Description of Cultural Factors Related to Comprehensive Knowledge of HIV/AIDS among Women in Nepal

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Abstract

This research paper has analyzed the individual and cultural factors related to comprehensive knowledge of HIV transmission. Secondary and primary data are used to identify the individual and cultural factors of comprehensive knowledge of HIV/AIDS among women in Nepal. Secondary source of quantitative data is based on NDHS, 2011 and 2016 whereas qualitative data collected from Nam Nagar of Naalparasi (Susta West) district. The total sample size of NDHS 2011 (N=12674) and 2016 (N=12862) are large and nationally representative. The study reveals that only 20 percent of women have comprehensive knowledge of HIV/AIDS. The individual cultural factor such as native language of women[OR= 3.34 (2.21-5.05) in 2011 and OR= 1.47 (1.01-2.13) in 2016] and ethnicity[OR= 1.90 (0.90-3.96) in 2011 and OR= 1.74 (1.10-2.74) in 2016] are the influential factors for comprehensive knowledge of HIV/AIDS. Beside these, socially constructed knowledge of HIV/AIDS has been determining the misconception of HIV transmission. The lower level of comprehensive knowledge is trigger by the cross-cultural context of women in Nepal.

Keywords: comprehensive knowledge, cultural factor, logistic regration, multivariate analysis

Introduction

Comprehensive knowledge of HIV transmission is best understanding from knowledge, attitude, belief and practice (KABP) model of HIV prevention and transmission at the individual level (UNAIDS, 2015). As assessing the knowledge, the composite index of knowing major two ways of HIV prevention such as condom use and having one faithful uninfected sex partner, having knowledge that a healthy looking person can be diagnosed of HIV and avoiding the two local misconceptions of infection (sharing food with an individual who has HIV/AIDS and HIV can be infected from mosquito bite) which is widely used in the study. The three nationally representative surveys of Nepal indicated that there were almost constant (20%)

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comprehensive knowledge of HIV transmission (MoHP, 2007; MoHP, 2012 & MoHP, 2017).

In the context of Nepal, low risk women have been found significant proportion of shared in living with HIV. According to NCASC (2019), low risk women have highest (39%) share in living with HIV whereas 35 percentage of male including labour migrants. The total numbers of reported cases of people living with HIV were 28,332 (age 15 years and above). However, the estimated numbers of people living with HIV were 29,503 (NCASC, 2019). The facts indicated that the low-risk women were most vulnerable in terms of programs and policies responses towards HIV prevention. The National HIV strategic plan (2011-2016) has incorporated action to be taken for the general population. With the aim of maintaining or reducing the current low prevalence among the general population and to reduce the stigma and discrimination, the strategic approach provide minimum sets of messages about HIV (how it is transmitted and how it can be prevented) with three objectives; make people aware about the means of prevention, providing the sufficient knowledge about the route of transmission of HIV, reduce stigma and discrimination, and provide minimum level of information about services available for prevention, treatment and care.

It is evident that comprehensive knowledge of HIV/AIDS has been almost constant since a decade (MoHP et al., 2017). Awareness building on HIV/AIDS in Nepal has been a key concept of HIV prevention at the beginning of national responses to HIV/AIDS. The awareness building activities are questionable as observing the facts of the MoHP et al., 2007, 2012 & 2017. The knowledge of AIDS increased among women in Nepal. However, comprehensive knowledge of HIV transmission is very low is about 20 percent (MoHP et al., 2017, MoHP et al., 2012, MoHP et al., 2007). There is an increasing recognition that understanding of HIV/AIDS knowledge needs to be better situated within their demographic and socio-economic, geo-development and cultural contexts. Most of nationally representative studies among women (MoHP et al., 2017; MoHP et al., 2012; Jha et al., 2009) have identified the demographic, socio-economic and geo-development as individual factors responsible for women's comprehensive knowledge of HIV/AIDS.

Awareness Building has been the primary strategy in Nepal's HIV and AIDS prevention programs, and this is certainly an essential element in HIV prevention (Beine, 2003). Without awareness building, stigma (acting only on the cultural model) is guaranteed along with the act of unsafe sexual behavior either knowingly or unknowingly or perception of low risk. It must be certainly acknowledged that through awareness building those with adequate knowledge can choose to act on their newly acquired knowledge rather than upon the cultural model (where some

forces are acting to construct). Although awareness building can increase knowledge, there is no guarantee that it will reduce stigma and unsafe sexual behaviour (because lack of education is not the principal trigger). It is well understood that HIV/AIDS is the biomedical reality and socio-cultural construction. It is argued that there is problem in understanding comprehensive knowledge from holistic approaches where different methodological convergence is essential to know the deeper understanding of comprehensive knowledge of HIV/AIDS.

Method

As studying the comprehensive knowledge of HIV/AIDS, the individual level and cross-cultural contest is essention For this, mixed method research typologies (mixed model designs and mixed method designs) resulted from consideration of many other typologies (Creswell, 1994) as well as several dimensions which one should consider planning to conduct mixed research. It can be construct mixed model designs by mixing quantitative and qualitative approaches within and across the stages of research. It is viewed that bio-medical reality is understood from the individual level of analysis from the quantitative data whereas socially constructed ideas acquired from the qualitative analysis. The auther such as the mixed method is included in three stages: stating research objective, collecting data and analyzing/interpreting data. According to Morgan (1998), it is considered the dimension of paradigm emphasis whether one paradigm should be dominant or equal status. In this study, the objective of research and research questions like "what are individual and social factors that contribute to comprehensive knowledge of HIV/AIDS" is answered by the mixed paradigms. In mixing of methods, concepts, data (qualitative data complementary to quantitative data) and interpretation of the findings are presented in the holistic approach.

To identify the cultural factors related comprehensive knowledge of HIV/AIDS, individual factors are analyzed from the quantitative data whereas socially constructed idea of HIV is based on the qualitative information. The sources of quantitative data are secondary exerted from Nepal demographic and Health Survey (NDHS), 2011 and 2016 data sets whereas qualitative data is collected from Ram Nagar village of Nawalparasi (Susta west) district. There are two different data sets (N=12674 in 2011 and 12862 in 2016) of women age 15-49 years old in both surveys. About 31 in-depth interviews are conducted with women from Ram Nagar of Nawalparasi.

Both bivariate and multivariate analysis were conducted to ascertain the association and net effects of the key independent variables on the dependent variable when the selected characteristics like demographic, socio-economic, geographical,

cultural and media exposure variables are analyzed. Cross tabulation including chisquare analyses were used for identifying patterns of associations and levels of significance (p < 0.05 and p<0.001) of such associations. Logistic regression was used to assess the predictors of the binary outcome. In most of the cases, demographic, socioeconomic, geo-development, cultural and media exposure variables are significantly associated with a measure of comprehensive knowledge of HIV/AIDS if the values of that measure at different levels of those variables. The narrative analysis of qualitative data is performed to know the socially constructed ideas of HIV/AIDS at the local level.

As assesses the socially constructed ideas of HIV/AIDS knowledge, 31 (age 15-49 years old women) potential research participants were selected for interview from Ram Nagar village municipality of Nawalparasi district. The in-depth interviews were conducted and performed narrative analysis as per the requirement of the study. As collection of qualitative data, the field work processes were three phases outlines. The first phase of fieldwork was conducted between January and February of 2015. This visit was to follow up contacts established by preceding research settings and also to establish new contacts with those organizations working in HIV/AIDS issues in Nepal especially in Nawalparasi. The identification of field sites for contacts was made at this stage. Building partnerships through discussions with others working on HIV/AIDS issues was an important step for the development of this study. The process of ethical approval was initiated in January, 2015 and was approved in April 2015. The field work commenced after the ethical approval from NHRC.

Result and Discussion

Comprehensive Knowledge of HIV/AIDS Transmission

The comprehensive knowledge is the composite index of knowledge of HIV prevention and transmission. The composite index is that respondents are known to three ways of HIV transmission and have avoided two misconceptions of HIV transmission. As identifying the individual factors associated with comprehensive knowledge of HIV/AIDS, there were series of questions asked to women about the ways of HIV transmission and prevention. The comprehensive knowledge is found to be low among women in Nepal.

Demographic and Socio-economic Factors and Comprehensive Knowledge of HIV/AIDS

Table 1 levels that the comprehensive knowledge is almost constant over the five years from 2011 to 2016. The comprehensive knowledge of HIV transmission among women in Nepal is determined by education, professional/managerial occupation, and wealth

index as individual factors. However, the comprehensive knowledge has decreased in previous years among women who belonged to SLC and above educated groups, professional/managerial occupation, and richest wealth index categories.

Table 1Percentage distribution of women with comprehensive knowledge of HIV/AIDS and selected demographic & socio-economic characteristics, NDHS, 2011 and 2016

Demographic and socio-	NDHS,	2011	NDHS, 2016		
economic characteristics	Percentage	Number	Percentage	Number	
Age					
< 25 Years	25.76***	5,050	20.70***	4,849	
25 years and above	17.26***	7,624	18.70***	8,013	
Marital Status					
Never Married	32.42***	2,708	27.30***	2,663	
Married	17.58***	9,608	17.70***	9,875	
Divorce/Separated	13.00***	100	15.20***	105	
Widowed	14.34***	258	7.90***	214	
Place of Residence					
Urban	34.90***	1,819	24.00***	8,072	
Rural	18.25***	10,855	11.80***	4,790	
Education					
No Education	4.87***	5,045	5.00***	4,281	
Primary	11.49***	2,209	11.80***	2,150	
Some Secondary	28.32***	3,088	24.80***	3,291	
SLC and above	53.38***	2,331	48.10***	3,140	
Occupation					
Not Working	27.15***	3,127	20.40***	4,259	
Professional/Managerial	60.38***	414	50.90***	487	
Clerical	51.85***	108	41.90***	172	
Sales/Service	31.08***	1,154	32.90***	1,137	
Skilled Manual	24.35***	428	23.80***	490	
Unskilled Manual	10.31***	253	14.30***	293	
Agriculture	13.46***	7,172	13.00***	6,011	
Others	44.44***	18	33.30***	12	
Wealth Quintile					
Poorest	5.79***	2,120	9.90***	2,176	
Poorer	11.00***	2,393	13.70***	2,525	

Middle	14.21***	2,600	13.60***	2,595
Richer	25.90***	2,722	18.90***	2,765
Richest	48.80***	2,839	38.20***	2,801
Total	20.70	12,674	19.50	12,862

Source: NDHS Data Files, 2011 and 2016

Note: *** indicates p < 0.001, ** p < 0.05 in $\chi 2$ association

The findings of the analysis portray that education intervention have played an important role in increasing comprehensive knowledge of HIV/AIDS which can be supported by the study (Sharma, 2008). The study also reveals that most of the respondents had misconception about the mode of transmission of HIV/AIDS such as mosquito/insects' bites, kissing, hugging, and sharing toilet, food, and handshaking. This finding is also supported by the study among street children of Kathmandu valley (Gurung, 2004).

The occupation of adults is key factor regarding the comprehensive knowledge of HIV transmission. According to Karki (2014), manual workers from carpet factory are less likely to know the modes of HIV transmission correctly. The managerial level workers are found to be at higher level of knowledge of HIV transmission than that of the manual workers.

Wealth quintile is also the major factor for comprehensive knowledge of HIV/AIDS transmission. The periodical surveys of NDHS, 2006, 2011 to 2016 have consistently indicated that women in the richest category of wealth quintile have highest knowledge than the middle, poorer and poorest (MoHP et al. 2007, 2012 & 2017). A huge gap is observed in comprehensive knowledge of HIV/AIDS and its acquisition between the poorest and the richest categories of women.

It is argued that adult, rural residents, widowed, illiterate, unskilled manual workers and poorest women are the problematic groups in acquisition of comprehensive knowledge of HIV/AIDS. These demographic and socio-economic factors have affected the women's comprehensive knowledge of HIV/AIDS transmission.

Geo-development Factors and Comprehensive Knowledge of HIV

Nepal's geographical diversity has also contributed to comprehensive knowledge of HIV/AIDS transmission. There are varying physical situations among the people living in different ecology because of having different socio-cultural settings. This ecological, development region and geo-political factors have the effect on women's knowledge of HIV/AIDS transmission because of the contextual situation of socio-cultural, access to services and development indices. The analysis of NDHS, 2011 and

2016 have found that ecological, development region and provinces characteristics of women and comprehensive knowledge of HIV transmission are statistically significant.

Table 2 shows that the comprehensive knowledge of HIV transmission has decreased among the women in Terai and have increased in Mountain and Hill over five years from 2011 to 2016. Similarly, there is also a decreasing trend of comprehensive knowledge among women in province-2. The facts indicate that the women from Terai especially from province#2 are less likely to know about the prevention and transmission of HIV.

Table 2Percentage distribution of women with comprehensive knowledge of HIV/AIDS and geo-development characteristics, NDHS, 2011and 2016

	NDHS	5, 2011	NDHS, 2016		
Geographical characteristics	Percentage	Number	Percentage	Number	
Ecological Zone					
Mountain	9.93***	805	16.50***	775	
Hill	22.27***	5,090	25.00***	5,556	
Terai	20.69***	6,779	15.10***	6,531	
Development Region					
Eastern	20.29***	3,057	16.10***	2,900	
Central	20.28***	4,236	20.60***	4,569	
Western	23.58***	2,666	22.60***	2,597	
Mid-western	16.30***	1,478	16.50***	1,650	
Far-western	21.59***	1,242	20.90***	1,145	
Provinces					
Province #1	20.40***	2,811	20.00***	2,173	
Province #2	11.50***	2,117	5.20***	2,564	
Province #3	26.10***	2,365	30.70***	2,732	
Province #4	23.70***	1,147	26.30***	1,249	
Province #5	25.30***	2,436	18.60***	2,274	
Province #6	12.80***	555	14.90***	724	
Province #7	22.40***	1,242	20.90***	1,145	
Total	20.70	12,674	19.50	12,862	

Source: NDHS Data Files, 2011 and 2016

Note: *** indicates p < 0.001, ** p < 0.05 and *p < 0.1 in Mean Differences

The government policies and strategic approach to prevent women from HIV/ AIDS through awareness building seem less effective. The constant knowledge of

comprehensive knowledge of HIV transmission in the three consequent surveys (MoHP et al., 2007, 2012 and 2017) witness the ineffectiveness of awareness building among low-risk women aged 15-49 years. However, the strategic approach has been prioritized for effective awareness campaign through different means and media campaigns.

A study by scholars stated that comprehensive knowledge is crucial for the safe HIV/AIDS behaviour in Western Nepal (Awasthi et al., 2015). However, lack of comprehensive knowledge about HIV among adolescent and general population have been built misconception on HIV transmissions. According to Karki (2014), a considerable number of workers in garment and carpet factories in Nepal are teenagers. A study in carpet and garment industries in Kathmandu shows alarming results. Some of the respondents reported having their first sexual experience at the age of thirteen. It was observed that majority among 23 percentage of males and 10 percentage of females aged below 19 years had unprotected sexual relation last year. It is also evident that women from the Northern region and rural settings of Ghana were lower levels of comprehensive knowledge (Gurure, 2020). It is argued that low level of comprehensive knowledge of women are determined by the individual factors of women such as ecological zone, development region and federal state structure.

Cultural Factor and Comprehensive Knowledge of HIV/AIDS Transmission

Nepal is multicultural and diverse country with varying languages, ethnicities, and religions. These cultural factors as region, ethnicity and language have been affecting the comprehensive knowledge of HIV/AIDS transmission among women in Nepal. Table 3 shows that Muslim, Terai Dalit and women with Maithali as native language have been with low levels of comprehensive knowledge of HIV transmission. The bi-variate analysis of individual cultural factors (religion, ethnicity, and native language) and comprehensive knowledge of HIV transmission are statistically significant (p<0.01).

Table 3Percentage distribution of women with comprehensive knowledge of HIV/AIDS and cultural characteristics, NDHS, 2011and 2016

	NDHS, 2011		NDHS, 2016		
Cultural factors	Percentage	Percentage Number		Number	
Religion					
Hindu	21.61***	10,672	19.70***	11,040	
Buddhist	16.81***	1,112	24.10***	652	

Total	20.70	12,674	19.50	12,862
Maithali	3.67***	1,307	5.30***	1,908
Others	19.32***	4,154	19.30***	3,532
Bhojpuri	8.36***	706	4.00***	1,142
Nepali	26.24***	6,505	26.70***	6,280
Native Language				
Terai Dalit	1.78***	559	3.20***	554
Others	16.00***	25	46.50***	43
Muslim	5.76***	468	4.80***	643
Terai Janajati	15.15***	1,313	14.30***	1,266
Hill Janajati	19.87***	3,154	21.90***	2,694
Newar	37.33***	541	33.50***	639
Hill Dalit	13.34***	1,214	17.70***	1,042
Other Terai Caste	7.27***	1,003	5.60***	1,908
Terai Brahmin/Chetri	25.00***	156	23.00***	217
Hill Chetri	24.63***	2,436	24.60***	2,343
Hill Brahmin	37.39***	1,805	35.40***	1,512
Ethnicity				
Muslim	5.95***	470	5.30***	644
Christian	21.81***	220	28.90***	346
Kirat	22.56***	195	20.20***	177

Source: NDHS Data Files, 2011 and 2016

Note: *** indicates p < 0.001, ** p < 0.05 in $\chi 2$ association

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The findings of the study indicate that individual cultural factors are correlated to HIV/AIDS related knowledge. Peruga & Celentano (1993) reviewed eighty US-based studies to explore the correlates of AIDS knowledge and concluded that white ethnic groups were more likely to be knowledgeable about AIDS and those strong religious beliefs or conservative political convictions are strongly associated with low AIDS knowledge.

Ethnic culture is seen as especially important in Africa, where many indigenous groups attach less value to virginity and marital fidelity than in Europe and the United States (Caldwell et al., 1989). Genetic predispositions are also being explored as the

factors of racial differences in infection rates. As a result of these findings, researchers argue for the crafting of culturally sensitive messages to improve HIV awareness (Wilson et al., 2003).

Researcher of HIV/AIDS has been also encouraging caution in interpreting the lack of results regarding the influence of comprehensive knowledge about HIV/AIDS. While this lack of results seems counterintuitive on its face, the findings are consistent with literatures that sometimes find comprehensive education effective and sometimes not (Watkins, 2004). There are at least two possible reasons for the failure of the variable in this study. First, though improving comprehensive knowledge about HIV/AIDS globally is regarded as an objective of the Joint United Nations Programme on HIV/AIDS (UNAIDS, 2015), the working knowledge that an individual needs to maneuver any local situation may be far less, especially in settings where abstinence and faithfulness are normative. A second consideration is reciprocal determinism: those who engage in high levels of risky sexual activity are the most knowledgeable on HIV/AIDS. The local misconceptions and socially constructed ideas of HIV have also contributed to the situation.

Media Exposure and Comprehensive Knowledge

It is expected that person with greater exposure to mass-media messages in general, for example on radio, magazine, and television are more likely to be aware of comprehensive knowledge of HIV/AIDS. It is because persons are more likely to be exposed to sexually transmitted infection including HIV and AIDS from the specific messages delivered through these media.

The analysis of both surveys (MoHP et al, 2012 & MoHP et al., 2017) reveals that there is association on media exposure and comprehensive knowledge of HIV/AIDS transmission (p<0.01). The comprehensive knowledge of HIV transmission increases with the increase in frequency of reading newspaper, listening radio, and watching television. The individual media factors such as reading newspaper, listening radio, and watching television have significantly contributed to women's comprehensive knowledge of HIV transmission.

The results demonstrate the importance of analyzing the effect of media to improve AIDS related knowledge. Media sources are helpful in improving AIDS-related knowledge among women, such as reading newspaper. Sources such as radio and television have lower impact in educating individuals on AIDS prevention and transmission modes because of low level of literacy rates in India (Amatya, 2005). Moreover, the effect of media in removing AIDS-associated misconceptions is very low (Shakya, 2012). Thus, a misconception on HIV transmission is still exists,

especially in rural areas and among uneducated poor women. Insufficiency of media to improve AIDS related knowledge is because of cultural taboos and conservative government actions as both of obstruct the objective portrayal of AIDS in media. Thus, development of media sources such as television in rural areas and change in the conservative attitude of local leaders would result in easy access to accurate AIDS information among all women through television, radio, and newspapers.

Table 4Percentage distribution of women with comprehensive knowledge of HIV/AIDS and media exposure, NDHS, 2011 and 2016

	NDHS, 2011 N		N	DHS, 2016
Media exposure	Percentage	Number	Percentage	Number
Frequency of Reading News	Paper or Maga	nzine		
Not at All	9.97***	8250	11.70***	8950
Less than once a week	36.35***	2827	32.10***	2793
At least once a week	49.34***	1597	50.40***	1119
Frequency of listening radio				
Not at All	11.89***	2379	13.50***	5558
Less than once a week	18.44***	4694	22.80***	3738
At least once a week	26.22***	5600	25.30***	3566
Frequency of watching Television				
Not at All	6.62***	3230	9.20***	3700
Less than once a week	14.90***	3434	14.90***	2692
At least once a week	31.46***	6009	27.30***	6470
Total	20.70	12674	19.50	12862

Source: NDHS Data Files, 2011 and 2016

Note: *** indicates p < 0.001, ** p < 0.05 in $\chi 2$ association

Newspapers are more effective in promotion of comprehensive knowledge of HIV transmission. Consistently reading newspapers is more effective in enhancement of knowledge than other mass media like radio and TV. However, only reading newspaper is not sufficient to promote the knowledge. Because the newspapers target small group of people, especially learned, or educated people. Moreover, no improvements have been observed in portraying accurate and objective knowledge by newspapers.

Radio is the optimal media source to disseminate knowledge to entire populace, in the rural areas of Nepal where majority of women have no access to television and a significant proportion of individuals are illiterate. The easy access to radio among all individuals, especially among those who belong to high-risk groups such as truck

drivers and sex workers, provides an opportunity to educate the whole country on HIV/AIDS issues and promote the knowledge. However, the impact of radio in increasing HIV/AIDS knowledge is lesser than that of newspaper.

The minimal impact of television as compared to newspaper in promoting HIV knowledge earlier is because of several factors, however, the two main reasons are the extensive content of HIV related issues in television programs/broadcastings and limited access to television, especially in rural areas. The first problem is of limited content and mostly use of Nepali (language). The second problem is of limited access to television that still exists. Most villagers in Nepal are poor to afford regular electricity and cable payments. Access to television will improve knowledge not only on AIDS, but also on other STDs, female feticide, changing perceptions of women, importance of education, and other factors that will ultimately lead to Nepal's growth and success.

Multivariate Analysis of Comprehensive Knowledge of HIV/AIDS

The outcome of comprehensive knowledge is measured from the binary logistic regression analysis. That is why the comprehensive knowledge of HIV is utilized to perform regression analysis. All the variables are employed included in the bi-variate analysis. Demographic and socio-economic, geo-development, cultural, and media exposure are modeling factors which have effects on the women's comprehensive knowledge of HIV/AIDS. Finally, demographic, and geo-development factors (variables included in these broad categories) are controlled in the regression analysis.

Table 5Logistic regression analysis on composite knowledge of HIV/AIDS by selected factors, NDHS, 2011 and 2016

	NI	NDHS, 2016			NDHS, 2016		
Factors	Odds ratio	95% CI		Odds ratio	95% CI		
	Ouus ratio	Lower	Upper	Odds ratio	Lower	Upper	
Ethnicity							
Hill Brahmin	1.90**	0.90	3.96	1.74**	1.10	2.74	
Hill Chetri	1.93*	0.92	4.04	1.77**	1.29	2.78	
Terai Brahmin/Chetri	2.31**	1.04	5.11	1.25	0.74	2.15	
Other Terai Caste	1.31	0.65	2.66	0.90	0.58	1.40	
Hill Dalit	1.59	0.77	3.28	1.81**	1.13	2.90	
Newar	2.03*	0.98	4.20	0.83	0.45	1.55	
Hill Janajati	1.93*	0.96	3.89	1.76**	1.10	2.82	
Terai Janajati	1.82	0.91	3.67	1.93***	1.24	3.00	
Muslim	1.71	0.78	3.77	1.51*	0.97	2.34	
Others	0.91	0.25	3.40	-	-	-	
Terai Dalit (RC)	1.00			1.00			

	NI	OHS, 2016		NDHS, 2016		
Factors	Odds ratio	95% CI		Odds ratio	95% CI	
	Ouus ratio	Lower	Upper	Ouus ratio	Lower	Upper
Native Language						
Nepali	3.34***	2.21	5.05	1.47***	1.01	2.13
Bhojpuri	1.56***	1.05	2.82	0.81	0.55	1.19
Others	2.73***	1.83	4.08	1.42*	0.99	2.05
Maithali(RC)	1.00			1.00		
Frequency of Reading Newspaper						
Not at All(RC)	1.00			1.00		
Less than once a week	1.38***	1.21	1.58	1.10	0.98	1.25
At least once a week	1.41***	1.19	1.167	1.49***	1.24	1.77
Frequency of listening radio						
Not at All(RC)	1.00			1.00		
Less than once a week	1.23*	1.04	1.45	1.21***	1.07	1.38
At least once a week	1.41**	1.19	1.67	1.24***	1.09	1.41
Frequency of Watching Television						
Not at All(RC)	1.00			1.00		
Less than once a week	1.18	0.98	1.43	1.06	0.84	1.33
At least once a week	1.27**	1.04	1.54	1.03	0.80	1.33

^{***} indicates p<0.01, ** indicates p<0.05, * indicates p<0.10

Note 1: The demographic and socio-economic variables and geo-development variables are controlled in this analysis.

Note 2: RC indicate reference category.

The analysis also carried out between the ethnicity and composite knowledge of HIV transmission and prevention. Women from Terai ethnic (Janajati) were more likely to know the comprehensive knowledge of HIV than Terai Dalit women. Similarly, Nepali native language of women is the dominant cultural determinant to acquire the knowledge of HIV transmission and prevention. The cultural individual factors like ethnicity and native language are also crucial individual factors to explain the comprehensive knowledge of HIV.

The logistic regression analysis also shows that media exposure such as higher frequency of reading newspaper and listening radio have also increased the knowledge of HIV prevention and transmission. The role of media in educating individuals on HIV/AIDS issues is uncertain. Media sources such as newspapers, radio and television constantly attempt to increase HIV/AIDS knowledge through advertisements, shows, and movies. Several government programmes and organizations working in HIV/AIDS field utilize media to convey AIDS information to citizens. However, at the same time, numerous newspapers, radio, and television broadcasts increase misconceptions

about AIDS by providing inaccurate or exaggerated AIDS information. Therefore, even though media has potential to educate people on HIV issues, the current impact of media on HIV knowledge is indeterminate (NCASC, 2016).

As identifying the constructed ideas of comprehensive knowledge of HIV transmission, misconception of HIV transmission is widely accepted by local women such as mosquito bite. The role of local leaders and community leaders are crucial for the misconception. If socially recognize person talked about the misconception of HIV transmission, then communities have been accepted it. So that the effectiveness of HIV services on HIV/AIDS is questionable in terms reducing the misconception of HIV transmission.

Social Construction of Comprehensive Knowledge of HIV/AIDS

Beside assessing the individual demographic and socio-economic, geodevelopment, cultural, and media exposure factors, the further analysis is based on the qualitative findings of comprehensive knowledge of HIV transmission. The misconception of HIV transmission is emerging from the narrative analysis of women at the micro level processes. Most of women (20 out of 31) from Ram Nagar of Nawalparasi irrespective their age, ethnicity, place of residence, media exposure said that "HIV is the communicable infection, and it is transmitted from the mosquito bite". However, some (5 out of 31) educated, young, hill caste caste/ethnic group and women participating in development activities have reported that HIV is the infection that is transmitted from eating together with infected persons.

It is also emerged from narrative analysis (25 out of 31) from field that abstinence from sex among unmarried young boys and girls is best means of protecting HIV transmission. Some of research participants (10 out of 31) reported that unmarried young boys and girls could not follow the normative guidelines of society which is challenging issues of HIV transmission. Almost half (15 out of 31) research participant from field on HIV transmission argued that abstinence and fidelity is best means. However, the wives of migrants and lower caste women and girls cannot follow the effective means due to the changes in social and cultural values of society. A woman from school teaching profession viewed as:

Particularly, young member of the community has been negative attitudes towards the wives of migrants (migrants either working in India or Arabian countries) in terms of sexual activities. There are different means of approaching to wives of migrants such support in outer household works of wives of migrants, banking services, transportation etc. After some time, they make close relation and concerted

in sexual relations. Some of the incidence disclosed and came into community openly. In some cases, they have received HIV services. But most of those types of sexual activities maintain close. There is problem of communicable infection among those types of people in this community. Most of them are aware about infection but they did not receive the services due to various types of barrier for it (A women teacher from Bhatuali Ram Nagar, Nawalparasi).

The social constructed idea of HIV transmission is the unprotected sexual activities, unfaithfulness, and lack of abstinence of sex. The narratives of women have also indicated that there is difference on biomedical reality and socially constructed ideas of HIV/AIDS. The norms of free society and norms and values local ideas are somehow confronted in the Ram Nagar of Nawalparasi.

Conclusion

It is found that women with Nepali native language were three times more likely to have the comprehensive knowledge than Maithali native language women in 2011. However, it was almost 2 times more likely to know in 2016. Most of the HIV/AIDS awareness message are developed and presented in Nepali language that is the outcome of the analysis. According to Macdonald (1996) identified that cultural factors like ethnicity and social norms and values have contributed to the knowledge of HIV transmission in Botswana. The cultural landscape is important aspects for the assessment of the comprehensive knowledge of HIV/AIDS. In some of the cases, the social constructions of HIV have been the more powerful means to develop misconceptions regarding HIV/AIDS in society. Ethnicity, native language, and socially constructed ideas of HIV transmissions are major factors for the lower level of comprehensive knowledge of HIV transmission among Women in Nepal. It is argued that cultural dimension of comprehensive knowledge of HIV/AIDS is emerged as principal trigger for the constant comprehensive knowledge of HIV/AIDS.

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