their own and need other cells to help them replicate. They therefore insert themselves into living cells and make use of the normal mechanisms of these cells to reproduce (options 1 and 2 incorrect). Viruses therefore do not feed on other cells (option 4 incorrect) but use them for reproduction. Please read p.28 in the prescribed book.

QUESTION 3

The HI virus uses different enzymes to help it to reproduce. The role of the enzyme reverse transcriptase, is to

- (1) help the HI virus to attach to the CD4+T cell's receptors.
- (2) enable the new viral RNA and viral proteins to merge and bud from the cell membrane.
- (3) assist fusion of viral DNA and CD4+T cell DNA.
- (4) transform viral RNA into viral DNA.

Feedback on Question 3

The correct answer is option 4. The viral RNA has to be changed into proviral DNA by transcribing the single-stranded viral-RNA into double-stranded DNA. This process is assisted by the enzyme reverse transcriptase. The gp120 glycoprotein of the HI virus attaches to the receptors of the host cell (option 1 incorrect). The protease enzyme is involved in the merger of the new viral RNA and the viral proteins to form new viruses (option 2 incorrect). The fusion of the proviral DNA with the DNA of the host cell is facilitated by the integrase enzyme (option 3 incorrect). Please read pp.31 - 33 in the prescribed book.

QUESTION 4

Jacob is a teenage boy who has heard a lot about HIV transmission from his friends. However, because there are so many myths about how HIV is transmitted, it is difficult for him to distinguish between fact and myth. As a health-care worker, you ask him to compile examples of facts and myths about transmission. Jacob gave a correct answer by stating that transmission of HIV through (a) _____ is a fact, while transmission of HIV through (b) _____ is a myth.

- (1) (a) coughing or sneezing; (b) handshaking or hugging
- (2) (a) unprotected sex; (b) breastmilk
- (3) (a) contact with infected blood; (b) mosquito bites
- (4) (a) swimming pools; (b) blood transfusions

Feedback on Question 4

The correct answer is 3. That HIV can be transmitted through contact with infected blood is a fact while transmission through mosquito bites is a myth. Transmission through unprotected sex, breastmilk, and blood transfusions are facts while transmission through coughing or sneezing, handshaking or hugging, and swimming pools are myths. Please read pp. 51 - 52 in the prescribed book.

QUESTION 5

Research has established that _____ for 4 to 6 months is the optimal feeding type for all babies, irrespective of their HIV status.

- (1) formula feeding
- (2) mixed feeding
- (3) exclusive breastfeeding
- (4) breastfeeding with no solids, but with water and juice

Feedback on Question 5

The correct answer is 3. Formula feeding and mixed feeding have not been indicated as the optimal feeding types (options 1 and 2 incorrect). Breastfeeding together with the intake of water and juice is not exclusive breastfeeding but is rather mixed feeding (option 4 incorrect). Take note, breastfeeding supplemented only by drops or syrups consisting of essential and necessary vitamins, minerals or medicines are still regarded as exclusive breastfeeding. Please read pp. 48-49 in the prescribed book.

QUESTION 6

Health workers in Africa often find the syndromic management approach for STI (sexually transmitted infection) treatment in Africa more practical than the diagnostic management approach. The following are some of the disadvantages of the diagnostic management approach in resource-poor settings in Africa:

- (a) Laboratories with sophisticated techniques and facilities need to be acquired to diagnose the specific STI.
- (b) Over-treating patients, who may receive more drugs than they actually need.
- (c) Patients with asymptomatic STI infections do not get treated at all.
- (d) STIs often go untreated because it is often not possible for patients who reside far from clinics to return for test results and treatment at a later stage.

The correct answer is:

- (1) (a) and (d)
- (2) (a)
- (3) (b) and (c)
- (4) (a), (b) and (d)

Feedback on Question 6

The correct answer is 1. Both options a and d are disadvantages of the diagnostic approach (option 2 incorrect). Options b and c are disadvantages of the syndromic approach and therefore options 3 and 4 are incorrect. Please read pp. 87 - 88 in the prescribed book.

QUESTION 7

HIV counselling and testing (HCT) clinics should use TB checklists and refer patients with symptoms to their nearest TB treatment clinic. Which of the following symptoms would you include in your TB checklist?

(a) swollen glands; (b) anaemia; (c) diarrhoea; (d) persistent coughing; (e) enlarged liver; (f) weight loss; (g) shingles; (h) shortness of breath; (i) malaise; (j) oral thrush; (k) loss of appetite; (l) recurrent herpes infections; (m) night sweats and fever; (n) coughing blood.

- (1) (a), (d), (f), (h), (j), (m) and (n)
- (2) (b), (c), (d), (e), (f), (h), (i), (k), (m) and (n)
- (3) (d), (f), (h), (i), (k), (m) and (n)
- (4) (b), (d), (f), (g), (j), (l) and (m)

Feedback on Question 7

The correct answer is 3. Options *d, f, h, i, k, m,* and *n* are some of the symptoms of pulmonary TB while the remaining options are not. Please read p.81 in the prescribed book.

QUESTION 8

Mary is worried about her HIV status because she has two sex partners. The result of her ELISA antibody test is negative. This result can mean any of the following:

- (a) Mary has not been infected with HIV.
- (b) No antibodies against HIV have been found in Mary's blood.
- (c) Mary may be infected with HIV, but antibodies against the virus have not yet formed.
- (d) Mary is in the 'window period.'

The correct answer is:

- (1) (a) and (b)
- (2) (b) and (d)
- (3) (c) and (d)
- (4) (a), (b), (c) and (d)

Feedback on Question 8

The correct answer is 4. All the options are possible interpretations of the ELISA test. This is why a person should be re-tested after 3 to 4 weeks if there is any reason to believe that the person may have been exposed to HIV. Please read p. 98 in the prescribed book.

QUESTION 9

After the discovery of HIV, the great search for a test to diagnose HIV began. The first kits for antibody testing became available in April

- (1) 1983
- (2) 1985
- (3) 1987
- (4) 1994

Feedback on Question 9

The correct answer is 2. In 1983 Montagnier discovered HIV, in 1987 the USA started to use AZT to treat HIV infection, and in 1994 the NACOSA strategy was accepted as the foundation of the South African government's AIDS plan (options 1, 3, and 4 incorrect). Please read p. 5 in the prescribed book. You can look at pp. 12-13 for enrichment purposes.

QUESTION 10

The anti-retroviral class, Protease Inhibitors, disturb the life cycle of the HI virus by interfering with the (a)___ enzyme. Interference with this enzyme (b)___.

- (1) (a) protease; (b) prevents the virus from changing its RNA into proviral DNA
- (2) (a) reverse transcriptase; (b) prevents the virus from changing its RNA into proviral DNA
- (3) (a) protease; (b) prevents the formation and release of new HI viruses from the infected cells
- (4) (a) integrase; (b) prevents the formation and release of new HI viruses from the infected cells

Feedback on Question 10

The correct answer is 3. Interference with the protease enzyme prevents the assembly and release of newly replicated HI viruses (option 1 incorrect and option 3 correct). Reverse transcriptase inhibitors interfere with the reverse transcriptase enzyme to prevent change from viral RNA to proviral DNA (option 2 incorrect). Integrase inhibitors interfere with the integrase enzyme to prevent HIV DNA to integrate into the core of the CD4+T cell (option 4 incorrect). Please read p.111 in the prescribed book.

QUESTION 11

It is recommended by the World Health Organisation that an HIV-infected pregnant woman with a CD4+T cell count < 350 cells/mm³ should receive

- (1) lifelong antiretroviral treatment to prevent mother-to-child transmission as well as for her own health.
- (2) AZT, Nevirapine and TDF from 14 weeks of pregnancy onwards.
- (3) antiretroviral prophylaxis to prevent mother-to-child transmission.
- (4) treatment for TB and other opportunistic infections.

Feedback on Question 11

The correct answer is 1. With a CD4+T count of < 350 cells/mm³ the pregnant woman is eligible for lifelong ART. For pregnant women not eligible for lifelong ART antiretroviral prophylaxis should be given. AZT should be given from 14 weeks of pregnancy, nevirapine should be added during the intrapartum stage, and TDF should be given during the postpartum stage (options 2 and 3 incorrect).

The treatment of TB and other opportunistic infections is not related to the CD4+T count of the pregnant woman (option 4 incorrect). Please read p.124 in the prescribed book.

QUESTION 12

One of the principles of behaviour change is that the counsellor should be absolutely specific about the behaviour that needs to be changed. It is therefore important to identify the action, target, context and time of the behaviour that you want to change. The important conceptual difference between BUYING a condom and USING a condom refers to the _____ of the behaviour.

- (1) action
- (2) target
- (3) context
- (4) time

Feedback on Question 12

The correct answer is 1. *Buying* and *using* a condom refer to what is being done – action. The target could be the type of condom to buy (option 2 incorrect), the context could be the relationship for which the condom is being bought (option 3 incorrect) and the time could be how often condoms are used (option 4 incorrect). Please read p. 138 in the prescribed book.

QUESTION 13

Mabel read an article about Aids in the November edition of Love Life and realised that she may be at risk from contracting HIV, but that she has the ability to change the situation. She made a New Year's resolution to ask her boyfriend to always use condoms - starting on the first day of January. Which one or more of the principles of behaviour change do you recognise in Mabel's decision to change her behaviour?

- (a) Recognition of the need to change.
- (b) Intention to perform a specific behaviour.
- (c) Self-efficacy.
- (d) A realistic perception that there are more obstacles to behaviour change than benefits and that the road ahead will be difficult.

The correct answer is:

- (1) (c)
- (2) (a) and (b)
- (3) (a), (b) and (c)
- (4) (a), (b), (c) and (d)

Feedback on Question

The correct answer is 3. Option d does not form part of the principles of behaviour change. In addition, even though there may be many obstacles to behaviour change it does not necessarily outweighs the benefits. Please read pp. 138-140 in the prescribed book.

QUESTION 14

Daisy is in the behavioural labelling stage of the Aids Risk Reduction Model. Daisy's behaviour is shaped by factors such as:

- (1) seeking information on how to modify her behaviour.
- (2) believing that being infected by HIV is undesirable.
- (3) what her friends think of the new behaviour, and the social support she gets for the new behaviour.
- (4) Both (1) and (2) above.

Feedback on Question

The correct answer is 2. Option 1 is incorrect as it relates to the stage *taking action* and option 3 is incorrect as it refers to *commitment to change*. Please read pp. 144 - 145 in the prescribed book.

QUESTION 15

According to your prescribed book, which one or more of the following HIV and Aids group facilitators has/have the qualities of a good and successful facilitator?

- (1) Jan helps her group to discover how much they already know, and build upon their experiences by involving them in their own learning.
- (2) May found that participants often remember the wrong answers that group members gave, and therefore prefers to give the group all the necessary information and only then allow them to ask questions.
- (3) April remains as objective as possible, but when it comes to negative attitudes towards people with Aids, she imposes her very strong opinions on the participants and tries to force them into agreeing with her that negative attitudes are harmful.
- (4) All three of the facilitators are good because each one has something to contribute to the learning process.

Feedback on Question

The correct answer is 1. The presenter should listen more than they talk and not do the group's work. Group participation and an atmosphere in which people feel free to ask questions are very important (option 2 incorrect). Ideas should not be forced onto the group (option 3 incorrect). Please read p. 161 - 163 in the prescribed book.

We hope that you have learned more than theory in this assignment and that you are stimulated to read more about new developments in the HIV and Aids field. Best wishes with all the work ahead, and make the best of it!

Your lecturers in *HIV/Aids care and counselling*.