



Disparity in the Use of Mass Media among Youth Population in Nepal

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Abstract

This paper assesses disparities in the use of mass media among the youth population in Nepal. Data for this cross-sectional analysis were extracted from the Nepal Demographic and Health Survey undertaken in 2016. The total sample of 8,010 included four population sub-groups – single and married males, and single and married females, ages 15-24. The forms of mass media assessed included reading the newspaper, watching TV, listening to the radio, or using the internet. Binary logistic multiple regression was applied to assess the net effects of covariates on the use of specific forms of mass media. Of the four types of mass media, TV was the most commonly used (52%), and newspaper and internet were the least used (14%). Radio was used by 34%. Any of the four types of mass media was used by 72%, while only 1% of youth used all four types. Household wealth status, followed by the educational background of the youth and their region of residence, were the main factors significantly and strongly correlated with the disparity in mass media use. Compared to single or married males or single females, married females were the least likely to use any of the forms of mass media. The results show that despite rapid growth in mass media over the last 25 years in Nepal, great disparities still persist in the current use of mass media among the youth population, particularly based on gender and marital status. The findings underscore the need for media-based interventions to be sensitive to both the gaps related to gender and marital status among the youth population in Nepal.

Keywords: Nepal, Demographic and Health Survey, Youth, Mass Media, Gender Disparity

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1. Introduction

It has been well established, both theoretically and empirically, that the availability of a given product or service in a community and its eventual habitual use by consumers, involves several steps (Rogers, 2010; Tsui, 1985). More specific to mass media, the availability of newspapers, radio, TV, or internet is an essential first step, but the availability itself does not guarantee use, or determine who uses which type of media, and how often. Yet for any technology, service, or product, in order to determine the ultimate impact, it is imperative to ascertain the level of access and usage among consumers. At a higher level, the availability of specific types of services and products are expected to be affected by state policies, laws/regulations, business potential, and market prospects; while at the individual level, access and use are also affected by a host of factors that include education, language, income, perception/preference, and convenience.

In Nepal, mass media has proliferated across the country in recent decades mainly due to the liberalization of the economy, along with the political change that expanded the role of the private sector, and the proliferation of digital technology globally. The youth population is expected to be at the forefront of the use of mass media. Still, youth may not have equal access to mass media; and the usage may be affected across socio-economic strata and geographical contexts. This paper aims to assess disparities in the use of mass media in Nepal.

1.1 Growth of Mass Media in Nepal

During the early 1990s, Nepal witnessed the beginning of growth and rapid development of mass media. This expansion of mass media was associated with changes in Nepal's political system, which experienced a titanic shift from a strictly state-controlled system to full political liberalization with a multiparty system of governance (Hutt, 1994; Lawoti & Pahari, 2010; Muni, 2003; Thapa & Sijapati, 2005). This was followed by the increasing role of the private and commercial sectors in providing broad access to mass media, including the internet (UNESCO, 2013). Commercial FM radio stations were established, something that was inconceivable prior to 1991. The private sector began to telecast several dozen (mostly foreign) television channels. Movie halls and telephones, which until 1990 were under strict state control, were also deregulated. Households were then free to set up their own dish antennas to receive any domestic or foreign satellite channels on television. Internet servers started to pop up in large numbers in many parts of the country.

Over the last three decades, the establishment of infrastructure and expansion of mass media has, thus, proliferated in the country. In 1990, Nepal had one TV station, one radio station, and 456 newspapers (UNESCO, 2013), but these numbers expanded by many folds by the mid-2000s. For instance, a study conducted in 2015 in the far-western region of Nepal, often known as comparatively less developed than other regions, reported 50 radio stations, 18 cable services, and 79 newspapers functioning on a regular basis (CMR, 2016).

Despite the deregulation and privatization policies, availability of and access to all forms of mass media still remains uneven in the country. The geographical terrain, transportation challenges, and population density affect both the supply of and demand for mass media. Furthermore, the infrequent supply of electricity still remains a major constraint limiting regular and timely access to mass media. The availability of newspapers varies greatly by region and similarly, internet access is a relatively recent phenomenon in the country, and access still remains limited.

The disparities in geographic regional development and human development has long been recognized and well documented in Nepal (Thapa, 1995; CBS & ICIMOD, 2003; NPC & UNDP, 2004, 2014; NPC & UO, 2018), and the growth and development of mass media in the country is also closely associated with these disparities. Beyond the physical, geographic, and human capital disparities and diversities, various social inequities have also existed for decades. Being a patriarchal and patrilocal society, in Nepali society women generally have traditionally had a lower status and lack of autonomy (e.g., Niraula & Lawoti, 1998; Agarwal, 1994). With the purpose of addressing some of these gender-based social, cultural, and legal inequities in particular, many reforms have been introduced and undertaken in recent decades (MWCSC, 2020; NWC, 2021). To the extent these efforts have been effective, the gender-based inequities in particular are expected to improve over the years.

1.2 Disparity in the Access and Use of Mass Media in Nepal

Aside from basic data tabulations on mass media usage (e.g., CMR, 2016), there is a dearth of systematically collected data and analysis referring to the full cohort of the youth population – male, female, single, married – on access to and use of the various forms of mass media in Nepal.

A study undertaken in 2000 among single and married males and females (in ages 14-22) in urban areas in Nepal found significant disparities based on gender and marital status, net of the influence of other factors (Thapa & Mishra, 2003). Between male and female youths, males were generally likely to have significantly more

daily exposure to the various forms of mass media than females (including TV, radio, or newspaper). But within the same gender, married females were likely to have less exposure than single females. Overall, the study found that married youths were the most disadvantaged in terms of the viewership/readership of mass media. The nationally representative cross-sectional data collected in 2016 provide the opportunity to assess the changes and achievements made with regards to the gender disparity in access and use among the youth over the years.

2. Data Source, Definitions and Methods

The data for this analysis are extracted from a national cross-sectional survey, referred to as the Nepal Demographic and Health Survey (NDHS), that was carried out in 2016 (MoH, New ERA, & ICFI, 2017). The NDHS included data on 11,040 households, 12,862 women and 4,063 men in the age group 15-49. The data were collected during a seven-month period, between June 2016 and January 2017. The data sets are also accessible in the public domain with registration (www.measuredhs.com).

The present analysis is limited to those in ages 10 to 24 at the time of the survey. The total sample (weighted) representing this age group in the survey was 8,010. It included four population sub-groups, male and female aged 15-24, categorized by their marital status. The World Health Organization (WHO) has defined the population in the age group 10-24 as ‘young people,’ those in the 10-19 age group as ‘adolescents,’ and those in the age group 15-24 as ‘youth’ (WHO, 1989). Throughout this chapter, the same definitions are used to refer to people in specific age groups. According to the projected estimates made by the Census Bureau of Statistics (CBS, 2014), in 2016 the young population (male and female) in Nepal stood at 9.4 million, representing 33% of the country’s total population. The 2016 NDHS showed the corresponding total percentage to be 31% (MoH, New ERA & ICFI, 2017).

For this analysis, mass media is defined to refer to four types: TV, radio, newspaper, and internet. Current use of any of these media types refers to the youth population who watched TV, listened to the radio, read a newspaper, and/or used the internet at least once a week. For convenience, TV viewership, newspaper readership, radio listenership, and internet usage are collectively referred to as the use/usage; and the terms use and exposure are used interchangeably.

The youth population’s current exposure to mass media are analyzed by individual and contextual factors. These factors include gender, age, current marital status, current employment status, ethnicity, household wealth/asset status, ecological region, and development region.

The wealth variable is a composite measure of the cumulative living standard of a household (including asset items such as water and sanitation facilities, televisions, and the type of material used for flooring). The construction of the index is described in detail elsewhere (Rutstein & Johnson, 2004; Johnson & Bradley, 2008). The ethnic identification of respondents is consolidated into four broad groups: Brahmin and Chhetri (traditionally known as the most advantaged group), Janajati (indigenous group), Dalit (known as the most disadvantaged group), and all others. These various groups are a mosaic of caste, ethnicity, and tribe, intertwined with religion and shaped by the geographic regions in the country (Bennett, Dahal & Govindasamy, 2008; Gurung, 1998; TU CDSA, 2014).

The ecological region refers to the three major topographical belts in Nepal: Mountain, Hill, and the Terai, the sub-tropical belt in the south. As noted above, the regions also feature a mix of ethnic compositions. In order to assess the influence of varying levels of overall development, the vertical broad geographic division into the conventional five regions – Eastern, Central, Western, Mid-western, and Far-western – is also used. These regions have long been shown to vary widely in terms of their development indicators (CBS & ICIMOD, 2003; UNDP, 2004, 2014).

The primary objective of the analysis is to assess the influence of the gender and marital status of the youth population on their current exposure to mass media, net of the influence of ecological and development regions, household wealth status, educational attainment, age, ethnicity, and employment status. The secondary objective is to assess the net influence of each of these variables. For the analysis, binary logistic multiple regression (Retherford & Choe, 1993) is used to assess the net effect of each factor on the odds of having been exposed to each or any of the four types of mass media. In order to avoid bias towards the over-sampled subpopulations, sample weights were applied for all estimates (means, percentages and odds ratios).

3. Results

Table 1 shows the distribution of the sample by seven variables representing contextual, household, and personal characteristics of the study population. The Central (where the federal capital is located) and Far-western regions have the largest and smallest share (37% and 9%) of the population, respectively. The Terai, the southern plains belt, has half of the total population; while only about 6% live in the Mountain region. Among the household wealth groups, the fourth quintile has the highest (24%) and the first quintile has the lowest (17%) of the population subgroups. About two in five possess an education which includes a secondary

level of schooling, and only 7% have no education. The 15 to 19 age group accounted for 56% of the total population. The Janajati (indigenous) population comprised the largest group (37%) and Dalit, the most disadvantaged group, comprises 13% of the total sample. Just half of the total population was employed in the 12 months preceding the survey.

Table 1. Distribution of the sample of single/married male and female, ages 15-24, by selected background characteristics, Nepal, 2016

Background Characteristic	%	Number
Development region		
Eastern	21.7	1,741
Central	36.6	2,929
Western	20.2	1,620
Mid-western	12.7	1,021
Far-western	8.7	699
Ecological region		
Mountain	6.2	495
Hill	43.2	3,462
Terai	50.6	4,053
Household wealth (quintile)		
First	16.5	1,322
Second	19.1	1,606
Third	20.0	1,606
Fourth	24.2	1,942
Fifth	20.1	1,613
Education		
None	7.2	573
Some primary (1-5 grades)	13.5	1,083
Secondary (6-9 grades)	41.4	3,317
10 th grade or higher	37.9	3,038
Age		
15-19	55.7	4,461
20-24	44.3	3,549
Ethnicity		
Brahmin/Chhetri	29.1	2,330
Janajati (including Newar)	36.5	2,942

Background Characteristic	%	Number
Dalit	13.1	1,048
All other	21.3	1,710
Employment status (current)		
Employed	50.1	4,015
Unemployed	49.9	3,995
Total (% , sample size)	100.0	8,010

Note: Total percent distribution and sample size for each variable adds up to 100 and 8,010 unless affected by rounding. The samples in this and subsequent tables are weighted.

The distribution of the sample by male and female population sub-groups was also analyzed (not shown in the table). The differences between male and female were not large for any of the variables except for education, age, and employment. There were proportionately more females in the ‘no education’ and less in the ‘10+ grades’ levels as compared to their male counterparts. Similarly, there were proportionally less males in the 20-24 age group than their female counterparts (41% v. 46%). Proportionately, more males in the age-group 15-19 were employed than females in the same age group (58% v 45%).

Table 2 shows the use of the specific types of mass media among the study population, by gender and marital status. For any or all four types of mass media, single males and married females represented the two extreme groups of users. Overall, 78% of single males and 62% of married females used any of the four types of mass media, but those using all four ranged from only 0.4% for married females to 2% among single males. TV watching was the most commonly used type of mass media across all marital and gender groups (ranging from 43% to 59%). Internet use was the least common among married females (8.5%) and was much higher among males (20%), either single or married. Similarly, only 4% of the married females read a newspaper, while 23% of single males reported reading a newspaper. Use of radio was highest (39%) among married males and lowest among married females.

Table 2. Percentage of single/married male and female youth (ages 15-24) currently using specific types of mass media, Nepal, 2016

Type of Mass Media	Male, 15-24		Female, 15-24		Both, 15-24
	Single	Married	Single	Married	Single/Married
Watches TV	55.1	42.5	59.2	45.7	52.4
Listens to radio	33.5	38.5	36.8	28.8	33.5

Type of Mass Media	Male, 15-24		Female, 15-24		Both, 15-24
	Single	Married	Single	Married	Single/Married
Reads newspaper	22.9	14.5	14.7	3.6	13.8
Uses Internet	20.2	20.4	12.6	8.5	14.4
Any one of four	77.6	70.2	77.1	61.8	72.0
All four	1.8	2.5	0.9	0.4	1.2
Sample size (<i>n</i>)	(2,451)	(710)	(2,433)	(2,416)	(8,010)

Note: Usage refers to at least once a week.

Table 3 shows differentials in media usage by selected background characteristics. TV viewing, the most commonly used of the four types of media (used by 52%), also has large differentials within and between many of the variables. Household wealth shows the largest differential – 66-points between the poorest and richest groups. In the latter, 81% reported viewing TV. The educational attainment variable shows a differential of 35-points between the groups with no education and 10+ grade education. Development region shows a TV viewing differential of about 25-points (in the Central and Western regions). Gender and marital status had 17-point differentials between married males and single females.

Table 3. Percentage of youth, ages 15-24, using specific types of mass media, by selected background characteristics, Nepal, 2016

Background Characteristics	TV	Radio	Newspaper	Internet	Any
Gender and Marital Status					
Male, Single	55.1	33.5	22.9	20.2	77.6
Female, Single	59.2	36.8	14.7	12.6	77.1
Male, Married	42.5	38.5	14.5	20.4	70.2
Female, Married	45.7	28.8	3.6	8.5	61.8
Development region					
Eastern	55.5	35.8	10.9	16.8	74.9
Central	58.7	30.4	20.8	14.8	74.9
Western	59.7	28.4	13.3	17.7	74.6
Mid-western	29.6	39.7	3.9	7.8	59.8
Far-western	34.4	44.1	7.4	8.5	64.8
Ecological region					
Mountain	34.7	47.6	4.8	9.7	67.1
Hill	52.9	37.6	19.4	17.0	76.7
Terai	54.1	28.3	10.1	12.8	68.7

Background Characteristics	TV	Radio	Newspaper	Internet	Any
Household wealth (quintile)					
First	14.8	44.8	2.0	8.9	55.1
Second	37.6	39.5	4.2	11.6	63.2
Third	52.2	29.5	6.1	14.6	68.0
Fourth	65.9	30.8	18.0	17.9	80.0
Fifth	81.2	26.1	35.2	17.2	88.6
Education					
None	30.7	12.8	0.5	3.5	40.8
Some primary (1-5 grades)	35.5	23.5	0.9	8.1	53.4
Secondary (6-9 grades)	49.7	34.0	7.8	13.3	70.7
10 th grade or higher	65.4	40.5	27.5	19.8	86.0
Age					
15-19	52.8	33.2	13.1	14.6	72.9
20-24	51.8	33.9	14.7	14.2	70.9
Ethnicity					
Brahmin/Chhetri	56.2	40.3	21.1	16.6	78.1
Janajati (inc. Newar)	56.2	34.7	12.8	16.1	77.0
Dalit	43.8	32.9	10.3	12.6	65.8
All other	45.9	22.7	7.8	9.6	59.1
Employment (current)					
Employed	47.6	38.7	12.6	13.8	71.1
Unemployed	57.2	28.4	15.0	15.0	73.0
All	52.4	33.5	13.8	14.4	72.0
Sample size (<i>n</i>)	(4,195)	(2,686)	(1,107)	(1,153)	(5,770)

The differential in radio listening was the largest (28-points) in terms of the education variable; whereas only 13% of those with no education listened to radio, 41% in the most educated group did so. Household wealth, ecological region, and gender/marital status variables have about the same level of differential – about 19-points – between groups within each variable.

As regards newspaper reading, the differential between the groups is the largest (33-points) within the household wealth variable. This is followed by education (a difference of 27-points). Gender/marital status had a 19-point difference between married females and single males. Similarly, the development region variable has about 17-points differential between Mid-western and Central regions.

For many of the variables, the differentials in access and use of the internet are not as large as for the other three types of mass media. Still education shows the highest differential – a 16-point difference between the sub-groups with no education and 10+ grade education (the latter has 20% users). Similarly, the differential between married males and married females was 12-points. Development region was another variable with a 10-point difference.

Regarding the use of any of the four types of media, education followed by household wealth variables showed the largest differentials. Of all the variables, the age and employment status of respondents had the least differentials between categories within each variable. The differential in the ethnicity variable is also relatively small across the media types. At the other extreme, education and wealth status show the largest differentials within each. As noted, the simple correlation between these two variables for the entire study sample was .301 ($p < .001$).

The results (odds ratio) based on binary multivariate logistic regression are shown in Table 4. For the purposes of assessing the relative importance of the covariates we also performed a similar analysis using step-wise logistic regression. Essentially, the step-wise results showed that out of all the covariates household wealth and educational attainment were comparatively the two most influential factors associated with all the outcome variables, except for internet use. For the latter, gender/marital status and development region were the top two most influential covariates. However, the results presented in Table 4 are based on all the covariates included simultaneously.

Compared to the medium wealth household group, the richer and richest groups were significantly more likely to be viewing TV and reading newspapers. This relationship was just the reverse for radio listeners: the poorer and poorest groups were considerably more likely to listen to the radio than the richer and richest groups. In terms of internet usage, the poorer and poorest groups and the richest groups were significantly less likely to use it than the medium and richer group.

Table 4. Effects (odds ratios based on binary multivariate logistic regression) of gender, marital status, and other factors on use of mass media among youth population, ages 15-24, Nepal, 2016

Co-factor	TV	Radio	Newspaper	Internet	Any
Gender and Marital Status					
Single male	0.88	1.08	5.21**	2.10**	1.33**
Single female	1.26**	1.21**	2.99**	1.19	1.36**
Married male	0.85	1.27*	5.46**	3.01**	1.34**
Married female	1.0	1.0	1.0	1.0	1.0

Co-factor	TV	Radio	Newspaper	Internet	Any
Development region					
Eastern	2.57**	1.04	2.21**	2.56**	1.99**
Central	2.25**	0.98	2.54**	1.96**	1.81**
Western	2.33**	0.77**	1.54**	2.32**	1.52**
Mid-western & Far-western	1.0	1.0	1.0	1.0	1.0
Ecological region					
Mountain	1.08	1.17	0.48**	0.71*	0.98
Hill	1.0	1.0	1.0	1.0	1.0
Terai	1.08	0.98	0.63**	0.84*	0.87
Household wealth (quintile)					
First	0.13**	1.71**	0.31**	0.55**	0.42**
Second	0.44**	1.41**	0.56**	0.67**	0.59**
Third	1.0	1.0	1.0	1.0	1.0
Fourth	1.57**	0.90	2.21**	0.98	1.51**
Fifth	2.70**	0.55**	3.34**	0.67**	1.80**
Education					
None	0.76*	0.55**	0.67	0.51**	0.69**
Some primary (1-5 grades)	1.0	1.0	1.0	1.0	1.0
Secondary (6-9 grades)	1.47**	1.83**	6.05**	1.47**	1.67**
10 th grade or higher	1.49**	3.03**	14.09**	2.15**	2.79**
Age					
15-19	1.07	0.95	0.83*	1.02	1.05
20-24	1.0	1.0	1.0	1.0	1.0
Ethnicity					
Brahmin/Chhetri	1.38**	1.09	1.18	1.24	1.28*
Janajati (including Newar)	1.27**	0.91	0.69**	1.14	1.20*
Dalit	1.0	1.0	1.0	1.0	1.0
All other	0.52**	0.82*	0.60**	0.65**	0.49**
Employment status (current)					
Employed	0.95	1.35**	0.95	0.82**	1.02
Unemployed	1.0	1.0	1.0	1.0	1.0
Log-likelihood	8,949.15	9,576.67	4,637.17	6,125.25	8,208.83
Sample size (n)	(4,195)	(2,686)	(1,107)	(1,153)	(5,770)

* $p \leq 0.05$; ** $p \leq 0.01$. The denominator for each media type is 8,010.

Compared to the group with some level of primary educational attainment, those with some secondary and higher levels of education were significantly more likely to be using each of the four types of mass media. The OR was particularly high for newspaper readership. Similarly, compared to those in the far and mid-western regions, those residing in other regions (Central, Western or Eastern) were significantly more likely to use TV, newspaper or the internet. However, the relationship for radio was the reverse.

Compared to married females, single females or married males were more likely to be using radio or newspaper. Similarly, single females were more likely to be using TV, and married males and single males were more likely to be using the internet. As regards ethnicity, Brahmin/Chhetri and Janajati were significantly more likely to be using TV, but this was not the case for other mass media. The effects of age or employment were generally not very strong or consistent.

4. Discussion and Conclusion

The dataset used for this analysis is unique in many respects. First, the dataset includes four full cohorts of the youth population (in ages 15-24) – male and female, and also single and married – and not just one particular group, which is common in many surveys. Second, the dataset represents the whole of Nepal, not just one particular geographic region or population subgroup. Further, the data refer to a recent period in the country's history, and more importantly, the two-and-half decades following the change in the political system that ushered in a fully-democratic form of governance, and liberalized the availability of and access to various forms of mass media, both through public and private sectors of the economy. Recent decades have also witnessed many legal and social reforms aimed at particularly addressing gender inequity and disparity across the various spheres (MWCSC, 2020; NWC, 2021)). Similarly, recent decades have seen remarkable achievements in access to schooling and educational attainment by both male and female youths in the country (Thapa, 2020). Educational attainment has most likely been the main agent of social, cultural and economic change in the country. Thus, the study findings would need to be seen in the larger societal context that has been undergoing changes in recent decades. Despite these factors, the data analyzed here unequivocally show that great disparities still exist in the current use of TV, radio, newspaper, and internet among the youth population in Nepal. Of the four types of mass media, TV was the most commonly used (by 52%), and newspaper and internet were the least used (14%) by the youth population. Radio was used by 34%. Any of the four types was used by 72% of the youth, while only 1% of youth used all four types of mass media.

Household wealth status, followed by the educational background of the youth, were the two main factors significantly and strongly correlated with the disparity in mass media use. The region of residence was also significantly associated with the disparity in use of mass media. Compared to single or married males or single females, married females were the least likely to use any of the forms of mass media.

In terms of the research design and data on all four full cohorts of the youth population, the previous research results that are most comparable are those based on a survey conducted in 2000 among the youth population (in ages 14-22) residing in urban areas in Nepal. When compared to the broad patterns from 15 years ago, the present results suggest both continuity and change.

One of the main patterns of continuity is that the married females are still (as of 2016) disadvantaged as compared to other youth sub-groups across all four forms of mass media included in the analysis – TV, radio, newspaper, and internet. At the other extreme, single females seem more advantaged in terms of media viewership/listenership. The reasons for the generally lower media exposure among the married female youths in particular are not clear from the survey data. It may be due to differences in lifestyle between married and single female youths. It could be hypothesized that single youth have a larger social network and may be more familiar with mass-media technology than married youth. Furthermore, married youth may have less time to spend on mass media than their single counterparts. This remains yet to be explored with qualitative research methodologies, and the insights gained can eventually be incorporated in survey tools as well.

The finding based on the current study is that 72% of the youths (ranging from 62% among married females to 78% among single males) reported current exposure to any of the four forms of mass media. This suggests tremendous opportunities for mass-media apparatus aimed at promoting youth awareness about important social and health issues and any other related factors. Of the four media forms, internet is still limited in Nepal, but use has grown steadily. The results also make clear that of the various co-factors – household wealth status followed by the educational background of the youth – are the two main factors significantly and strongly correlated with the disparity in mass media usage. The results imply that reducing the disparities in mass media use may not be achieved without addressing disparities in household economic status and enhancing the educational attainment of the youth population.

The data analyzed here lack information regarding the preference of the youth population for a particular type of mass media, or the specific type of information sought and obtained from mass media. This would warrant a mass media focused study, which was not the aim of the survey data analyzed in this paper. Despite this limitation, the findings underscore the need for media-based interventions to be sensitive to both the gaps related to gender and marital status among the youth population in Nepal. These efforts should also be monitored and evaluated for their effectiveness towards closing the divides that currently exist in the usage of the mass media. These remain the challenges now and for the future.

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Ethics Approval

The present study represents a secondary analysis of the Nepal Demographic and Health Survey 2016. As part of the global survey program funded by the US Agency for International Development (USAID), the survey adapted the ethical clearance as required in the US and Nepal. The details are provided in the main survey report cited in the references.

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Data Availability

The dataset can be accessed by registering and submitting a request to the DHS Program (www.DHSprogram.com).

Conflict of Interest

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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