

Knowledge, Attitude and Practice Regarding Management of HIV/Aids among Postgraduate Medical Internee Working in Tertiary Hospitals of Karachi.

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ABSTRACT

Objective: To assess the knowledge, attitude, and practice about HIV/AIDS among post-graduate medical doctors of medicine working in the tertiary care Hospitals of Karachi.

Methods: A descriptive Cross-sectional Study was done to assess the Postgraduate (PG) students HIV Knowledge Attitude and Practice (KAP). Three tertiary level care hospital of Karachi were randomly selected. All the postgraduates of three hospitals were approached for data collection. The important study variables are age, gender, year of training and year of graduation, passing year of part I FCPS. Data was collected through the self-structured questionnaire based on 31 questions regarding knowledge, attitude, practice and management of the participants by the principal investigator taking their written consent. The study duration was 6 months. SPSS version 24 was used to analyze data. Continuous variables like age, year of training, clinical practice experience was measured as mean and SD. The categorical variables such as level of knowledge, attitude and practice was presented through percentages and frequencies.

Results: The study showed that the one third of participants had adequate knowledge regarding HIV/AIDS (35.3%), whereas sufficient internees had adequate attitude (69.7%) towards HIV Patients, and almost one fourth participants had adequate practice and Management (26.1%) approach towards HIV/AIDS cases.

Conclusion: The Postgraduate internee has sufficient attitude, while poor knowledge and practice towards HIV/AIDS cases. For improving HIV/AIDS management and strategy, we recommended improving the awareness of health care provider as well as general population through emphasis on three KAP components.

Keywords: Knowledge, Attitude, Practice, Management FCPS part II.

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INTRODUCTION:

In this modern era the number of new cases of HIV has dropped but in Pakistan remains one of the few regional countries witnessing an increase in cases; stated by Dr. Mamadou Sakho the UNAIDS Pakistan Country Director 2017¹.

In Pakistan AIDS first case was recorded in 1987 in the city of Lahore^{2,3} but then in Pakistan the number has raised dramatically, it was estimated that HIV/AIDS reported cases in Pakistan six thousand by 2010 and its three times increased (registered cases were 23,783 according to NACP) this graph is on the rise with the way of time. It is necessary to take some serious policy and must be planned, implement to control this deadly disease^{1,4}.

Deadly virus leading to syndrome (AIDs) continues to grow in the country with an estimated 133,529 people infected less than even one percent (1%) of the total population 207 million inhabitants of the country. The estimated

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highest number in Punjab around (66,059) and lowest in Khyber-Pakhtunkhwa, (3,203), province Sindh (5,699) at the second position, Baluchistan (7,318) placed at the second position. In the light of mentioned prevalence, HIV prevalence was highest among people who inject drugs at a rate of 38.4 percent; people who are transgender sex workers were second with 7.5 percent, male sex workers at 5.2 percent, and men having homosexual intercourse at 5.1 per cent. Curiously, female sex workers were the lowest rated among the at-risk groups at 2.2 per cent. Currently registered peoples in NACP were (23,783), according to NACP peoples currently receiving ARV therapy were (13,384)^{1,5}.

From the time when the onset of HIV/Aids widespread, it has become a double challenge for healthcare professionals with regards to their interaction to patients and the need to guard themselves through the use of preventive procedures in the day to day practice⁶.

In the region (MENA) the Middle East and North Africa a lower number of population have HIV, but now it is spreading at a rapidly increasing rate. If we said about Pakistan, the estimated prevalence among general population remains low (i.e 0.14%) and the spreads of HIV/Aids continuously increasing especially in the drug users with a prevalence of 38.4% at the top most. People who are transgender sex workers were second with 7.5 percent, male sex workers at 5.2 percent, and men having homosexual intercourse at 5.1 percent. Curiously, female sex workers were lowest rated among the at-risk groups at 2.2 percent^{1,7,8}.

The route of transmission for HIV in Pakistan is changing, and unsafe sexual practices result in a rising number of infection. It is a stigma around individuals with this deadly HIV/AIDS and transmission fear is major elements that contribute to negative attitudes of health care providers towards HIV. In the Era of 1990s various knowledge, attitudes and practice (KAP) studies related to HIV have been conducted^{6,9}.

But their reliability, validity, and generalizability have been questioned^{7,10}. Health is the basic need of everyone and it is also the responsibility of any state that they should provide basic health

need to population but in developing countries especially in Pakistan health care system still poor, not at whole but somewhere unsafe blood transfusion practices and religious norms and existing cultural may mostly responsible for the high prevalence of virus related hepatitis especially virus B and C with a low prevalence of HIV is estimated in Pakistan. Reports in this reviewed study showed that 5 years Seroprevalence of Hepatitis B, C and HIV in Army and citizens who donated blood at the Armed forces Institute of Transfusion (AFIT), the change in trends in Hepatitis B and C seroprevalence in donors of blood and a low HIV prevalence in the Pakistani population also supported by this valuable study¹¹. HIV transmission through damaged skin also have been confirmed, but the risk of transmission was notable to be less than the risk of exposure through the mucous membrane¹² it was also documented that the transmission through bodily fluids or tissue is may be much smaller than exposure through the blood of HIV infected person¹³.

It was reported by WHO in 2007 about 33.0 million people around the globe having HIV/AIDS, among them five millions were in Asia. Another report regarding epidemics of AIDS by UNAIDS and WHO. In Pakistan the epidemic of HIV was increasing due to lack of awareness about HIV and ways of transmission. Peoples on risk didn't want any alteration in their behavior. There is highest prevalence of HIV in Pakistan between persons injecting drugs indicated by the regional summary of AIDS epidemic update which was noted in city like Karachi raised from 1-26% during 2004-2005, another city of Pakistan Quetta it was noted 24%, but in Sargodha quietly low 12%, respectively 10% in Faisalabad and another city of Sindh Larkana it was 8%. In Pakistan other risk group showed a low prevalence of HIV. General Practitioners in Pakistan may be facing 75% to 80% of citizens in case of illness, they are the key health educators and health facilitator if they play their role in the prevention of this deadly disease, for which the government is facilitating and about fifty non-government organizations (NGO) are functioning¹⁶.

Everyday probably four thousand patients die due to HIV/AIDS globally and more than 7000 thousands new HIV/AIDS cases occurred daily. Approximately 95% infected cases were unaware regarding their HIV/AIDS status, due to the nature of HIV/AIDS spread especially sexual trans-mission some groups having higher risk of HIV/AIDS including commercially involved sex workers, users or abusers of drugs especially intravenous, and those peoples who always mobile due to nature of jobs like military personnel, Fishermen, prisoners and drivers especially heavy vehicles¹⁷.

Hiv/AIDs is easily transmitted through blood, semen, breast milk, vaginal fluid, and vertical transmission. This deadly AIDS condition in human always leads to immune system failure which may result in opportunistic life-threatening infections and some cancers. The disease spread via blood, semen, vaginal fluid, breast milk and vertical transmission. The developing countries are sharing about 90% of load of these patients. The illiteracy with poverty is increasing the prevalence. It was concluded by the joint United program on HIV (UN AID), it is a serious communicable disease which leading to deaths throughout the globe¹⁷.

Pakistan is at high risk for the spread of HIV infection but still identified with low prevalence. Women are at high risk as compared to men because of many biological, social and cultural as well as financial factors. For the prevention of HIV women's can perform an important role. The knowledge about the HIV/AIDS is necessary particularly for married women for the protection of their family and also for themselves. The education and awareness programs about the disease is the only way of protection and reducing the incidence as till yet no any vaccine is available¹⁷.

Globally every year millions of peoples infected with this deadly syndrome. With medical advancement, still curable medicine is so far from medical science. A suppressive therapy with anti-viral therapy (ART or ARV) is the closest discovery for suppressing HIV/AIDS. The only beneficial and curable way is the prevention. Health education and health promotion can play an

important role and at other hand suppressive therapy only can increase the life spam or suppress the virus¹⁹.

Prevalence of HIV is only 0.04% in general population in Pakistan. A survey conducted in Pakistan in 2005 noted that a large number of patients were treated in Pakistan. In Pakistan prevalence is still low but the virus spreading with the constant speed it may due to unsafe sex, i.v drug addiction and unsafe blood transfusion. In Pakistan men are highly infected as compared to women. Another scenario is that Pakistani people have inadequate knowledge regarding HIV/AIDS. In a study conducted in Pakistan concluded that it is a mutual misconception in the overall population or society is that being Muslim, HIV cannot be contracted²⁰.

The objectives of the current work were to evaluate the knowledge, attitudes and behavior of post-graduate medical students of medicine working in the Government Hospitals of district south Karachi with regards to chances of HIV infection at their workplace.

METHODS

This cross-sectional study was carried out from June to November 2017. The FCPS part II trainee were assessed with regards to their knowledge, attitude, practice, and management towards HIV/AIDs. The population consisted of FCPS part II post-graduate trainees, first, second, third and 4 year trainees who asked to fill the complete questionnaire. Total 65 participants were interviewed. Three tertiary level care public hospitals such as National Institute of Child Health (NICH), National Institute of Cardiovascular Diseases (NICVD), Jinnah Postgraduate Medical Center (JPMC) were selected randomly and medicine wards Internee were considered more appropriate internee to be studied. A closed-ended standard questionnaire was developed and validated under the supervision of Consultant Epidemiologist at Baqai Medical University, Karachi. The sample size was calculated using highest HIV prevalence among parental drug users at a rate of (38.4%)¹ and margin of error of (10%) the calculated sample size was 65 by using following formula.

$$n = \frac{z^2 (p) (1-p)}{c^2} = \frac{(1.65)^2 * (0.384) * (1-0.384)}{(0.1)^2} = \frac{0.643991}{0.01} = 64.399 = 65$$

$$= \frac{2.7225 * 0.384 * 0.616}{0.01} = \frac{0.643991}{0.01} = 64.39 = 65$$

z = 1.65
p = 0.384
c = 0.1

The important study variables are age, gender, year of training and year of graduation, passing year of part I FCPS. The questionnaire consist of 31 questions with regards to knowledge, attitude, practice and management. The ethical approval was taken from Institutional review board, National Institute of Child Health, karachi. The informed written consent was taken prior to each interview and participants were selected voluntarily. The questionnaire was developed in English. The Structured self-administered questionnaire was developed used United Nations Aids Control program guidelines (UNAIDS 2017) in English. The questionnaire was pretested (pilot study) to made it reliable and validated. (Each respondent will be given questionnaire detail about the purpose of the study and was given the questionnaire to fill it out in front of the researcher. The questionnaire is divided into four parts. The first part comprises 5 questions on evaluation of their demography i.e., age, gender, year of training and year of graduation, passing year of part I FCPS. The second section of the questionnaire includes 11 questions to test the knowledge of FCPS part II trainee regarding the HIV/AIDs, the third section comprises of 08 questions on attitude and practice and the last section comprises of 12 questions on management assessment HIV/AIDs. The questionnaire for general FCPS part II trainee presented in (appendix-1) was circulated and collected from the randomly selected hospital on the same day after they have filled out the answers. The data was entered in the SPSS version 23 and was analyzed. All the categorical variables were presented in frequencies and percentages. For continuous variables mean and standard deviation were be taken.

RESULTS

In our study 65 participants were interviewed on KAP tool. The demographic

characteristics of the study participates are shown in table 1. The mean age of participants was 29.6± 3.34 years. In this study (67.75) were female and the rest (32.3%) were males. about (47.7%) participants were in last year of training. mostly (55.5%) of participants were passed their graduation in last 5 years. regarding FCPS part I mean years 2013.29 ± 3.85.

Table-I: Demographic Characteristics of Participants

Variables (n=65)	Frequency(%) Mean (S>D)
Age	29.6=3.34
Gender	
Male	21 (32.3)
Female	44 (67.7)
Year of Training	
First Year	12 (18.5)
Second Year	16 (24.6)
Third Year	6 (9.2)
Forth Year	31 (47.7)
Year of Graduation	
Less than 5 years	36 (55.4)
more than 5 Years	29 (44.6)
Passing Year of Part I	2013.29=3.85

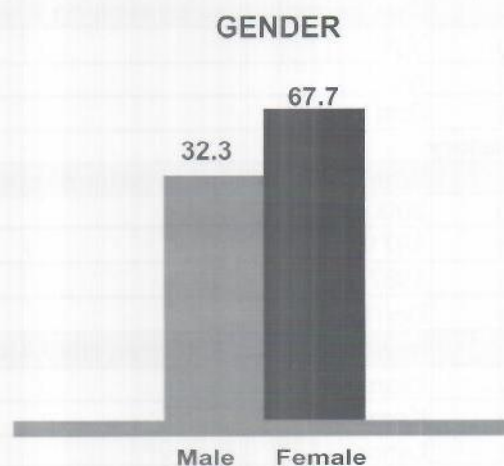


Figure I: Gender of Participants

Table 2 shows that most of the participants (96.9%) had good knowledge regarding link between HIV and AIDs. whereas (63.1%) of participants had knowledge that infected person with HIV develops antibodies within 6 months. about (43.1%) was the response that HIV virus hard to killed even outside the body, whereas (90.8%) of participants had good knowledge about known HIV/AIDs cases, when he/she evaluated for infection, about (64.6%) had average knowledge regarding physical appearance of

HIV/AIDs positive cases. Regarding the history of HIV/AIDs (43.1%) said that Hiv aids the first case was reported in 1987. only (30.8%) had said that first case of Hiv aids was reported in Lahore. only (41.5) of participants knew, Hiv/aids is highly prevalence in Punjab. mostly (78.5%) knew that Hiv/aids is highly prevalence in injections users. only (38.5%) of participants were know the world first verified case of Hiv was from Kinshasa (Democratic republic of Congo). while (49.2%) knew that Aids were finally named in 1 April 1986.

Table II: Knowledge of the participants.

Variables (n=65)	Frequency(%)
1. What is the link between HIV and AIDS?	
a) HIV is a virus that attacks the immune system, AIDS refers to a set of symptoms and illnesses.	63 (96.9)
b) HIV refers to a set of symptoms and illnesses, AIDS is a virus that attacks the immune system.	2 (3.1)
c) Don't know	
2. Persons infected with HIV will likely develop antibodies within 6 months	
a) Yes	41 (63.1)
b) No	16 (24.6)
c) Don't know	8 (12.3)
3. Even outside the body, the HIV virus is hard to kill.	
a) Yes	28 (43.1)
b) No	31 (47.7)
d) Don't know	6 (9.2)
Presenting Symptoms	
1. A patient is known to have HIV/Aids, if she/he has tested positive for HIV	
a) Yes	59 (90.8)
b) No	5 (7.7)
c) Don't know.	1 (1.5)
2. One cannot know by looking if someone is HIV/aids -positive.	
a) Yes	42 (64.6)
b) No	15 (23.1)
c) Don't know.	8 (12.3)
History	
1. When was HIV / Aids patient report in Pakistan?	
a) 2000	6 (9.2)
b) 1971	9 (13.8)
c) 1987	28 (43.1)
d) Don't know	22 (33.8)
2. In which city of Pakistan Hiv / Aids was first time reported?	
a) Islamabad	9 (13.8)
b) Karachi	13 (20)
c) Lahore	20 (30.8)
d) Don't know	23 (35.4)

3. In which province of Pakistan Hiv / aids High prevalence?	
a) Sindh	8 (12.3)
b) Punjab	27 (41.5)
c) Baluchistan	21 (32.3)
d) Don't know	9 (13.8)
4. In which group Hiv / Aids Highly prevalence (38.3%) in Pakistan?	
a) Sex worker	8 (12.3)
b) Injection users	51 (78.5)
c) Cross gender	5 (7.7)
d) Don't know	1 (1.5)
5. Do you know the world first verified case of HIV was from a blood sample taken in 1959 from a man living in?	
a) California (USA)	17 (26.)
b) Kinshasa (Democratic Republic of Congo)	25 (38.5)
c) Don't know.	23 (35.4)
6. Aids were finally named in?	
a) 1 April 1986	32 (49.2)
b) September 1982	13 (20)
c) 14 august 1947	1 (1.5)
d) Don't know	19 (29.2)

HIV/AIDS High Prevalence Province

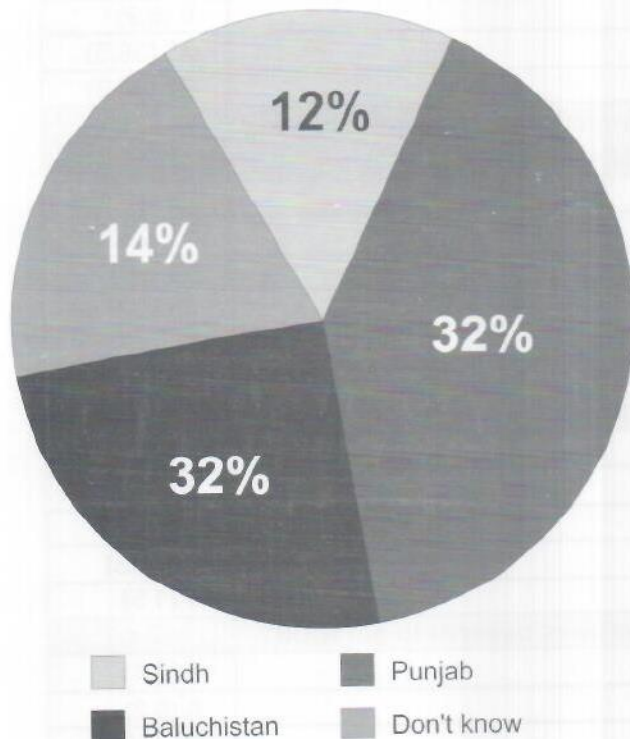


Figure. II: In which Province of Pakistan HIV/AIDS high prevalence.

Table 3 shows that regarding attitude of participants, Mostly (93.8) were strongly agree that prevention is better than cure. Regarding HIV/Aids curable, mostly participants (43.1%) disagree and (23.1%) were strongly disagree. Mostly (98.4%) agree that health education regarding HIV/Aids should be given to general population. mostly participants (70.8%) disagree that people with aids deserve what the get. about (62.3%) were agree that children in which the disease is transmitted by their mother may have priority in the management in comparison to sexually transmitted cases, while (53.8%) blood transfusion are more deserving of treatment, only (12.3%) were agree that people with multiple sexual partners are deserving for the infection, while (40%) think that positive ladies should not bear kids.

Table III: Attitude of Participants

Variables (n=65)	Frequency(%)
1. Do you think prevention is better than cure?	
a) Strongly agree	61 (93.8)
b) Agree	1 (1.5)
c) Neutral	0
d) Disagree	0
e) Strongly disagree	3 (4.6)
2. Do you think Hiv/aids is curable?	
a) Strongly agree	0
b) Agree	14 (21.5)
c) Neutral	8 (12.3)
d) Disagree	28 (43.1)
e) Strongly disagree	15 (23.1)
3. Do you think health education regarding Hiv/aids should be given to general Population?	
a) Strongly agree	50 (76.9)
b) Agree	14 (21.5)
c) Neutral	1 (1.5)
d) Disagree	0
e) Strongly disagree	0
4. Do you think most people with AIDS deserve what they get?	
a) Strongly agree	1 (1.5)
b) Agree	12 (18.5)
c) Neutral	6 (9.2)
d) Disagree	25 (38.5)
e) Strongly disagree	21 (32.3)
5. Do you think children who get AIDS from their mothers are more deserving Treatment than people who get AIDS by sexual partner?	
a) Strongly agree	28 (43.1)
b) Agree	19 (29.2)
c) Neutral	13 (20)
d) Disagree	5 (7.7)
e) Strongly disagree	0
6. Do you think People who get AIDS through a BT are more deserving of treatment than people who get AIDS through sexual partner?	
a) Strongly agree	1 (1.5)
b) Agree	34 (52.3)
c) Neutral	8 (32.3)
d) Disagree	8 (12.3)
e) Strongly disagree	1 (1.5)
7. Do you think people who have many sexual partners deserve to get AIDS?	
a) Strongly agree	2 (3.1)
b) Agree	6 (9.2)
c) Neutral	29 (44.6)
d) Disagree	9 (13.8)
e) Strongly disagree	19 (29.2)

8. Do you think HIV/Aids-positive women should not have children?		
a) Strongly agree		25 (38.5)
b) Agree		1 (1.5)
c) Neutral		19 (29.5)
d) Disagree	1	1 (16.9)
e) Strongly disagree		9 (13.8)

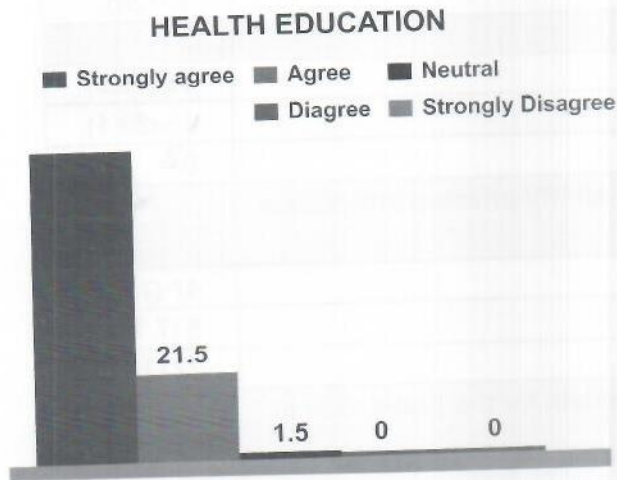


Figure III: Health Education regarding HIV/AIDS should be given to general population

Table 4 practice and management profile of participants shows that about (50.8%) of participants said ART may be initiated in every one having HIV at any CD4 cell count. while (72.9%) were said there are four types of drugs used in HIV aids, whereas (72.3%) were recommended ART for all infected cases to decrease the chances of disease enhancement, while (70.8%) were also recommended ART for HIV prevention. only (32.3%) had correct practice knowledge of W.H.O initial regimen for adults. while (47.7%) had correct practice knowledge of W.H.O regimen for children less than 3 years. whereas only (50.8%) had correct practice knowledge of W.H.O regimen aged between 3 years to 10 years, only (46.2%) agreed that older persons may prescribed multiple non-HIV medication and care should be taken for any drug interaction with any potential HIV medication.

DISCUSSION

This study was an effort to investigate FCPS part II trainee behavior and practice regarding HIV/AIDS and its management. In this study, W.H.O, UNAIDS and NACP guideline were followed to assess the knowledge, attitude, practices of FCPS Part II trainee. Belonging to the healthcare system, it's important that we cannot ignore the potential risk of transmission of infection which not only affects the FCPS Part II trainee and patients but also the assistants and laboratory technicians associated with them.

Study population composed of (67.75%) females and (32.3%) males consisted of the fact that large number females were trainee at different post-graduate teaching hospitals at Karachi. While 47% in their last year of training.

In this study mostly of the participants (96.9%) had good knowledge regarding link between HIV and AIDs similar result were found in study (97%) UNAIDS⁶. Whereas (63.1%) of participants had correct knowledge that infected person with HIV develop antibodies within 6 months in our study the result was quietly high than study conducted in Tanzania by UNAIDS it was 40%⁶.

In our study a poor knowledge (43.1%) were response that HIV virus hard to killed even outside the body. Quite better result (69%) were in study on patients in Tanzania by UNAIDS⁶ whereas (90.8%) of participants had good knowledge a patient is known to have HIV/AIDs when tested for that, about (64.6%) had average knowledge regarding no one know physically in positive cases. Regarding history of HIV/AIDs (43.1%) said that first ever documented in 1987. only (30.8%) had said that in Pakistan first time it

Table IV: Practice and Management Profile of Participants

Variables (n=65)	Frequency(%)
1. Antiretroviral therapy (ART) should be initiated in everyone living with HIV at any CD4 cell count.	
a) Yes	33 (50.8)
b) No	19 (29.2)
c) Don't Know	13 (20)
2. How many drugs are used as ART in HIV aids?	
a) Four	50 (76.9)
b) Six	15 (23.1)
c) Don't Know	0
3. Antiretroviral therapy (ART) is recommended for all HIV-infected individuals to reduce the risk of disease progression?	
a) Yes	47 (72.3)
b) No	5 (7.7)
c) Don't Know	12 (18.5)
4. ART also is recommended for HIV-infected individuals for the prevention of transmission of HIV.	
a) Yes	46 (70.8)
b) No	11 (16.3)
c) Don't Know	8 (12.3)
5. Patients starting ART should be willing and able to commit to treatment and understand the benefits and risks of therapy and the importance of adherence. Patients may choose to postpone therapy, and providers, on a case-by-case basis, may elect to defer therapy on the basis of clinical and/or psychosocial factors.	
a) Yes	34 (52.3)
b) No	13 (20)
c) Don't Know	18 (27.7)
6. The WHO preferred initial regimen for adults and adolescents as of June 30, 2013 is	
tenofovir + lamivudine (or emtricitabine) + efavirenz	21 (32.3)
ribavirin + lamivudine (or emtricitabine) + efavirenz	19 (29.2)
Don't Know 25	(38.5)
7. The WHO recommends for children less than 3 years:[47]	
a) abacavir (or zidovudine) + lamivudine + lopinivir + ritonavir	31 (47.7)
b) abacavir (or zidovudine) + lamivudine + lopinivir + lincomycin	15 (23.1)
c) Don't Know	19 (29.2)
8. For children 3 years to less than 10 years and adolescents <35 kilograms:	
a) abacavir + lamivudine + efavirenz	33 (50.8)
b) betametsone + lamivudine + efavirenz	7 (10.8)
c) Don't Know 25 (38.5)	

9. ART for mothers both before and during delivery and to mothers and infants after delivery are recommended to substantially reduce the risk of transmission.	
a) Yes	46 (70.8)
b) No	8 (12.3)
c) Don't know	11 (16.9)
10. The risk of transmission from mother to child is proportional to the plasma viral load of the mother. Untreated mothers with a viral load >100,000 copies/ml	
a) Yes	34 (52.3)
b) No	14 (21.5)
c) Don't know	17 (26.2)
11. The risk when viral loads are < 1000 copies/ml are less than 1%.	
a) Yes	28 (43.1)
b) No	9 (13.8)
c) Don't know	28 (43.1)
12. It is important to take into account that older patients are more likely to be on multiple non-HIV medications and consider drug interactions with any potential HIV medications.	
a) Yes	30 (46.2)
b) No	12 (18.5)
c) Don't know	23 (35.4)

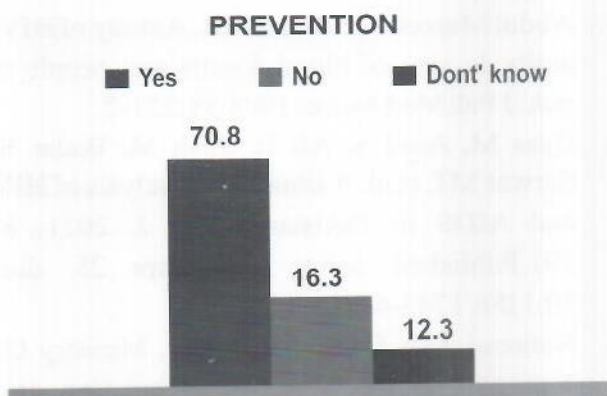


Figure IV: ART also advised for HIV infected cases to Prevent the transmission.

was diagnosed in Lahore. Only (41.5) of participants were know, Hiv/aids is highly prevalence in Punjab. mostly (78.5%) knew that Hiv/aids is highly prevalence in injections users. only (38.5%) of participants were know the world first verified case of Hiv was from Kinshasa (Democratic republic of Congo). while (49.2%) knew that Aids were finally named in 1 April 1986.

In our study regarding attitude of participants, mostly (93.8) were strongly agree that prevention is better than cure. Regarding HIV/Aids curable, mostly participants (43.1%) disagree and (23.1%) were strongly disagree. Mostly (98.4%) agree that health education regarding HIV/Aids should be given to general population. mostly participants (70.8%) disagree that people with aids deserve what the get, in another study the result was (12.3%) conducted by UNAIDS⁶, about (62.3%) were agree that children transmitted by their mothers should get treatment on priority than people who getting aids by sexual transmission, in another study it was (35.3%)⁶, while (53.8%) blood transfusion are more deserving of treatment in another study it was (24.5%), only (12.3%) were agree that patients with multiple sexual partners deserve for aids, while (40%) think HIV/AIDS positive women should not conceive babies.

In this study practice profile of participants showed that about (50.8%) of participants said

ART should be offered to every one having HIV at any CD4 cell count, according to W.H.O guide line it should be initiated in every one at any CD4 cell count²². While (72.9%) were said there are four groups of drugs for the disease but correct answer was there 3 classes²². Whereas (72.3%) were recommended ART for all HIV-infected individuals to reduce the risk of disease progression. while (70.8%) were also recommended ART for HIV prevention Brain G. Williams et al. concluded that ART reduced viral load and restores immune systems²³. Only (52.3%) knew that Patients starting ART should be willing and able to commit to treatment and understand the benefits and risks of therapy and the importance of adherence. Patients may choose to postpone therapy, and providers, on a case-by-case basis, may elect to defer therapy on the basis of clinical and/or psychosocial factors²⁴.

Only (32.3%) had correct practice knowledge of W.H.O initial regimen for adults. while (47.7%) had correct practice knowledge of W.H.O regimen for children less than 3 years. whereas only (50.8%) had correct practice knowledge of W.H.O regimen aged between 3 years to 10 years. only (46.2%) were important to take into account that older patients are more likely to be on multiple non-HIV medication and consider drug interaction with any potential HIV medication²².

Mostly (70.8%) correctly answer that ART for mothers both before and during delivery and to mothers and infants after delivery are recommended to substantially reduce the risk of transmission²⁵. Only (52.3%) knew that the risk of transmission from mother to child is proportional to the plasma viral load of the mother. Untreated mothers with a viral load >100,000 copies/ml have a transmission risk of over 50%²³. About (43.1%) knew that the risk when viral loads are < 1000 copies/ml are less than 1%²². About (46.2%) knew that it is important to take into account that older patients are more likely to be on multiple non-HIV medications and consider drug interactions with any potential HIV medications²⁶.

CONCLUSION:

It is concluded from present study that there is a need to improve the awareness of health care provider as well as general population. In our study the Attitude, Practice of FCPS II trainee with regards to HIV/AIDS were adequate but the level of management was poor.

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