

# Knowledge and Attitude Towards Pre-Exposure Prophylaxis for HIV/AIDS and its Associated Factors Among Health Care Workers in Debretabor Compressive Specialized Hospital 2023

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## Abstract

**Back ground:** Human immunodeficiency virus infection is a severe public health issue that claims the lives of numerous people, including medical professionals. The effectiveness of daily oral pre-exposure prophylaxis for HIV prevention among at-risk individuals has thus been repeatedly shown in clinical trials. An important public health opportunity to reduce HIV incidence is presented by pre-exposure prophylaxis.

**Objective:** The purpose of this study is to evaluate health care workers' knowledge, attitudes, and factors related to pre-exposure prophylaxis against HIV/AIDS at Debretabor comprehensive specialized hospital in Debretabor, Ethiopia.

**Method:** A cross-sectional study was conducted among 322 health care workers in Debretabor comprehensive specialized hospital from June to July, 2023. The data were collected by trained data collectors using a structured questionnaire with self-administered questioners. The collected data were entered, and the data were checked, coded, data cleaning and analysis using SPSS version 23.

**Result:** The level of attitudes of pre-exposure prophylaxis was analyzed among all 322 respondents. Overall attitudes of health care workers were 68% [95% CL: 62.7-72.7]. Off 322 study participants were participated with a response rate of 100%. About 134(41.6%) health care workers had six to ten year clinical experience in their profession, and almost half, 63(51.6%) health care workers in this study were Nurses followed by 62(19.3%) doctors. Majority of 203(63%), and 127(39.4%) were male, and educational status were BSc degree, Prior to conduct this survey, 273 (84.8%) the respondents were aware of the concept of HIV pre-exposure prophylaxis. but only half of, 171 (53.1%) Previously took training on pre-exposure prophylaxis. And 37 (11.5%) of participants had self-rating poor knowledge about HIV- pre-exposure prophylaxis. Variables which had P value less than 0.25 in bivariable analysis would be adequate for multivariable logistic regression analysis, and then in the final stage of multivariable analysis two variables such as marital status [AOR: .211(0.048-0.932), educational status [AOR: .032(.003-.365)], [AOR: .181(0.054-0.600)], [AOR: .112(0.027-0.469)], [AOR: .084(0.025-0.286)], and [AOR: .204(0.058-0.720)] of health care workers had significantly associated with the attitudes of pre-exposure prophylaxis..

**Conclusion and Recommendation:** Our study shows that, inadequate knowledge, and attitude towards pre-exposure prophylaxis, and its management comparing to previously conducted researches, but the current study shows low levels of attitudes, there is suboptimal knowledge about PrEP.

So concerned bodies expected to give training to health care workers to increase knowledge, and attitude of health care workers, and researchers expected to conduct research in the area of pre-exposure prophylaxis.

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**Keywords:** Attitude, HIV, Knowledge, Pre-Exposure Prophylaxis

## Abbreviations

**3TC:** Lamivudine.

**AIDS:** Acquired Immune Deficiency Syndrome.

**ARV:** Anti Retro Viral.

**CDC:** center of Disease Control

**CSF:** Cerebra Spinal Fluid.

**FDA:** food and drug administration

**GOUCSH:** Gondar University compressive and specialized hospital

**GP:** general peractionire

**IDV:** Indinavir.

**KA:** Knowledge and Attitude

**NNRTIs:** Non-nucleoside Reverse Transcriptase Inhibitors.

**NRTIs:** Nucleoside Reverse Transcriptase Inhibitor.

**PI:** Protease Inhibitors.

**PrEP:** Pre Exposure Prophylaxis.

**SRP:** Student Research Program.

**STD:** sexually transmitted disease

**TDF:** Tenofovir

**UNAIDs:** United Nation

**UP:** Universal Precaution.

**WHO:** World health organization.

**ZDV:** Zidovudine

## 1. Introduction

### 1.1 Background of the Study

Acquired immunodeficiency syndrome (AIDS) remains one of the sexually transmitted diseases (STDs) with high incidence and important associated morbidity and mortality [1].

Although AIDS remains one of the world's most serious health challenges, global solidarity in the AIDS response during the past decade continues to generate extraordinary health gains. (2) Historic success in bringing HIV programs to scale combined with the emergence of powerful new tools to prevent people from becoming infected and from dying from AIDS-related causes has enabled the foundation to be laid for the eventual end of AIDS. Although much of the news on AIDS is encouraging, challenges remain. The number of people newly infected globally is continuing to decline, but national epidemics continue to expand in many parts of the world. Further, declines in the numbers of children dying from AIDS-related causes and acquiring HIV infection, although substantial, need to be accelerated to achieve global AIDS target [1,2].

Populations such as healthcare workers (HCWs), injection drug users (IDUs), and people engaging in unprotected sex are all at risk of being infected with the human immunodeficiency virus (HIV) Globally, it has been recognized that, while HIV treatment saves lives and has a significant preventive effect by suppressing onward transmission from those living with the virus, evidence shows that treatment alone will not be enough to control the HIV epidemic [3,4]. Primary prevention also needs to be scaled up vigorously [5]. A new effort is urgently needed to reinvigorate primary HIV prevention, building on lessons learned from previous prevention

initiatives and other successful experiences that have contributed to the reduction of new HIV infections [6].

The HIV epidemic in Ethiopia is heterogeneous by sex, geographic areas and population groups. Among women and men combined, HIV prevalence is seven times higher in urban areas than in rural areas (2.9 percent versus 0.4 percent). HIV prevalence is 3.6 percent among women in urban areas compared with 0.6 percent among women in rural areas. Seven out of the nine regional states and two city administrations have HIV prevalence above 1 percent. Looking at HIV prevalence by region, it is highest in gam Bella (4.8 %), followed by Addis Ababa (3.4%), Dire Dawn (2.5%), and Hariri (2.4%) Pre-exposure prophylaxis (PrEP) against HIV infection is available for people at risk of acquiring HIV infection and who are not positive for HIV infection. It is proven to be effective at preventing HIV infection in many studies in various populations. However, due to lack of knowledge or due to attitudes towards PrEP, this mode of prevention may be underutilized by people at risk and their providers. Our aim is to assess the baseline knowledge of, attitudes towards and factors providers at university of Gondar compressive and specialized hospital [7].

Because health care workers participates in activities of preventive education (such as promoting therapeutic adherence and obtaining samples during the follow-up of patients at substantial risk of HIV acquisition, among other activities), the evaluation of health workers' attitudes toward PrEP is crucial. The drop in HIV-related mortality and morbidity has been facilitated by PrEP. It is effective at lowering HIV prevalence and occurrence [8]. Pre-exposure prophylaxis (PrEP), a United Stat Food and Drug Administration

(FDA)-approved preventive treatment for HIV, has been shown to reduce risk of HIV infection. Truvada, a PrEP medication, was first approved by the FDA in 2004 for treatment of PLWH; however, it was also FDA approved in 2012 as the first PrEP to prevent risk of infection among HIV-negative individuals. Nearly 50,000 individuals in the United States have begun taking Truvada as a PrEP. Though considering the potential long-term benefits to population health, PrEP prescription has been relatively low [9].

The HIV incidence threshold for cost-saving implementation of PrEP will vary depending on the relative costs of PrEP versus treatment for HIV infection and the anticipated effectiveness of PrEP. In some situations, PrEP may be cost saving, but other interventions may be more cost saving and scalable. Monetary costs should not be the only consideration, since staying free of HIV and having control over HIV risk has intangible value to people and communities. The cost-effectiveness of PrEP may decrease with declining HIV incidence in the context of universal treatment for HIV, but primary prevention, including PrEP, is essential to eradicate HIV, regardless of cost-effectiveness. Offering PrEP in situations where the incidence of HIV is greater than 3 per 100 person-years is expected to be cost saving in many situations. Offering PrEP at lower incidence thresholds may still be cost-effective [10].

However, as far as the investigators knowledge there is no study that have analyzed the level of knowledge, attitudes and its associated factors among key professional groups in our setting. Thus, the objective of this study to determine the knowledge, attitudes and its associated factor about PrEP among health care professionals at UOGSCH. Thus, the objective of this study to determine the knowledge, attitudes and its associated factor about PrEP among a sample of DebreTabor compressive spacialized hospital health care workers.

## 2. Method And Materials

### 2.1 Study Area and Period

The study was conducted in DebreTabor compressive spacialized hospital from July1 to July 30/2023.

### 2.2 Study Design

A Institution-based cross-sectional study was conducted.

### 2.3 Sources Population

All health care professionals working in Debretabor comprehensive Specialized Hospital were taken as source population

### 2.4 Study Population

The study subjects were all health care professionals working in Debretabor comprehensive specialized hospital and fulfilling eligibility criteria during the study period.

## 2.5 Inclusion and Exclusion Criteria

### 2.5.1 Inclusion Criteria

All health care professionals who are working at university of Debretabor specialized hospital were included in the study.

### 2.5.2 Exclusion Criteria

Study participants who are seriously ill and absent from work during the data collection period were excluded from this study.

### 2.5.3 Sampling Technique and Sample Determination

#### 2.5.4 Sampling Technique

Since there hasn't been any prior research in the field, it is assumed that 50% of HCWS are knowledgeable about, have favorable attitudes toward, and use prep, with a 95% confidence interval and margin of error. The method of non-probability convince sampling were used to carry out this study.

#### 2.5.5 Sample Determination

Sample size were calculated using the single population proportion formula as where  $z= 1.96$

$P=$  anticipated proportion (50%)

$Q=1-p$

$D=$  marginal of error (error allowance) 5%

$N=$  total number of health care workers

Therefore

$N=1.96^2 \times 0.5 \times 0.5$

0.0025

$N_i = 384$

If the total populations are less than 10,000 in number just apply correction formula.

$= 294$ , where 1257 is n-size of source of population in gusch.

$N_i =$  initial sample size

$N_f=$  final sample size

To compute for non-respondent, 10% of the total sample size was added, thus a total of 323 study subjects are requiring as sample size

### 2.5.6 Study Variables

#### 2.5.7 Dependent Variables

- Knowledge towards PrEP
- Attitude towards PrEP

#### 2.5.8 Independent Variables

- Socio-demographic factors; experience, working area ,occupational status; professional type; and variables related to PrER acceptability

#### 2.5.9 Operational Definitions

- Heath care workers: persons working in health care setting who have potential for exposure for exposure in infectious materials/ infectious conditions.
- Adequate attitude: when respondents correctly answer  $> 75 \%$  of the knowledge questions [11].
- Inadequate attitude: when the correct answer of respondents is  $< 75 \%$  of the nine knowledge questions [2,11].

## 3. Data Collection Instrument & Technique

Clarification was given on the purpose of the study. Then respondents who met the inclusion criteria filled by using structured and pre-tested questionnaires which was adapted from reviewed literature. Data will be gathered through a questionnaire

that has been especially created to fit the context and objectives of the current investigation. In the first section, participants' demographic information, year of service, occupational states, professional backgrounds, and affiliations with particular religions were gathered. In the second, their understanding of prep was evaluated. The third section assessed how the participants felt about prep, and the fourth and final section looked at the factors that affected how willing the individuals were to be PrEP.

### 3.1 Data Processing and Analysis

After the data collection, the response were code and enter in to phone by using kobo , and 10% of the response were randomly selected and checked for the consistency of the data entry. SPSS version 23 also was used for data analysis. Frequency and Percentage were calculated to all variables which are related to objective of the study, and Bivariable and multivariable logistic regression was employed to identify factors associated with dependent variables. Odds ratio (OR), with 95% CI and p value< 0.05 were computed to determine the level of significance.

### 3.2 Quality Assurance and Control

Data collection were supervised for correct implementation of procedures by principal investigators and the investigat, and Completeness and consistency of the questionnaire was also be checked at the end of data collection. In addition, pre-test was performed in 5% of the sample size at felegehiwot referral hospital.

### 3.3 Ethical Consideration

Ethical clearance was obtained from institutional review board (IRB) of the Debretabor University. A written letter of permission from the research coordination committee were submitted to ebretabor University Administration to grant permission for conducting the study. The study participants was provided with clear information about the purpose of the study and asked if they

are willing to participate in the study. Data was collected after receiving verbal consent from those who are willing to participate in the study. Anonymity of the respondents was preserved and their information were kept secret and were not be disclosed to anyone except for the purpose of the study.

### 3.4 Dissemination of Result

A copy of the report will be given to Debretabor comprehensive specialized hospital and other concerned bodies. It is also expected that the result of this study will be disseminated to the public through media. Additionally, the result may be presented on scientific conferences and published in scientific journals.

## 4. Result

### 4.1 Socio Demographic Characteristics of the Respondents

In this study 322 participants were participated with a response rate of 100%. Majority, 147(45.7%) of participants were found in the age group of less than 30 years old. About 134(41.6%) HCWs had six to ten year clinical experience in their profession, and almost half, 63(51.6%) HCWs in this study were Nurses followed by 62(19.3%) doctors.

Among the respondents males had higher proportion 203(63%) and majority of respondent's 127(39.4%) educational status were BSc degree, and only 18(5.6%) have educational status lower than diploma .Majority of study subjects marital status 147 (45.7%) were married, while 238(73.9%) study participants' religious were orthodox, 124(38.5%) Of HCW were working at an outpatient department.

The majority of providers (27.3 %) were familiar to themselves with regard to prescribing PrEP, and (26.1%) of providers completely willing to prescribing PrEP to their patients. See (Table 1)

Variables	Categories	Frequency (n=322)	percent (100%)
Sex	Male	195	60.6
	Female	127	39.4
Age	≤30	147	45.7
	31-40	124	38.5
	41-50	42	13.0
	≥51	9	2.8
Work experience	≤5	133	41.3
	6-10	134	41.6
	≥11	55	17.1
Occupation	Medical doctor	62	19.3
	Nurse	97	30.1
	Pharmacist	58	18
	Laboratory technician	38	11.8
	Health officers	5	1.6
	Others	62	19.3
Religion	Orthodox	238	73.9
	Muslim	43	13.4
	Protestant	36	11.2
	Others	5	1.6

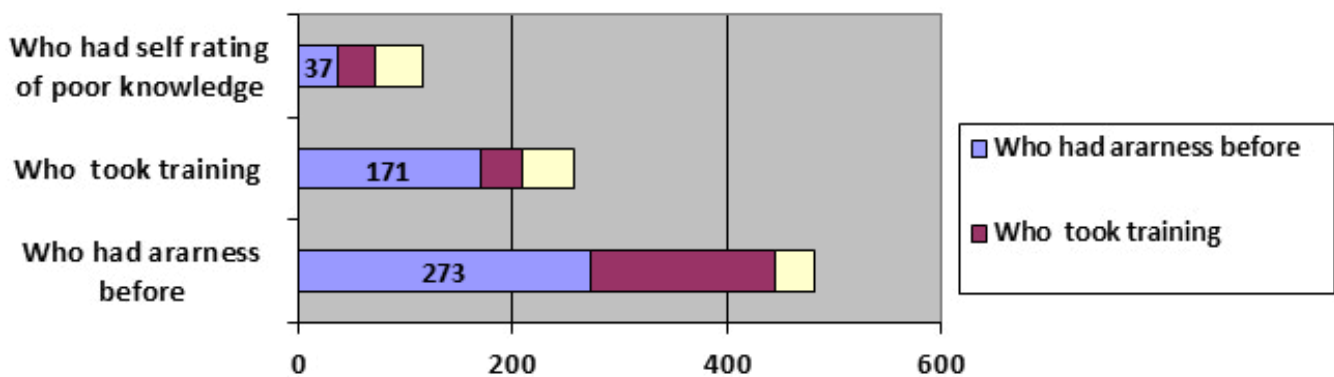
Marital status	Single	137	42.5
	Married	147	45.7
	Divorced	29	9.0
	Widowed	9	2.8
Educational status	Diploma	31	9.6
	BSc	127	39.4
	MSc/MPH	99	30.7
	PhD	47	14.6
	Others	18	5.6
Working area	ICU	35	10.9
	OPD	124	38.5
	OR	37	11.5
	Ward	119	37.0
	Other	7	2.2

**Table 1: Socio-Demographic Characteristics of HCWs in Debretabor Comprehensive Specialized Hospital, 2023, (n=322)**

#### 4.2 Knowledge of Respondents about PrEP

In regard to knowledge towards PrEP, 273 (84.8%) the respondents were aware of the concept of HIV PrEP, but only half of, 171

(53.1%)them previously took training on PrEP, and 37 (11.5%) of participants had self-rating poor knowledge about HIV-PrEP. (Figure1).



**Figure 1: Awareness, Training Status, and Knowledge of Health Care Professionals of UoG Compressive Specialized Hospital, 2023(n=322)**

In overall, majority, 139(43.2 %), of the participants of the study had answers about PEP correctly by saying it is Preventive medicine, taken daily, for HIV negative adults who are at high risk of exposure to the virus.

From the total of participants 250(77.6%), 123(38.2%), and 190(59%) of health care workers had knowledge about available PrEP drugs in our hospital, the types of regimen is available, and

those health care workers knows PrEP is administered by through oral routs.

According to the FDA, the antiretroviral drugs used as PrEP 150(46.6 %) must be taken Daily. Majority, 90(28%) of respondents PrEP is contraindicated in patients with History of myocardial infarction, and 201(62.4%) knows PrEP reduces the risk of getting HIV and other STDs. (Table 2)

Variables	frequency	Percent
<b>What is pre-exposure prophylaxis (PrEP)?</b>		
A medicine for HIV positive adults who have had the virus for some time	5	1.6
A preventive medicine taken within 72 hours of exposure to HIV	90	28.0
I have never heard of prep	67	20.8
None of the above	20	6.2
Other	1	.3
Preventive medicine, taken daily, for HIV negative adults who are at high risk of exposure to the virus	139	43.2
<b>Is PrEP available in your hospital?</b>		
Yes	250	77.6
No	72	22.4
<b>Which drug regimen is available?</b>		
Lopinavir (kaletra®)	29	9
Emtricitabine + Tenofovir (truvada®)	13	4
Emtricitabine + Tenofovir + Efavirenz (triple®)	43	13.4
TDF +3TC	123	38.2
Lopinavir (Alberta®)	29	9.0
I don't know	57	17.7
<b>The PrEP is administered by</b>		
Don't, know	33	10.2
Intramuscular route	30	9.3
Intravenous route	41	12.7
Oral route	190	59.0
Subcutaneous route	28	8.7
<b>According to the FDA, the antiretroviral drugs used for PrEP must be taken</b>		
I Don't know	37	11.5
After sexual intercourse	36	11.2
Before sexual intercourse	66	20.5
Daily	150	46.6
Weekly	33	10.2
<b>PrEP is contraindicated in patients with</b>		
Creatinine clearance below 60 mL/min	88	27.3
History of myocardial infarction	90	28.0
Hypertension	41	12.7
I Don't Know	103	32.0

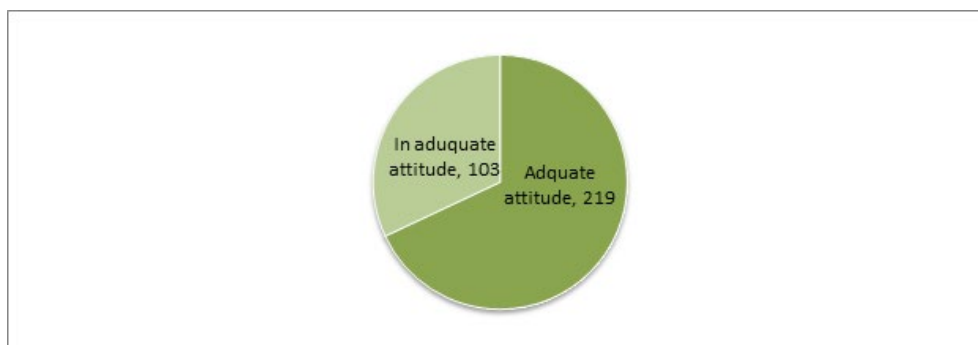
**Table 2: Knowledge of HCWs at UoG Comprehensive Specialized Hospital, 2023, (n=322)**

#### 4.3 Attitudes of Respondents about PrEP

The level of attitudes of PrEP was analyzed among all 322 respondents. Overall attitudes of HCW were 68% [95%CL: 62.7-72.7] which is inadequate level of attitudes.

Among all of the respondents, (77.1%), (74.8%), (51.2%), and

(82.9%) of HCWS had agree on PrEP is very important measure of HIV prevention, PrEP can reduce the likelihood of HIV infection, prep will not result to or prevents from risk compensation, and also prep is the most effectiveness for HIV. More than half, (55.3%) of HCWs were prep will not lead to increased STI. (Table 3).



**Figure 2: Over all Attitudes of HCWs at UoG Comprehensive Specialized Hospital, 2023, (n=322)**



Variables	Result				
	Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
PrEP is effective?	29.8	53.1	8.1	7.1	1.9
PrEP In an important measure of HIV prevention	31.4	45.7	5.6	14.3	3.1
Everyone should have access to PrEP	24.5	44.1	8.7	15.8	6.8
PrEP can reduce the likelihood of HIV infection	32.3	42.5	8.7	14.3	2.5
PrEP costs less than care on the HIV epidemic	28	46.9	9.6	12.4	3.1
PrEP has little impact of PrEP on ARV resistance	22	41.9	12.4	19.6	4
Taking PrEP for a long time will not lead to more adverse events	18.6	34.2	10.9	29.5	6.8
Patients will adhere to daily PrEP	22.4	36	14.3	23	4.3
PrEP will not result to risk compensation (less condom use)	15.2	36	16.8	27.6	4.3
PrEP will not lead to increased STIs	17.1	38.2	13.7	24.5	6.5
Patients won't be perceived as HIV positive by their partners	16.8	36	12.7	28	6.5
PrEP won't cause patients an increased likelihood of more sexual partners	18.9	40.4	9.3	25.5	5.9
PrEP won't result in more needle and syringe sharing	17.7	40.1	10.6	24.5	7.1
Time to engage in PrEP counseling	25.5	48.1	24	42	5.9
Patients will adhere to daily PrEP	22.4	36	14.3	23	4.3

**Table 3: Attitudes of HCWs at UoG Comprehensive Specialized Hospital, 2023, (n=322)**

### 5. Factors Associated with PrEP Among Health Care Workers

Variables which had P value less than 0.25 in variable analysis would be adequate for multivariable logistic regression analysis. In this study Gender [COR: .742 (0.459-1.199)], work experience [COR: 0.47 (0.039-1.988)], marital status [COR: .36(0.78 -1.66)], and [COR: .064-1.001], educational status [COR: 4.939(0.606-40.24)], [COR: 5.586(0.652-47.864)], and [COR: 23.40(0.233-235.536)] Were having p-value less than 0.2 and there were forwarded to the final stage of multivariable analysis. Among the candidate variables for multi

variable analysis. The two variables such as marital status [AOR: .211 (0.048-0.932), educational status [AOR: .032(.003-.365 ) ], [AOR: .181(0.054-0.600)], [AOR: .112 (0.027 -0.469)], [AOR: .084(0.025-0.286)], and [AOR: .204(0.058-0.720)] of health care workers had significantly associated with the attitudes of PrEP. The odds of positive attitude among those participants who had marital status widowed was 79 % ((AOR=0.211, 95% CI: 0.048, 0.932) p= 0.015) lesser as compared to married and other marital status. As shown (Table 4).

Variable	categories	COR(95%CI)	P-Value	AOR(95%CI)	P-Value	
Gender	Male	1	0.22	1	0.264	
	Female	0.742 (0.459-1.199)		1.348(0.798-2.276)		
Work experience	<5	1	0.000	1	0.361	
	6-10	0.47 (0.039-1.988)		0.970(.908-1.036)		
	>11					
Marital status	Single	1	0.191	1	0.097	
	Married	0.36(0.078-1.666)		.251(0.049-1.281)		
	Divorced	0.492(0.127-1.911)		.387(0.092-1.638)		
	Widowed	0.254(0.564-1.001)		.211(0.048-.932)		
Educational status	Diploma	1	0.036	1	.006*	
	BSc	4.939(0.606-40.242)		0.397		.032(.003-.365 )
	MSc/MPH	2.625(0.282-24.435)		0.411		.181(.054-.600 )
	PhD	2.443(0.291-20.501)		0.116		.112(.027-.469 )
	Others	5.586(0.652-47.864)		0.007*		.084(.025-.286 )
						.204(.058-.720 )

**Table 4: Factor Associated with Overall Attitudes of Health Care Workers at UoG Comprehensive Specialized Hospital 2023(n=322)**

**NB:** \*COR, P-value of < 0.25 fitted for multivariable logistic regression

\*\*AOR, CI-95% with P-value of < 0.05 was significantly associated with overall satisfaction

## 6. Discussion

Pre-exposure prophylaxis (PrEP) against HIV infection is available for people at risk of acquiring HIV infection and who are not positive for HIV infection. It is proven to be effective at preventing HIV infection in many studies in various populations. However, due to lack of knowledge or due to attitudes towards PrEP, this mode of prevention may be underutilized by people at risk and their providers. Now the current study revealed that 139(43.2%), of the participants of the study had answers about PEP correctly by saying it is Preventive medicine, taken daily, for HIV negative adults who are at high risk of exposure to the virus.

The proportion of respondents who responds 250(77.6%), 123(38.2%), and 190(59%), of providers were PrEP is available in our hospital, drug regimen TDF +3TC is available, and those providers answers PrEP is administered by through oral routs. According to the FDA, the antiretroviral drugs used as PrEP 150(46.6%) must be taken Daily. Majority, 90(28%) of respondents PrEP is contraindicated in patients with History of myocardial infarction, and 201(62.4%) knows PrEP reduces the risk of getting HIV and other STDs The prevalence of health care workers attitude towards PrEP was 68% [95% CI: 63.1-73.0] which was in line with study conducted in Pakistan 66.74% [12]. The current study higher than the study conducted in Spain between 2019 and 2020 showed that, from the total of 570 students of the Degree of Nursing have insufficient knowledge of PrEP (83.24%) and less than 50% said that they had received information about it during the training programme in the nursing degree.

In an observational cross-sectional study, Portuguese HCPs who work with HIV-risk populations. 96 responders in all (75%) said that PrEP should be made available in Portugal, (55.1%) rated their knowledge of PrEP as high (21.8%), and only 11.5 percent of participants had ever heard of PrEP, and 87.5% of senior ID physicians said they did the current WHO guidance on PrEP was more widely known among ID professionals than by general practitioners (GPs).so this shows difference level of knowledge rating, and information they got, may the reason will be in difference [13]. These differences might be in the type of the study participants were a reason for the variation and might be attributed to the fact that this study was conducted in a high-level facility.

The Previous study, cross-sectional web-based survey conducted from Brazil and Mexico to assess the Awareness of PrEP did not differ between Brazil and Mexico (84.6%), Willingness to prescribe PrEP was 74.2%, higher among Brazilians (78.2%). Overall, participants had concerns about consistent access to PrEP medication and the risk of antiretroviral resistance in case of acute [13].

A study conducted in a qualified healthcare professionals in DeLand, Florida, in the United States, as part of the Florida Department of Health's cross-sectional survey. Two-thirds of providers used the right definition of PrEP Considering that one-third of the remaining providers define PrEP incorrectly. Beside of this the current study reported that Prior to conduct this survey,

273 (84.8%) the respondents were aware of the concept of HIV PrEP, and 139(43.2%), of the participants of the study had answers about PEP correctly, but only 250(77.6%), 123(38.2%), and 190(59%), of providers were PrEP is available in our hospital, drug regimen TDF +3TC is available, and those providers answers PrEP is administered by through oral routs.

In this study, marital status having single and in any occupational status, was significantly associated with the attitudes of pre exposure prophylaxis. Lack of research in Ethiopia and little research in Africa could not information about Pre exposure prophylaxes of HIV knowledge, attitudes and its associated factors may make current conditions worsen HIV prevalence.

## 7. Conclusion and Recommendation

The level of attitude was in adequate. Knowledge was influenced by source of information. Furthermore, the level of attitude was 68% and attitude was significantly associated with marital and occupational status of the participants. As a result, public awareness campaigns should concentrate on delivering more information about the PrEP safety, significance, and efficacy. Furthermore, it is critical to disseminate accurate information, particularly among Health care workers to educate people more on PrEP.

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