### Training course in adolescent sexual and reproductive health 2021

HIV prevention and care

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#### Question 1

## Name three factors that increase adolescent girls' risks of acquiring HIV and of the consequences of HIV infection?

In eastern and southern Africa, girls accounted for two in every three new HIV infections among young people in 2017, a phenomenon underpinned by gender inequalities and harmful masculinities, violence, poor access to education and employment opportunities, and low levels of economic independence. Undiagnosed and untreated HIV among adolescents results in substantial mortality. AIDS-related deaths among young adolescents aged 10-14 years have declined since 2010 to approximately 20 000 deaths globally during 2015, due largely to the impact of prevention of mother-to-child transmission. However, AIDS-related deaths among adolescents aged 15-19 years have continued to rise, with an estimated 20 800 deaths during 2015, due in part to the unique characteristics, especially increasing autonomy, of older adolescents and the effects of these characteristics on adherence to treatment and retention in care. Compared with children and adults living with HIV, adolescents living with HIV have higher rates of mortality. In fact, adolescents comprise the only age group for which AIDSrelated mortality did not decline between 2000 and 2015 worldwide; instead, AIDS-related mortality among adolescents more than doubled during this time period. Further, adolescent girls especially may be unable to negotiate the use of condoms due to low levels of economic independence, interpersonal violence, and power differentials related to age and gender.

#### **Question 2**

### Name three reasons why we have to do more to address HIV in adolescents than we are doing now?

Because: 1-We have more to do to achieve epidemic control Although there are less new infections in younger children, for adolescents the decline has almost flat lined (according my understanding of this figure regardless the all activity the number of adolescence was not decrease and there was no changes in reduction of the number of adolescences). 2-AIDS related deaths continue to decrease for all age groups but for adolescents the decline has flat lined (without changes). 3- Adolescents living with HIV receive inadequate access to antiretroviral therapy (girls receive more than boys)

#### Question 3

### Name two ways in which service organization of medication refill visits could be differentiated to make them more friendly to young people living with HIV.

PHC Out-of-facility individual or group collection, ART delivery models can be considered Pregnant or breastfeeding adolescents supported within differentiated ART models for clinically stable adolescents. ART refill, if oral contraception provided, refills could be distributed along ART refills, Adherence check, Disclosure process check-in, and Referral check: clear pathway to identify needs for referral to clinicians.

#### **Question 4**

### What is the DREAMS initiative? What is meant by "layering" in the context of the initiative? What challenges has the initiative experienced in layering interventions?

It is an ambitious program aiming to halt the persistent pattern of HIV infection among AGYW by creating opportunities for them to live Determined, Resilient, Empowered, AIDS-Free, Mentored and Safe lives (DREAMS). DREAMS provides a combination of HIV prevention packages designed to target multiple sources of risk for AGYW, e.g., the economic, social, cultural, behavioral, and biomedical factors that increase AGYW's vulnerability to HIV infection.

Layering in DREAMS means providing multiple interventions or services from the DREAMS core package to each AGYW. The combination of interventions that should be layered depends on several factors: 1) which interventions and services are included in the country's DREAMS program; 2) age of the AGYW (10–14, 15–19, 20–24 years); and 3) specific circumstances of individual AGYW. In addition, layering includes contextual level interventions. To build on existing infrastructures, DREAMS activities are intended to be integrated within government-supported systems

DREAMS was 'a big lift'-requiring a huge effort to get it off the ground.2- Expectations are ambitious and bold to implement and achieve impact in a quick timeframe. 3-Coordinating multiple components of the DREAMS Core Package—at institutional level was challenging. 4-A 'new way of working' was difficult given lack of existing systems, structures or incentives for organizations to link their services for AGYW. 5-Layering services in the DREAMS Core Package—at individual AGYW level. 6-Tracking the layering of services

#### **Question 5.1**

#### Explain what Theory of Diffusion of Innovation is?

Peer education interventions for HIV/AIDS prevention are usually based on behavioral theories. The design of the intervention discussed here is based partly on the Theory of Diffusion of Innovations ], which considers that an innovation can be new information, an attitude, a belief or a practice or any other object that is perceived as new by the individual or the community and can be diffused to a specific group. An innovation is communicated through certain channels over time amongst members of a social system (here, the school).

#### **Question 5.2**

#### Who are "Change Agents"?

Opinion leader

#### **Question 5.3**

### Statistically speaking, what impact did the peer education intervention have on students' knowledge, as compared to students who were not exposed to the intervention?

Of students targeted by peer education 68% had good knowledge scores, compared with 43.3% of students not targeted by peer education (c2 = (df = 1) = 111.15, p < .01). Students targeted by peer education had statistically less misconceptions and better knowledge on the modes of transmission and prevention.

#### Question 5.4

#### In your country, what role do you believe that peer educators could play in a project/ programme to address HIV among adolescents or young people? Please provide a relevant reference or example.

Naif et al (2021) conducted a study on 506 students from two Iraqi Universities to evaluate the knowledge and awareness about HIV and AIDS. The result of this study revealed that a high level was seen with the causative agent of AIDS and its transmission through blood transfusion, unprotected sexual contact, and sharing needle injection. However, a moderate level was observed regarding antenatal vertical transmission of HIV, shared use of a toothbrush or a razor. While there was inadequate or low knowledge and awareness about HIV spread through breast feeding, during birth, needle sharing and the availability of vaccines. The levels of knowledge and awareness among female students were significantly higher than males in most studied parameters (P=0.03-0.006). The general knowledge and awareness among Diyala's students declined during the second survey scheduled in 2017 compared with that done in 2010 (P=0.004) for undefined reasons (1).

A study done by Tahir et al (2009) showed that there was no significant difference between male and female regarding the etiology of AIDS. The knowledge of secondary school students was not related to parent's education (2).

Othman (2014) conducted a study to assess the knowledge about HIV/AIDS among high school students in Erbil city. Result of this study showed that all the students had heard about AIDS where around two thirds of students had heard from mass media like TV/Radio. In addition, Around 45% of students had good knowledge scores about HIV/AIDS, and 43.7% had acceptable knowledge scores, while only 11.2% had poor knowledge scores. There was a statistically significant association between high knowledge score about HIV/AIDS with older age, male gender, and typical school type (P < 0.001) (3).

According the result of these studies in Iraq and Kurdistan region School-based HIV peer education that is a process by which trained students (peer educators) inform, teach and encourage their schoolmates (peers) to recognize the risk factors and protect themselves against HIV has important role in our country.

#### **Question 6.1**

### What are the five principal components of the regional strategy for the health sector response to HIV's priorities?

Strengthening health information systems for HIV and operational research; 2. Fostering political will, broad participation and increased financing for a coordinated and sustained national response to HIV; 3. Providing quality HIV prevention, care and treatment services and enhancing their utilization; 4. Strengthening the capacity of health systems for effective integration of HIV services; 5. Promoting a supportive policy and legal environment to facilitate the health sector response.

#### **Question 6.2**

# In your opinion, which of the five principal components of the regional strategy for the health sector response to HIV's priorities is most needed in your country? Please provide a relevant reference or example.

Iraq is considered a country with a low HIV prevalence in general population (<0.1%). and of a low epidemic level of HIV/AIDS. In 2014, WHO and MOH/Iraq declared that our country will be free from the illness (zero) when new HIV cases were identified in 2012, but with time we noticed many new HIV cases were detected which not correspond to the efforts of the MOH in co-ordination and corporation with WHO. All data regarding HIV/AIDS are under strict of governmental restriction. There is no published research studying the epidemiology of HIV/AIDS in Iraq except one covering the period from 1986-2005. The study was conducted in Iraq from July 2018 to December 2019 that collected data from HIV/AIDS Center in Baghdad. Result showed that all the cases are diagnosed through case history, clinical examination and laboratory investigations. The cumulative annual number of new HIV cases increased with time (2010-2019). All cases are adults. The majority of new HIV cases are males (83.5%) and alive (90.2%). Sexual activity contributed the main mode of HIV transmission (74.6%) especially heterosexuals (4).

According the result of this study all of the principal components of the regional strategy for the health sector response to HIV's priorities is important but I think the ,Strengthening health information systems for HIV and operational research, Fostering political will, broad participation and increased financing for a coordinated and sustained national response to HIV are priority is most needed in Iraq, and Kurdistan region(2),because there is no educational program in our country to educate the adolescence and the mass media has weak role in increasing the level of awareness of people especially adolescence and providing financial support for organization that should provide the educational program for adolescence especially in high school.

#### **References**

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