

Acceptance and Associated Factors towards Provider Initiated HIV Counselling and Testing among Pregnant Women Attending Health Facilities in Jigjiga Town, Ethiopia

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Abstract

Ethiopia is one of the sub-Saharan African countries affected by the HIV/AIDS, among them urban women account for a larger share. The country has a wide HIV related program that is focused on the provision of preventive, care, support and treatment services. Most efforts have focused on Provider initiated HIV counselling and testing (PIHCT) as the primary means of encouraging people to become aware of their HIV status, but its uptake is relatively low in many parts of Ethiopia. To determine the acceptance of PIHCT on pregnant mothers attending health facilities, Jigjiga town, Ethiopian Somali regional state; an institutional-based, cross-sectional quantitative studies were conducted in 3 selected health facilities (one hospital and two health centres) in Jigjiga town. Total 189 participants were recruited by using systematic sampling technique. Only 60% of the respondent's showed their willingness to accept the PIHCT. Age [AOR = 3.9, 95%CI:1.124-13.793] and personal risk perception [AOR = 4.19, 95% CI:1.59-11.02] was positively and educational status, knowledge of PIHCT and PMTCT were negatively associated with the acceptability of PIHCT. The present situation in relation to acceptance of PIHCT is alarming for region as well as for country. Community conversation, information dissemination and awareness creation using couple counselling, media and influential community people and socio-economic empowerment of women should be taken in to consideration and intra personal communication between service providers and their clients for behavioral changes should be strengthened and expansion of integrated service to community level health institutions to promote and accept PIHCT by the pregnant women in Somali region.

Keywords: PIHCT acceptance, Pregnant woman, Health facility, Jigjiga town.

Introduction

HIV/AIDS is a potential risk to everyone, among them women and girls are more vulnerable to HIV/AIDS. Because of their low status in society and low level of participation in education, decision-making and employment, women and girls also lack access to information on their sexual and reproductive health rights and on the ways of prevention and control of HIV. Many of them are also subjected to violence of different kinds ranging from sexual violence to harmful traditional practices which increase their chance of HIV infection. Current trends in Sub-Saharan Africa, the number of women being infected by and living with the virus is greater than that of men by a large margin (UNFPA, 2011).

According to the HIV Related Estimates and Projections for Ethiopia (2015), the HIV prevalence was estimated to be 1.1% and an estimated 729,517 people live with HIV/AIDS in Ethiopia. Across all the country, urban and female populations are more affected than rural and male population. Round Antenatal Care based Sentinel HIV Surveillance in Ethiopia (2014) reported that HIV prevalence at Somali region was 3.8% among Antenatal care (ANC) Attendees at ANC Clinics, it was 4.8% in particularly in Jijjiga town, Karamara Hospital. (EPHI, 2015).

Like other part of the World, Ethiopia also envisages to ending AIDS by 2030. The post 2015 HIV priorities are expected to be of high impact interventions that dramatically reduce the annual new infection and save many lives which also pave the path to ending AIDS in Ethiopia. Even all those interventions made important contributions to HIV prevention but country was unable to reach antiretroviral therapy (ART) targets. In this situation, Ministry of Health of Ethiopia in collaboration with partner organizations, developed a provider-initiated HIV counseling and testing (PIHCT) approach. The primary focus of PIHCT is on identifying HIV-infected clients and linking them to prevention, care, treatment and support services. By implementing PIHCT, HIV screening in health facilities has become routine and it has been integrated as a standard of care in Ethiopia (FMOH, 2010).

According to Ethiopian Demographic Health Survey data (EDHS, 2016) of Somali region, 13.4% women (age 15-49 yrs) know that consistent use of condoms is a means of preventing the spread of HIV. Twenty-Six percent of women know that limiting sexual intercourse to one faithful and uninfected partner can reduce the chances of contracting HIV. About 10% women know that both using condoms and limiting sexual intercourse to one uninfected partner are means of preventing HIV. Increasing general knowledge about prevention of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. In Somali region (2016), 37% of women know that HIV can be transmitted through

breastfeeding; 14.4% of women know that the risk of mother-to-child transmission can be reduced if the mother takes special drugs during pregnancy. Overall, 14% of women know that HIV can be transmitted by breastfeeding and that the risk of mother-to-child transmission can be reduced by taking special drugs. Knowledge regarding PMTCT was higher in urban than in rural areas and increases with increasing education and wealth. Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. In Somali region (2016), 43% of women age 15-49 who know where to get an HIV test, 14 % tested, and 8.5% who were tested in the past 12 months and received the results of the last test. Knowledge of a place to get an HIV test increases steadily with education and wealth (CSA, 2016).

Determinant factors that drive the epidemic and sexual behaviors among population of Somali region not adequately explored. Early published literature identified that cultural and traditional practices, low awareness and knowledge about HIV/AIDS due to limited HIV/AIDS interventions in Somali region of Ethiopia were the main reasons behind pastoralist communities at risk of HIV infection (FHAPCO, 2010). Considering the present situation, there is a urgent need assess the acceptance and other associated factors for PIHCT of pregnant women attending at health facilities in Jigjiga town, because Jigjiga is capital city of Somali region with high prevalence of HIV and most residence of this town are working in peripheral area of the country and even outside the country (mobility/migration of population) which has the possibility of acquiring the infection and even earlier no study has been conducted on this PIHCT acceptance issue in Somali region.

Material and Methods

A facility based cross sectional study was conducted from February to May, 2017 among pregnant mothers attending health facilities in Jigjiga town, Ethiopia. The total population of the town was 153,461 of which 35,066 are childbearing age (15-49yrs) and around 1400 are on Antiretroviral Drugs (ARV). The inhabitants are mainly Somalis, with Oromo, Amara and Gurage available, there are three government health institutions namely Karamara referral hospital, Ayardaga and Jigjiga Health center which offer ANC and PIHCT as well as PMTCT services in the town.

The sample size was determined using a formula for estimation of single population proportion with the assumption of 95 % confidence interval, 5 % margin of error and considering the proportion of HIV testing 12.8 % in Somali region (CSA, 2016). To compensate for the non-response rate, 10 % of the determined sample was added, so the final sample size was 189. The Pregnant women who attended at three government health institutions (one hospital and two health centers) of Jigjiga town during data collection were selected for the study by proportional sampling and systematic sampling technique. Pregnant women who are unable to communicate (mentally ill, critically sick,

deaf and dumb) with the data collectors and not willing to provide informed consent were excluded from the study.

Self-administered questionnaires were employed to collect the following information related to PIHCT acceptability: socio-demographic factors, knowledge of pregnant mother towards HIV/AIDS and PIHCT, perceived risk factors, barriers and stigma. At first, the questionnaire was prepared in English language and translated into two local languages (Somali and Amharic). Before the actual data collection, the questionnaire was pre tested on 10% of the study subjects. Based on the findings of the pre-test, the tool was modified and final version of questionnaire became ready. Data collection facilitators were four female health professionals working at ANC with trained PIHCT on those respective health facilities in Jigjiga town.

Data were entered by using Epi-info version 3.5.1 and analyzed through SPSS 20.0. The descriptive analysis including percentages, frequency distribution was done. All variables found to be significant at bivariate level (at P-value < 0.05) were entered in to multivariate analysis to control for confounding factors. Ethical clearance and permission was obtained from School of Graduate studies, Jigjiga University as well as Regional Health Bureau. Confidentiality of information was maintained and participants were informed of their right to skip or ignore any question or withdraw from their participation at any stage.

Results

Results related to Socio-Demographic Characteristics of respondents

A total of 189 pregnant mothers attending these three health facilities were included in the study with response rate of 100%. More than 50% of participants were between the age group of 25-34 years. 45.5% of the study participants educational status were illiterate, 18.1% had the college and above degree. Occupationwise, 59.3% of the participants were house wife, 26.5% were in government job (Table 1).

Table 1: Socio-demographic characteristics of pregnant mothers attending public health facilities in Jigjiga town, Somali Region, Ethiopia

Socio-Demographic Variables	C a t e g o r i e s	F r e q u e n c y (N=189)	P e r c e n t (%)
A g e	1 5 - 2 4 y e a r s	6 8	3 6 . 0
	2 5 - 3 4 y e a r s	1 0 1	5 3 . 4
	3 5 y e a r s a n d a b o v e	2 0	1 0 . 6
M a r r i a g e s t a t u s	M a r r i e d	1 7 0	8 9 . 9
	U n m a r r i e d , D i v o r c e d , W i d o w e d / s e p a r a t e d	1 9	1 0 . 1
E t h n i c i t y	S o m a l i	1 5 7	8 3 . 1
	O r o m o	1 7	9 . 0
	A h m a r a	1 1	5 . 8
	T i g r a e	2	1 . 1
	G u r a g i e	2	1 . 1
R e s i d e n c e	U r b a n	1 7 6	9 3 . 1
	R u r a l	1 3	6 . 9
R e l i g i o n	M u s l i m	1 7 0	8 9 . 9
	O r t h o d o x	1 4	7 . 4
	P r o t e s t a n t	3	1 . 6
	C a t h o l i c	2	1 . 1
E d u c a t i o n a l s t a t u s	I l l i t e r a t e	8 6	4 5 . 5
	R e a d a n d w r i t e , p r i m a r y a n d s e c o n d a r y	6 9	3 6 . 5
	h i g h e r e d u c a t i o n	3 4	1 8 . 0
O c c u p a t i o n	H o u s e w i f e	1 1 2	5 9 . 3
	G o v e r n m e n t e m p l o y e e	5 0	2 6 . 5
	P r i v a t e e m p l o y e e	1 1	5 . 8
	M e r c h a n t	1 3	6 . 9
	O t h e r * *	3	1 . 6
H o u s e h o l d I n c o m e	5 0 0 - 3 0 0 0 E T B	1 1 5	6 0 . 8
	3 0 0 1 - 5 0 0 0 E T B	5 3	2 8 . 0
	> = 5 0 0 1 E T B	2 1	1 1 . 1

Results related to Knowledge and Other associated Factors

Table 2: Knowledge of HIV/AIDS among pregnant mothers attending public health facilities in Jigjiga town, Somali Region, Ethiopia

Variables	Categories	Frequency (N=189)	Percent %
Heard about HIV/AIDS	Y e s	1 8 5	9 7 . 9
	N o	4	2 . 1
Mode of transmission	T h r o u g h s e x u a l i n t e r c o u r s e	6 1	3 3 . 0
	Sharing of Sharps with someone who is infected (Needles, etc.)	9	4 . 9
	T r a n s f u s i o n o f i n f e c t e d b l o o d	7	3 . 8
	T h r o u g h m o t h e r t o c h i l d t r a n s m i s s i o n	5	2 . 7
	M o s q u i t o b i t e s	2	1 . 1
	Shaking hands a person living with HIV/AIDS	2	1 . 1
	Sharing a meal with a person living with HIV/AIDS	2	1 . 1
	Through sexual intercourse & Sharing of Sharps with someone who is infected (Needles, etc.)	4 3	2 3 . 2
	Through sexual intercourse, Sharing of Sharps with someone who is infected (Needles, etc.) & Transfusion of infected blood	4 6	2 4 . 9
Through sexual intercourse, Sharing of Sharps with someone who is infected (Needles, etc.), Transfusion of infected & Mother to child transmission blood	8	4 . 3	
Mode of prevention	A v o i d i n g S e x (a b s t i n e n c e)	4 3	2 3 . 2
	Staying with only one uninfected partner faithful	1 9	1 0 . 3
	Using a condom every time during sex	9	4 . 9
	Avoiding Sex (abstinence) & Staying with only one uninfected partner faithful	6 2	3 3 . 5
	Avoiding Sex (abstinence), Staying with only one uninfected partner faithful & Using a condom every time during sex	5 2	2 8 . 1
Heard about MTCT	Y e s	9 0	4 7 . 6
	N o	7 0	3 7 . 0
	D o n ' t k n o w	2 9	1 5 . 3
Aware about way t	Y e s	5 4	2 8 . 6
	N o	5 4	2 8 . 6
	D o n ' t k n o w	8 1	4 2 . 8
	Y e s	1 1 2	5 9 . 3
Heard about PMTCT Program	N o	7 7	4 0 . 7

Table 3: Knowledge of PIHCT among pregnant mothers attending public health facilities in Jigjiga town, Somali Region, Ethiopia

Variables	C a t e g o r i e s	Frequency	Percent (%)
Heard about PIHCT	Y e s	5 9	3 1 . 2
	N o	1 3 0	6 8 . 8
Importance of PIHCT	Y e s	1 6 9	8 9 . 4
	N o	2 0	1 0 . 6
Reason of PIHCT importance	H e l p s p a t i e n t s l i n k t o A R T	7 0	4 1 . 4
	M a k e s e a s i e r f o r c l i e n t s t o g e t t e s t e d	9 3	5 5
	I n c r e a s e n u m b e r o f t e s t e d p e o p l e	4	2 . 4
	R e s u l t s i n l e s s d i s c r i m i n a t i o n o f H I V p o s i t i v e p a t i e n t s	2	1 . 2
	O t h e r (s p e c i f y)	0	0
Pregnant mother's test	Y e s	1 5 6	8 2 . 5
	N o	3 3	1 7 . 5
Pregnant mother's time of test	A t A N C	2 6	2 8 . 9
	D u r i n g l a b o r	2 4	2 6 . 7
	W h e n s i c k	8	8 . 9
	B e f o r e m a r r i a g e	3	3 . 3
	A t a n y t i m e	2 1	2 3 . 3
	D o n ' t k n o w	8	8 . 9
People need test	F e m a l e c o m m e r c i a l s e x w o r k e r s	5 1	2 7
	D r i v e r s	2	1 . 1
	P e o p l e w i t h h i s t o r y o f u n p r o t e c t e d s e x	4	2 . 1
	P r e g n a n t m o t h e r s	1 6	8 . 5
	T h o s e w i t h m u l t i p l e p a r t n e r s	2	1 . 1
	A n y o n e s e x u a l l y a c t i v e	3 8	2 0 . 1
	T h o s e a r e s i c k .	5	2 . 6
	A n y o n e a t r i s k	0	0
	O t h e r s (s p e c i f y)	0	0
	F e m a l e c o m m e r c i a l s e x w o r k e r s & D r i v e r s	2 1	1 1 . 1
	F e m a l e c o m m e r c i a l s e x w o r k e r s , D r i v e r s & P e o p l e w i t h h i s t o r y o f u n p r o t e c t e d s e x	2 9	1 5 . 3
F e m a l e c o m m e r c i a l s e x w o r k e r s & P e o p l e w i t h h i s t o r y o f u n p r o t e c t e d s e x	2 1	1 1 . 1	
Ever tested	Y e s	1 3 4	7 0 . 9
	N o	5 5	2 9 . 1

Reason of ever tested	V o l u n t a r i l y	4	2	3	1	. 3
	I n i t i a t e d b y h e a l t h w o r k e r	5	1	3	8	. 1
	B l o o d t r a n s f u s i o n	3		2		. 2
	A N C	3	8	2	8	. 4
Reason not ever tested	F e a r o f s t i g m a a n d d i s c r i m i n a t i o n	2		3		. 6
	D o n ' t w a n t t o k n o w m y r e s u l t	8		1	4	. 5
	I ' m n o t r i s k p e r s o n	3	6	6	5	. 5
	P a r t n e r t r u s t	3		5		. 5
	O t h e r * *	6		1	0	. 9

** had live in accessible area to the service

According to Table: 2, 97.9% of the respondents were aware about HIV/AIDS and 47.6% of the participants heard about mother to child transmission of HIV virus. Awareness towards PIHCT was among 31.2% participants and 70.9% of participants tested their HIV status before this study was conducted (Table 3).

Results related to Personal Risk Perception

Table:4 is showing that, 45% of the respondents had a perception that they can be infected by HIV virus and 59.78% of the respondent's showed their willingness to accept the PIHCT.

Table 4: Personal risk perception towards PIHCT among pregnant mothers attending public health facilities in Jigjiga town, Somali Region, Ethiopia

V a r i a b l e s	C a t e g o r i e s	Frequency N=189	Percent %
Personal risk perception	Y e s	8 5	4 5 . 0
	N o	1 0 4	5 5 . 0
Reason for high/medium risk perception			
	H a d m u l t i p l e s e x u a l p a r t n e r	1 4	6 0 . 9
	H a d s e x u a l c o n t a c t w i t h o u t C o n d o m	3	1 3 . 0
	H a d i n j e c t i o n w i t h u n s t e r i l e n e e d l e	6	2 6 . 1
	H a d s e x u a l c o n t a c t w i t h H I V p o s i t i v e p e r s o n	0	0
	O t h e r s p e c i f y	0	0
Reason for low risk perception			
	T r u s t t h e i r s e x u a l p a r t n e r .	3 8	6 1 . 3
	N o i n j e c t i o n w i t h u n s t e r i l e n e e d l e	1 3	2 1 . 0
	A l w a y s u s e c o n d o m	1 0	1 6 . 1
	* * O t h e r s p e c i f y	1	1 . 6
Reason for willingness to test			
	J u s t t o k n o w m y s t a t u s	8 8	4 6 . 6
	T o p r o t e c t t h e i r c h i l d f r o m H I V	1 5	7 . 9
	T o p r o t e c t t h e i r p a r t n e r f r o m H I V	5	2 . 6
	K n o w i n g t h a t t r e a t m e n t i s a v a i l a b l e	1	0 . 5

	Knowing that test results will be confidential	4	2	. 1
Reason for not being willing to test				
	Lack of HIV risk perception	5	2	6 8 . 4
	Fear of stigma and discrimination	4	5	. 3
	Fear of knowing HIV positive test result	0		0
	Need for partner's consent	5	6	. 6
	Not being sure of HIV test confidentiality	2	2	. 6
	Was not ready for HIV test	7	9	. 2
	T e s t e d b e f o r e	6	7	. 9
O t h e r (s p e c i f y)	0		0	

**Religious belief

Results related to Barriers toward PIHCT

According to Table: 5, 92.6% respondents reported to have pre-counselling during the HIV test and 96.3% realised and accepted the importance of pre-counselling before test. Regarding family member with HIV infection, 67.2% respondents were interested to keep it secret and 77.8% participants was ready to continue their learning with the teacher with HIV infection.

Table 5: Barriers towards PIHCT

V a r i a b l e s	Categories	Frequency N=(189)	Percent %
P r e - c o u n s e l l i n g	Y e s	1 7 5	9 2 . 6
	N o	1 4	7 . 4
I m p o r t a n c e o f p r e - c o u n s e l l i n g	Y e s	1 8 2	9 6 . 3
	N o	7	3 . 7
M a i n t e n a n c e o f f a m i l y s e c r e t w i t h H I V i n f e c t e d f a m i l y m e m b e r	Y e s	1 2 7	6 7 . 2
	N o	6 2	3 2 . 8
I n t e r e s t e d t o t a k e c a r e o f H I V i n f e c t e d / H a v i n g A I D S r e l a t i v e s	Y e s	1 4 5	7 6 . 7
	N o	4 4	2 3 . 3
I m p r e s s i o n a b o u t H I V i n f e c t e d f o o d s e l l e r / s h o p k e e p e r	Y e s	5 8	3 0 . 7
	N o	1 3 1	6 9 . 3
I m p r e s s i o n a b o u t H I V i n f e c t e d t e a c h e r	Y e s	1 4 7	7 7 . 8
	N o	4 2	2 2 . 2

Results related to Ethical issue towards PIHCT

Regarding ethical issues, 94.7% respondents satisfied that health workers initiated HIV testing with informed consent (Table: 6).

Table6: Ethical issues regarding PIHCT

V a r i a b l e s	Categories	FrequencyN=189)	Percent (%)
C o n s e n t	Y e s	1 7 9	9 4 . 7
	N o	1 0	5 . 3
S a t i s f a c t i o n	Y e s	1 7 9	9 4 . 7
	N o	1 0	5 . 3
C o n f i d e n t i a l	Y e s	1 7 7	9 3 . 7
	N o	1 2	6 . 3
HIV testing site Location-Infrastructure: dislike	Y e s	1 1	9 1 . 6
	N o	1	8 . 3

Table 7: Bivariate and Multivariate analysis to Identify Predictors of acceptance towardsPIHCT

Variables	Categories	Are you willing to take the test N=(189)		C O R (95% CI)	P-value	AOR (95% CI)	P-value
		Y E S N o (%)	N O N o (%)				
		Age (yrs)	1 5 - 2 4	40(58.8%)	28(41.2%)	4.545(1.84- 11.23)	. 0 0 1 *
	2 5 - 3 4	66(65.3%)	35(34.7%)	1.468(0.657- 3.28)		1.043(.353-3.081)	0 . 9 4 0
	35 and above	7 (3 5 %)	13 (6 5 %)	1		1	
Educational status	Illiterate	32(37.2%)	54(62.8%)	1		1	
	Read and write, primary and secondary	54(78.3%)	15(21.7%)	0.165(.080- 0.338)	0 0 *	0.211(0.78-0.567)	0.002**
	higher education	27(79.4%)	7(20.6%)	0.154(.060 - 0.393)	0 0 *	0.140(0.039 -0.509)	0.003**
Occupation	Housewife	55(49.1%)	57(50.9%)	1		1	
	Government employee	3 4 (6 8 %)	1 6 (3 2 %)	0.454(.225 - 0.915)	0.027*	1.031(0.33-3.216)	0 . 9 5 8
	Private employee	10(90.9%)	1 (9 . 1 %)	0.096(.012 - 0.779)	0.028*	0.259(0.028-2.404)	0 . 2 3 5
	Merchant	13(100%)	0 (0 %)	0		0	0 . 9 9 8
	O t h e r	1 (3 3 . 3 %)	2 (6 6 . 7 %)	1.93(.170- 21.896)		2.817(0.019-427.6)	0 . 6 8 6
Household Income	500-3000ETB	47(51.1%)	45(48.9%)	1		1	
	3001-5000ETB	33(63.5%)	19(36.5%)	0.601(0.3 - 1.207)		0.838(0.3-2.345)	0 . 7 3 7
	>=5001ETB	33(73.3%)	12(26.7%)	0.38(0.175- 0.826)	0.015*	0.725(0.211-2.49)	0 . 6 1
M T C T	Y e s	6 3 (7 0 %)	2 7 (3 0 %)	3.31(1.024- 3.76)	. 0 0 7 *	0.291(0.075-1.133)	0 . 0 7 5
	N o	38(54.3%)	32(45.7%)	1.96 (1.39- 3.85)		0.326(0.076-1.409)	0 . 1 3 4
	Don't know	12(41.4%)	17(58.6%)	1		1	
P M T C T	Y e s	40(74.1%)	14(25.9%)	0.37(0.178, 0.79)	. 0 1 1 *	0.270(0.088-0.828)	0.022**
	N o	31(57.4%)	23(42.6%)	0.799(.399-1.59)		0.655(0.251-1.712)	0 . 3 6 1
	Don't know	53(50.5%)	52(49.5%)	1		1	
Heard about PIHCT	Y e s	46(78.0%)	13(22.0%)	0.301(.148- .608)	. 0 0 1 *	0.222(0.085-0.581)	0.002**

	N	o	67 (51.5%)	63 (48.5%)	1		1		
Risk perception	Y	e	s	39 (45.9%)	46 (54.1%)	2.909 (1.594 - 5.30)	.001*	3.83 (1.612-9.113)	0.002**
	N	o	74 (71.2%)	30 (28.8%)	1		1		
Importance of Pre-counselling	Y	e	s	112 (61.5%)	70 (38.5%)	0.10 (.012 - 0.88)	.038*	0.287 (0.011-7.257)	0.449
	N	o	1 (14.3%)	6 (85.7%)	1		1		
Maintenance of family secret	Y	e	s	87 (68.5%)	40 (31.5%)	0.33 (.177 - 0.62)	.001*	0.618 (0.191-1.995)	0.421
	N	o	26 (41.9%)	36 (58.1%)	1		1		
Impression about HIV infected teacher	Y	e	s	96 (65.3%)	51 (34.7%)	0.36 (.179 - 0.73)	.005*	1.462 (0.35-6.06)	0.601
	N	o	17 (40.5%)	2 (59.5%)	5	1		1	
Consent	Y	e	s	111 (62.0%)	68 (38.0%)	0.15 (.032 - 0.74)	.02*	0.19 (0.009-4.487)	0.309
	N	o	2 (20%)	8 (80%)	1		1		

* statistically significant (P<0.05) at bivariate regression

** statistically significant (P<0.05) at multivariate regression

It has been observed in this study, the participants aged between (15-24) yrs were 4 times [AOR=4.117; 95 % CI: 1.197-14.156, p=0.025] more likely to be accepted the test compared to those with age group of 25 yrs and above. The illiterate participants were 80% and 86% less likely to accept the test than those can read and write or reach primary and secondary education [AOR=0.211; 0.78-0.567; p=0.002] and those having higher education [AOR=0.140, 95 % CI: 0.039-0.589, p=0.003] respectively. The respondents, those who do not know about HIV Prevention of mother to child transmission [PMTCT] were 73% less likely to accept the HIV test than those were aware to PMTCT [AOR=0.270, 95%CI: 0.088-0.828, p=0.022]. The study participants, who were not aware about PIHCT were 78% less likely to accept the HIV test than those heard about PIHCT [AOR=0.22, 95%CI: 0.085-0.581, p=0.002]. The perception of getting infected by the HIV virus motivated participants 4 times more likely to accept the HIV test than those participants, those are not aware about the chances of HIV infection [AOR=3.832, 95%CI: 1.612-9.113, p=0.002]

Discussion

HIV testing during pregnancy enables pregnant women to benefit from prevention, treatment and care and to access interventions for reducing HIV transmission to their infants. The overall acceptance of PIHCT in this study was (59.78 %), which is much lower than the studies conducted on acceptance rates of PIHCT in other part of Ethiopia. Studies conducted at Wonchi Woreda, Southwest Shoa zone (Fikadu et al., 2016), acceptance rate of PIHCT was 78.4%, in Harar

town(Abdurrahman et al.,2015), it was 70.6% and in Gondar town(Malaju and Alene2012), acceptance rate was 82.5%.Lower acceptability rate of PIHTC in Jigjiga town, may be due to differences in the start times of PIHTC, the availability of PIHTC services, Somali pastoralist lifestyle, cultural practices including lack of education, awareness and decision making power among women, fearness and social stigma about HIV/AIDS as well as inadequate information and communication.

In present study, the following variables like age, educational level, knowledge about PMTCT, knowledge about PIHCT and risk perception had significant association with acceptance towards PIHCT. Among the selected socio-demographic variables, age had statistically significant association with acceptance of PIHCT. The finding is in line with the studies conducted in Gondar town, Ethiopia(Malaju and Alene,2012a) and findings reported by Abdurrahman et al(2015).According to the report of Round Antenatal Care based Sentinel HIV Surveillance in Ethiopia(2014), HIV prevalence among 15-24 years age group was 1.7% while it was 2.6% in 25-34 age group. Young women between 15–24 years more fresh in mind in interacting with outer world and not interested to follow the old rituals and bindings of the society, that might brought many exposures and opportunities for them to accept new concepts/ideas. In contrast, another study at Nekemte town by Hasen (2012), researcher did not find no statistically significant association between age and acceptance of PIHCT.

Regarding association of education level with acceptance of PIHCT in this study, those women with no education were less likely to accept PIHCT than those with basic education, studied school, college and above. This finding is supported by the study conducted at Gondar town, Ethiopia, Women with education level of secondary and above were 6.85 times more likely to have better knowledge on MTCT of HIV than those with no education (Malaju and Alene,2012b). In contrary, Malaju and Alene(2012a) observed that illiterate women were more likely to accept PIHTC. According to Tahir(2012), variables like higher income and marital status had no statistical significance with PIHCT, which is similar to the findings of present study.

Present study indicated that respondent's knowledge towards PMTCT decide the acceptance of PIHCT. Similar findings reported by a study conducted at Gondar town(Malaju and Alene, 2012a), where researcher noted women with good knowledge of PMTCT were about 3.3 times more likely to accept PIHCT than those who do not have PMTCT knowledge. This knowledge development can be connected with educational status of the respondents. In this relation, Olugbenga-Bello and his colleagues(2012) report can be mentioned, where they found that education was significantly associated with knowledge of respondents about HIV/AIDS. But Abtew et al(2015) in similar type of study conducted at Assosa town, Ethiopia observed that PMTCT was not significantly associated for

the acceptance of PIHCT. They concluded that knowledge about HIV/AIDS and PMTCT may not be a sufficient to guarantee for behavioural change.

Present findings reported that awareness of respondents about PIHCT had statistically significant related with acceptance of PIHCT, which is similar to the study findings conducted among outpatient clients in selected health facilities in Harartown (Abdurrahman et al.,2015) as well as Wolaita zone (Facha et al., 2016).This could be due to the fact that those who ever not heard of PIHCT and not familiar with HIV/AIDS and PMTCT, lack of education-information-communication, fear of cultural practices, need more time to think of HIV test and/or discuss with whom they want before accepting PIHCT service.

Perceived risk of getting HIV was found to be associated with acceptance of PIHCT in present study; which is comparable to the report from Ethiopia and several African countries suggested that self-risk perception of being HIV infected has major influence on HIV test acceptability (Dabis et al.,2006). But many researchers(Abtew et al.,2015 and Abdurahman et al, 2015), reported dissimilar results,this could be due to no risk perception observed among the majority of the study participants. Risk perception can be developed by dissemination of education-information-communication related to HIV/AIDS and PMTCT. Knowledge will create awareness and practices, which will make people ready to accept PIHCT.

Conclusion

Though its implementation started since 2005, PIHCT acceptance in Somali region capital, Jigjiga town is only 60%, which implies significant number of individuals still did not accept PIHCT recommendation.Young age and literacy level are two indicators of acceptance towards Provider Initiated HIV/AIDS Counselling and Testing among pregnant mothers attending health facilities in Jigjiga town, Ethiopian Somali Regional State. Beside these, knowledge about PMTCT and PIHCT and risk perception are another predictors for acceptance towards PIHCT. Available and acquired knowledge related to HIV/AIDS, PMTCT and PIHCT will create awareness and for behavioural changes related to utilisation of available health facilities, like HIV testing and counselling, increased uptake of ART, condom use, prevention and control of sexually transmitted diseases(STD) and other related interventions.The plausible factors may be for not accepting PIHCT include; cultural barrier, not being at risk, self-trust, not ready, stigma and discrimination, not counselled properly, not sure of confidentiality, needing to consult their partners, being tested before, and fearing the results, a shortage of staff and lack of privacy at health facilities. It is therefore being recommended that to improve women's access to economic resources by multisectoral coordination to enable them to increase their own decision on accessing test of HIV. Provision of information and education during

pre-test counselling service should be given for all pregnant women to increase their attitude towards PIHCT during their ANC visits. Couple counselling during ANC services should be taken as a strategy to minimize the difficulty that pregnant women face to disclose their HIV test result to their husband and encourage them to disclose their results to their partner. Behavioural approach by strengthening Behavioral Change Communication (BCC) as well as information Education and communication (IEC) to increase awareness of pregnant women should be done by community health workers and the community itself. Public sectors, Non-government and private sector organizations have to take initiation mainstreaming of HIV/AIDS into their core activities by providing adequate infrastructure especially for Somali region. The education sector has to focus on integration of HIV/AIDS into the curriculum, initiating peer education, life skills and peer group conversation in considerable number of educational institutions in this region. Further health facilities based studies in relation to acceptance of PIHCT were recommended to assess barriers in availability, acceptability and accessibility HIV test and counselling services in Somali community.

Acknowledgement

The author would like to thank the health professionals working at ANCs in Jigjiga town and students of MPH program, Jigjiga University. The authors also want to express appreciation for all respondents who spared their valuable time to participate in the study.

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