

Family Planning Practice among People Living with Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome

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ABSTRACT

Background: Family planning among people living with Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome is proved to be effective in preventing Human Immuno Deficiency Virus transmission through sexual and mother to child transmission. We studied family planning practice among people living with Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome at reproductive age and its associated factors.

Methods: We conducted a cross-sectional study in four anti retro viral therapy centers in eastern Nepal from September 2015 to February 2016. Data was collected among 200 samples by face to face interview using pretested semi-structured questionnaire. Bivariate analysis and logistic regression was performed to analyze the associated factors.

Results: Fifty one percent (51%) of participants in reproductive age were currently using family planning methods with male condom being the most common. On bivariate analysis, higher income, higher education, having living children, involvement in decision making, low fertility desire, longer duration in anti-retroviral therapy, family planning knowledge and past counseling were found to be statistically significant in having higher family planning practice. In multivariate analysis, participants with duration in anti-retroviral therapy for 1- 4 years (AOR: 9.2, 95% CI: 1.7-47.5), both spousal involvement in decision making (AOR:37.1, 95% CI: 6.5-211.9) and family planning counseling (AOR: 3.4, 95% CI: 1.0-11.3) were found to have higher odds of family planning practice.

Conclusions: Male condom is the most common method of family planning practice among HIV patients. Higher income, education status of both partners and having living childrens are the encouraging factor for better practice. Involvement of both partners is associated with higher use of family planning practices. Duration of anti-retroviral therapy use has positive impact on use of family planning practices.

Keywords: Family planning practice; people living; Human Immuno Deficiency Virus

INTRODUCTION

Human Immuno Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) has been a global pandemic affecting more than 70 million people and costing the lives of about 35 million people globally.¹ In Nepal, the prevalence of HIV/AIDS among adults is almost constant and the trend of death is decreasing.² The knowledge and practice of family planning is imperative to control the heterogeneous and vertical transmission.³

There exists wide differences in family planning practice among HIV from around 51% to 87%.^{4,6} The available data

on family planning is not analyzed based on HIV/AIDS status in Nepal. Also, very little is explored on family planning knowledge, practice, associated factors and barriers in Nepal.

We studied practice of family planning, its knowledge, associated factors and barriers in getting family planning services in eastern Nepal. The findings from this study can contribute in designing the localized interventions for the study area.

METHODS

We conducted crosssectional study from September 2015 to February 2016 at B.P. Koirala Institute of Health

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Sciences, Mechi Zonal Hospital, Koshi Zonal Hospital, and Sagarmatha Zonal Hospital which were referral centers of that region. Men and women with HIV/AIDS within reproductive age group (15- 49) who were either married or living together and attending anti-retroviral therapy (ART) centers of study sites for HIV care were taken as study population. The sample size was 200 calculated at 95% confidence interval taking 10% allowable error and 10% non-response rate based on 70.8% family planning use in similar study conducted in Nepal in 2012.⁶

We obtained the list of people living with HIV/AIDS (PLWHA) attending ART clinics from ART registers. We took the samples proportionately from each center using lottery method from the selected study site.

The inclusion criteria of the study were: men and women with HIV/AIDS coming to ART centers of study sites for HIV care, either married or living together, within reproductive age and willing to participate in the study. Similarly, the exclusion criteria were: unstable patients due to physical and mental illness and not providing consent to participate.

We conducted a face to face interview using semi-structured questionnaire which was pretested in 10% of samples in BPKIHS. We excluded samples involved in pretesting from the study. We checked the ART card of participants to obtain the information on duration under ART therapy. Also, we translated the tool in Nepali and back translated in English and matched with the original.

We defined study participants as practicing family planning if either they or their partners or both are currently (since last menstrual period) and consistently (in every coitus) using any modern method of family planning devices. Similarly, future desire for pregnancy meant if the participant had desire to have baby in future. Also, the knowledge was classified as adequate or inadequate taking 62.5% of knowledge score as a cut-off which was further decided by using ROC curve.

The different variables studied and analyzed were: socio-demographic, economic factors (age, sex, education, occupation, family income, having living children, religion), treatment related variable (duration of enrolment into ART, past counseling on family planning/PMTCT), knowledge of family planning methods, desire of pregnancy and perceived barrier to family planning.

We obtained the ethical permission from Institutional Review Committee, BPKIHS, (Code no: IRC/645/015). Likewise, we obtained formal permission from each ART center and took written informed consent from

participants.

We entered data in Microsoft Excel 2007 and analyzed by SPSS 11.5. We expressed the descriptive data in frequency, percentage, mean, and standard deviation, along with tabular presentation. Similarly, we adopted chi-square test assessing the association between variables and logistic regression analysis to see the independent effect of the independent variables adjusted for all possible confounders significant at p value <0.20 in bivariate analysis. We considered test findings significant if the p value was less than 0.05.

RESULTS

Table 1. Socio-demographic Characteristics of Participants (n=200).

Characteristics	Categories	Frequency	Percent (%)
Age (in completed years)	20-29	43	21.5
	30-39	110	55.0
	40-49	47	23.5
Sex	Male	101	50.5
	Female	99	49.5
Economic status	Below poverty line (<\$1.25/person/day)	94	47.0
	Above poverty line (≥\$1.25/person/day)	106	53.0
Educational status	Uneducated	36	18.0
	Educated upto class 10	94	47.0
	Educated higher than class 10	70	35.0
Have current living children	Yes	75	37.5
	No	125	62.5
Reproductive health related decision maker	Spouse only	78	39.0
	Self	60	30.0
	Both	62	31.0

Out of total 200 samples, more than half (55.0%; 110 out of 200) were 30-39 years with mean age 34.51±6.65 years. Sex of participants was almost evenly distributed. Economic status was classified with reference of <\$1.25/person/day as below poverty line and ≥\$1.25/person/day as above poverty line.⁷ Slightly more than half (53.0%; 106 out of 200) of participants belonged to above poverty line group. Similarly, less than half of (47.0%; 94 out of 200) of the participants had studied up to class

10. Around two third of the participants (62.5%; 125 out of 200) had no living children. The decisions regarding reproductive health issues were made by spouse alone in 39.0% (78 out of 200) couples (Table 1).

In this study 51.0% (102 out of 200) of PLWHA were found to be practicing any modern method of family planning and male condom (78.6%; 80 out of 102) was most

common device. it was observed that nearly two-fifth (83 out of 200) participants had adequate knowledge on family planning and 44.0% of the participants had received family planning counseling as a part of their treatment. Likewise, 22.0%(44 out of 200) PLWHA stated that they had future desire to bear baby. Nearly, half of the participants (45.0%) were under the ART therapy for more than 5 years (Table 2).

Table 2. Knowledge and Practice of Family Planning among PLWHA on ART (n=200).

Characteristics	Categories	Frequency	Percent (%)
Practice of Family Planning	Yes	102	51.0
	No	98	49.0
Types of family planning used	Condom (male)	80	78.6
	Depo-provera	9	8.8
	Sterilisation	8	7.8
	Pills/IUD and others	5	4.8
Reason for not using contraceptive (n=98)	Temporary stay of spouse	25	25.6
	Unspecific reason	51	52.0
	Planning of pregnancy	5	5.1
	Lack of spousal support	12	12.2
	Less frequent coitus	2	2.0
Knowledge of family Planning	Fear of contraceptive	3	3.1
	Adequate	83	41.5
	Inadequate	117	58.5
Future Desire to bear baby	Yes	44	22.0
	No	156	78.0
Duration on ART (years)	≤ 1	46	23.0
	1 -4	64	32.0
	≥5	90	45.0
Ever received family planning counseling	Yes	88	44.0
	No	112	56.0

Table 3. Association of family planning with independent variables (n=200).

Characteristics	Categories	Family Planning Practice		Row Total (n)	p-value
		Yes (%)	No (%)		
Economic status	Below poverty line	38.3	61.7	94	<0.001
	Above poverty line	62.3	37.3	106	
Educational status	Uneducated	25.0	75.0	36	<0.001
	Educated upto class 10	52.1	47.9	94	
	Educated above class 10	62.9	37.1	70	
Have current living children	Yes	72.0	28.0	75	<0.001
	No	38.4	61.6	125	
Reproductive health related decision maker	Spouse only	20.5	79.5	78	<0.001
	Self	65.0	35.0	60	
	Both	75.8	24.2	62	

Duration on ART(Years)	<1	17.4	82.6	46	<0.001
	1 - 4	57.8	42.2	64	
	>4	63.3	36.7	90	
Future Desire to Have Baby	Yes	25.0	75.0	44	<0.001
	No	58.3	41.7	156	
Ever Received family planning Counseling	Yes	67.0	33.0	88	<0.001
	No	38.4	61.6	112	
Knowledge of family planning	Inadequate	38.6	61.4	83	0.003
	Adequate	59.8	40.2	117	

Table 4. Factors Associated with Family Planning Practice among PLWHA (n=200).

Characteristics	Categories	β	Adjusted Odds Ratio (AOR)	95% Confidence Interval for AOR	p-value
Duration on ART	Up to 1 year		Ref		
	1-4 years	2.22	9.2	1.7-47.5	0.008
	≥ 5 years	1.71	5.5	1.1-25.7	0.030
Reproductive health Decision Maker	Spouse only		Ref		
	Participants only	2.40	11.0	2.8-42.6	<0.001
	Both of them	3.62	37.1	6.5-211.9	<0.001
Family planning Counselling	Yes	1.25	3.4	1.0-11.3	0.036
	No		Ref		

In bivariate analysis, we observed that practice of family planning was more common among participants who were above poverty line (62.3%), with higher level of education (class 10 and above: 62.9%), with living children (72.0%), and involving both couple in making decision regarding reproductive issues(75.8%) and the association was significant with P value <0.001. However age and sex showed no association with practice of family planning(Table 3).

We also found that longer the treatment duration with anti-retroviral drugs better is the practice of family planning (p <0.001). More than three-fifths (63.3%) of PLWHA who had been under ART therapy for more than 5 years were practicing family planning. Family planning practice was more common among participants having no desire for future (58.3%) than who had (25.0%, P<0.001).

Also those who had taken family planning counseling had significantly better practice of family planning (67.0%; p value <0.001). Likewise family planning practice was positively affected by knowledge of family planning as those having higher knowledge had better practice (59.8% versus 38.6%) (Table 3).

Logistic regression analysis revealed that the odds of practicing family planning was 9 folds higher (AOR: 9.2, 95% CI: 1.7-47.5) among participants under

ART for 1 - 4 years and five folds higher (AOR: 5.5, 95% CI: 1.1-25.7) among participants undergoing ART for ≥ 5 years as compared to those with duration up to 1 year. When compared with spouses alone (whether husband or wife) who were solely involved in decision making in reproductive health, participants who alone made decision were almost 11 times likely to practice family planning (AOR: 11.0, 95% CI: 2.8-42.6) and this likelihood was 37 times when the decision was made by both husband and wife together (AOR: 37.1, 95% CI: 6.5-211.9). Family planning counseling had significant influence on its practice as those who received counseling were found to be practicing family planning 3.4 (95% CI: 1.0-11.3) times higher than those who did not receive.

DISCUSSION

We found that 51.0% of PLWHA were currently practicing family planning. This figure is slightly higher than that of general population in Nepal which is 43.0% for modern method of contraception.⁸ This could be due to more focus family planning among PLWHA. Similar findings were revealed in study conducted among PLWHA in Kenya (55.6%; among women),⁹ Malawi (51.2%),⁴ Uganda (58%).¹⁰ Our finding was slightly less than finding in similar population in Kaski, Nepal which was around 70%.⁶

The most common contraceptive was male condom (78.8%) followed by Depo-Provera (8.8%) and sterilization (7.8%). Condom was most commonly used contraceptives by PLWHA in other studies as well.^{5,6,11,12} This could be due to fact that condom not only prevents unwanted pregnancy but stops transmission of STIs/HIV and is highly recommended by health care providers.

In this study, higher income of participants had positive association with family planning practice which is supported by study in Kenya.¹³ This could be due to high access to health care among relatively affluent people.

Likewise, we observed higher family planning practice among highly educated participants. We found that the educational status had consistently influenced practice of family planning across the world.^{6,10,12} This might be because of higher awareness among more educated participants than less ones.

Similarly, participants with no children were found to be practicing family planning less than those who have them (38.4% versus 72.0%). This might be due to desire to have children among those who did not have children. Similar finding was observed in Cambodia.¹⁴

Also, both spousal involvements in decision making had better chance of practicing family planning and this finding was found to be significant even after controlling for other variables in logistic regression. This might be due to the fact that the family planning practice is a shared decision between spouse and it makes more sense when comes to having of HIV/AIDS. This is supported by studies in TasoTororo⁵ and Cambodia.¹⁵

However, age, sex and occupation had no any association with practice of family planning. This finding is partially supported as well as in contrast to findings from other studies.^{4,6,10-12}

Participants under ART for onetofouryearshad higher practice of family planning even after controlling for other variable. This could be due to increased level of awareness as duration increases. But again, we observed that the odds of family planning seemed to decrease after being enrolled in ART therapy for five years and above. In contrast to this, study conducted in Cambodia¹⁴ revealed no any significant association between family planning practice and duration under ART.

Family planning practice was highly affected by knowledge of family planning and family planning counseling ever received. Two-third (67.0%) of participants who received family planning counseling were found to be practicing

family planning where only 38.4% of those who did not receive were practicing family planning. This association was found to be significant in regression analysis (AOR: 3.4; 95% CI: 1.0-11.3). This could be due to the counseling on family planning. This finding is supported by study in Cambodia.¹⁴ Also our study revealed positive association, higher the knowledge better is the practice, between knowledge of family planning and its practice. This is supported by study conducted in Shoa Zone, Ethiopia.¹²

CONCLUSIONS

We found that almost one out of every two participants in this study practiced family planning with male condom being the most common. Similarly, socio-demographic factors such as higher income, higher educational status of both partners and having living children were encouraging factors for better practice of family planning. Higher use of family planning practice was observed when decision regarding reproductive health was made with the involvement of both partners than the spouse or participants alone. The longer duration on ART had positive impact on family planning practice and counseling regarding family planning had great impact on utilization of it. Despite the endorsement of various programs including PMTCT there is still huge gap in practice which is not being met by current infrastructure and some additional efforts are at urgent need to address this issue.

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