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Unmet Contraceptive Need among Currently Married Adolescents in Nepal

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Abstract

Nepal has a remarkably high adolescent fertility rate with low use of contraception. A high level of unmet need for contraception persists among currently married young women in Nepal. Evidence about the unmet need for family planning and its associated factors has not been deeply analyzed in the Nepalese context yet. Therefore, this study investigates the prevalence and determinants of unmet need for family planning among currently married adolescent women in Nepal. It is an analytical cross-sectional study through secondary data analysis of the 2016 Nepal Demographic and Health Survey women data-file. This study is carried out on 704 currently married women aged 15-19 years. Selected independent variables are cross-tabulated with the dependent variable to analyze where the Chi-square test is applied to test the significance of the association between these two variables. This study shows that the total unmet need for family planning among adolescent women is 34 percent is much higher than the current national unmet need for family planning is 23 percent among all women of reproductive age by the NDHS 2016. The study reveals that several adolescents have a higher unmet need for family planning by different background characteristics in Nepal. Hence, it is necessary to focus on strengthening women's status by improving their socio-economic condition. That enables them to discuss sexual issues openly. Family planning programs need to design to address the unmet need of young women, especially needy adolescents.

Keywords: Family planning, unmet need, met need, contraceptives intentions, NDHS **Introduction**

The term "unmet need for contraceptives" refers to the percentage of women who are capable of getting pregnant, not currently pregnant or experiencing postpartum amenorrhea, and wish to delay their next pregnancy for two or more years or stop having children, but are not using any contraceptive method. It also includes those who have an unwanted or mistimed pregnancy, as well as those who have had a birth in the past two years that was mistimed or unwanted, according to the Ministry of Health in Nepal, New ERA, and ICF in 2017.

The measurement of unfulfilled demand for family planning can be used to assess the progress towards the end goal of providing widespread access to sexual and reproductive healthcare, including family planning. To provide some context, the widespread adoption of family planning among Asian countries has led to a drastic decline in birth rates. But despite this, the population of the said Asian countries is predicted to continue rising in the years to come due to the "population momentum", judging by the increasing population of young individuals and adolescents in the region (UN, 2017).

The Government of Nepal's goal in the domain of family planning is to make it easier for women and couples to have the number of children they want and to space them out in a healthy way.lowering the unmet demand for contraceptives and providing rights-based family planning services (MoHP, 2015).

Nepal established the Cost Implementation Plan (CIP) on Family Planning -2020, which focuses on five priority areas, to address the issue of access to rights-based family planning services. They are: Demand Generation, Service Delivery, Capacity Building, Research and Innovation, and an Enabling Environment. The nation hopes to improve the demand satisfied for modern contraception from 56 percentage in 2014 through investment in these sectors. (MoHP, 2015) and Contraceptive Prevalence Rate (CPR) for contemporary techniques from 47 percentage (CBS, 2014) in 2014 to 50 percentage by 2020 (Ministry of Health, Nepal; New ERA and ICF International, 2012). To reach a replacement level fertility of 2.1 births per woman by 2021 (MoHP, 2015), it also seeks to reduce the unmet demand for family planning from 25.2 percent in 2014 (CBS, 2014) to 22 percent in 2020. These goals may seem modest, but they were selected to take into account the context of a nation that has made significant progress in family planning, butCPR has been stagnant for some time and where the unmet need for contraceptive remains high where 35 percentage is among women aged 15 to 19 and 32.6 percentage among those aged 20 to 24 (Ministry of Health, Nepal; New ERA and ICF, 2017).

Several factors, such as age, marital status, education level, religion, occupation, and household income, have been revealed in the literature to be thoroughlyconnected with the prevalence of unmet need for contraceptive. Misconceptions and worries of the health risks related with family planning methods have a substantial impact on its use, particularly among young married women, which contributes to the persistence of unmet need. In Nepal, research in this field is limited, and the factors behind unmet need among young women have not been thoroughly explored.

In Nepal, 77 percent of currently married women aged 15 to 49 who are not using contraceptive in the future. This is a slight decline from 81 percent recorded in 2011. Among nonusers, the intention to use contraception in the future decreases as the number of living children increases. For instance, 87 percent of married women with one child plan to use contraception in the future, compared to only 52 percent of those with four or more children. These findings were reported by the Ministry of Health, Nepal, New ERA, and ICF in 2017.

Despite the passage of time, a significant proportion of currently married young women in Nepal still face unmet need for contraception. Previous research on this topic, including the factors influencing unmet need, has not been fully explored within the Nepalese context. This article aims to fill this gap by analyzing data from the Nepal Demographic and Health Surveys, 2016 to investigate the unmet need for contraceptive among currently married young women.

The issue of unmet need for family planningamid young married women is frequently overlooked, both by researchers and service providers. In India the most significant requirement for contraception was to delay the first pregnancy in a context where women continue to marry at a young age. The ability of young women to use contraceptive methods to postpone pregnancy was linked to their premarital knowledge of sexual and reproductive health, including awareness of contraceptive methods and services. The extent of their agency, communication with their partner, and the quality of sex education they received also played a criticale role in their ability to delay pregnancy using contraception, as reported by Jejeebhoy, Santhya, and Zavier in 2014.

The concept of unmet need has far-reaching implications for future population growth and plays a significant role in the development of family planning programs. To develop a more nuanced understanding of the future demand for contraception, it is essential to comprehend the scale of the unmet need and the characteristics of the population affected by it (Ross, 1994). According to Sinding et al., unmet need can also be used as a tool to estimate the potential impact on fertility if the unmet demand for contraception is metin 1994.

Given the current circumstances, it would be advantageous to conduct a study on the contraceptive use behavior and determining factors among young married women. This is because many have stated that family planning methods are country-specific and call for action at that level. Effective interventions must take into account the diverse background characteristics of Nepal's population due to its distinct socioeconomic and infrastructure development. A thorough investigation into the broader range of socioeconomic factors influencing the unmet need for family planning among adolescent women in Nepal, however, is not yet available. As a result, the purpose of this research is to provide an explanation for this issue.

Research Methods

Research Design

Research designs are various methods of investigation utilized in qualitative, quantitative, and mixed methods research, which outline the specific procedures to be followed in conducting research (Creswell, 2003). In this study, a quantitative approach was adopted, and secondary data from NDHS 2016 was analyzed to examine the unmet need for family planning among married women aged 15-19. The study focused on determining the factors affecting unmet need for family planning. To represent the study, a descriptive and analytical research design was chosen, based on the quantitative method.

Source of Data and Sample

In this article, we utilize secondary data from the Nepal Demographic and Health Survey (NDHS) conducted in 2016, which is a part of the global Demographic and Health Survey Program (Measures DHS) intended for Nepal. Since 1984, the DHS program has carried out comparable, nationally representative household surveys in more than 85 countries worldwide. The surveys collect a broad range of objective and self-reported data, with a strong emphasis on indicators of fertility, reproductive health, maternal and child health, mortality, nutrition, gender-based violence, women's empowerment, and self-reported health behaviors. Key advantages of the DHS program include high response rates, national coverage, standardized data collection procedures across countries, and consistent content over time.

The Ministry of Health (MoH) in Nepal, with support from the United States Agency of International Development (USAID), commissioned a periodic survey administered by New ERA. This survey collected data from a large sample of ever-married women of reproductive age across the country. ICF International provided technical assistance. The survey, known as the Nepal Demographic and Health Survey (NDHS), aims to provide policymakers, program managers, and researchers with up-to-date information on population and health indicators, and to meet the monitoring and evaluation needs of the country's population health. The survey has been widely used by academics to investigate a range of demographic, sociological, family planning, women's empowerment, and maternal health issues. USAID funding ensures that almost all NDHS data files and final reports are freely available on the MEASURE DHS website (www.measuredhs.com), with standardized formatting to improve comparability across surveys and ease of use for analysis. Notably, the NDHS is the only survey that covers a large sample of Nepal's population.

Nepal is comprised of 77 districts that are spread across various ecological zones and development regions. Recently, Nepal's Constituent Assembly approved changes that divided Nepal administratively into seven provinces: Koshi Province, Madesh Province, Bagmati Province, Gandaki Province, Lumbini Province, Karnali Province and Sudurpaschim Province. Each province is divided into urban and rural areas, and selected districts are included within their boundaries. While entire districts were included in most cases, two districts, Rukum and

Nawalparasi, were split into two separate provinces, bringing the total number of districts to 77(Ministry of Health, Nepal; New ERA and ICF, 2017).

The number of women surveyed in each province should be proportional to its size in order to ensure that the figures obtained from the survey are representative of the entire nation and its seven provinces. However, each region requires a minimum sample size. Although the 2016 NDHS survey sample covers the national and provincial levels, ecological zones, development regions, urban and rural areas, and women from some provinces, if the sample size is distributed proportionally to each province's population, there may be insufficient women from some provinces for analysis. To overcome this problem, provinces with small populations are oversampled.

This article focuses on analyzing data from the Nepal Demographic and Health Surveys (NDHS) 2016, specifically from a sample of 704 respondents who meet the criteria of being currently married and adolescent women between the ages of 15 and 19.

Study Variables

Dépendentand Independent Variables

As per the demographic health survey, married women who are capable of bearing children and desire to delay their next pregnancy for two or more years or wish to cease childbearing but are not employing any contraceptive method are identified as having an unfulfilled need for family planning. This study considers the unmet need as the dependent variable and evaluates it against various demographic and socio-economic variables concerning women aged 15-19. The unmet need is categorized as 1, while met need is coded as 0. The independent variables examined in this study are place of residence, ecological zone, province, education, and wealth index.

Method of Data Analysis

This study utilizes various statistical tools to analyze the relevant data and what are the determinants of unmet need for family planning and intention to uses of family planning? Since the study relies on secondary data, the necessary variables are reclassified and recoded for appropriate tabulations. Descriptive statistics are used to present relevant information, while bivariate and binary logistic regression modeling is used for analysis. Percentage distribution is used for descriptive analysis, and cross-tabulation of independent and dependent variables is presented in tabular form. The association between independent and dependent variables is determined using the Chi-square test. Simple associations are identified through cross-tabulations, while the Chi-square test for independence is used to determine whether there is a significant association between independent variables and the outcome of variables.

Results

The distribution of the adolescent population is shown first, followed by the results of the Chi-square test and the bivariate analysis of the unmet need. Finally, the intention of married adolescent women to use family planning in the future is investigated.

As can be seen in Table 1, 704 of women from were aged 15-19 years. There was no significant difference of study population by place of residence but bit more percentage for urban area (50.9%). Table indicated that terai (57.0%) consisted higher percentage of population than other ecological zones and province 2 have higher population (34.0%) among of the remaining provinces.

In this article population consisted more in those who have completed secondary level of education (60.7%). By wealth Index very less percentage was found in richest group (6.9%) and

highest in middle group i.e around 27 percent other remaining groups have almost similar percentage.

Table 1Percentage Distribution of Respondents (adolescent) by Background Characteristics

Characteristics	Percentage	Total Population
	Place of residence	
Urban	50.5	356
Rural	49.5	349
	Ecological zone	
Mountain	6.1	43
Hill	37.0	260
Terai	57.0	401
	Province	
Province 1	13.9	98
Province 2	34.0	240
Province 3	12.0	85
Province 4	7.4	52
Province 5	15.5	109
Province 6	8.6	61
Province 7	8.6	60
	Education	
No education	12.4	87
Primary	22.6	159
Secondary	60.7	428
Higher	4.4	31
	Wealth Index	
Poorest	22.2	157
Poorer	22.2	157
Middle	26.7	188
Richer	21.9	154
Richest	6.9	49
Total	100.0	704

Source: Ministry of Health (MOH) [Nepal], New ERA, and ICF. (2017).

Determinants of unmet need for family planning: bi-variate analysis

The results of the bi-variate analysis between the socio-economic characteristics of currently married adolescent women and their unmet need for contraceptives are presented in Table 2. The table shows how the unmet need for family planning among adolescent women varies based on their socio-economic characteristics such as place of residence, ecological zone, province, education level, and wealth index. The data indicates that 34% of currently married adolescent women in Nepal have an unmet need for family planning, with a notable difference observed between rural and urban settings. Rural adolescent women have a higher unmet need (38.4%) compared to their urban counterparts (29.8%).

Table 2Percentage Distribution of Currently Married Adolescents Age 15-19 with Unmet Need for Contraceptive, Percentage with Met Need of Contraceptive, According to Different Background Characteristics, Nepal DHS 2016

Characteristics	Unmet need for	Met Need for	Total	Pearson
	Family Planning	Family Planning		Chi-Square
Place of residence				
Urban	29.8	26.1	356	$\chi^2 = 6.920$
Rural	38.4	20.1	349	<i>P</i> <0.031
Ecological Zone				
Mountain	39.5	34.9	43	$\chi^2 = 42.467$
Hill	37.3	31.9	260	<i>P</i> <0.000
Terai	31.2	16.2	401	
Province				
Province1	34.7	31.6	98	$\chi^2 = 58.999$
Province2	32.1	10.4	240	<i>P</i> <0.000
Province3	22.6	39.3	84	
Province4	34.6	32.7	52	
Province5	34.9	23.9	109	
Province6	41.0	26.2	61	
Province7	46.7	25.0	60	
Education				
No education	31.0	9.2	87	$\chi^2 = 57.075$
Primary	27.7	13.2	159	<i>P</i> <0.000
Secondary	37.2	27.6	427	
Higher	33.3	50.0	30	
Wealth Index				
Poorest	34.9	20.4	157	$\chi^2 = 22.254$
Poorer	29.9	24.8	157	P<0.004
Middle	38.3	17.0	188	
Richer	26.0	26.6	154	
Richest	24.5	36.7	49	
Total	34.1	23.1	704	

Note: Chi-squire test shows that all the variables are statistically Significant at 5 percent level Source: Ministry of Health (MOH) [Nepal], New ERA, and ICF. (2017).

As we expected, unmet need for family planning among adolescent women from poor households are more than that of women from rich households. The results in Table 2 show the presence of a marked difference in unmet need between women from richest (24.5%) and poorest (bottom 34.8%) households. This table showed that unmet need for family planning was higher for the middle households, i.e. (38.3%).

The analysis shows that the provinces of 6 and 7, located in remote and inaccessible regions of far western and northwestern Nepal, have the highest unmet need for family planning among currently married adolescent women, at 41.0% and 46.7% respectively. In contrast, the lowest unmet need is observed in Province 3, at 22.6%, and the remaining provinces have one-third of the population with unmet need. This indicates a significant need for family planning programs across all provinces. Family planning is not only important for controlling childbirth but also prevents various health problems in women. The analysis also reveals that unmet need increases with higher educational attainment, from 31% among women with no education to 37% and 33% for those with secondary and higher education respectively.

Intention to Use of Family Planning

Improving the accessibility and quality of family planning services while also addressing the unmet demand for contraceptives among couples and individuals is an essential priority to promote the utilization of family planning.

Table 3 showed that large majority of the respondents intended to use contraceptives by all different background characteristics those who were currently not using contraceptive were. Hence it should be necessary to easy access and quality family methods to meet these populations need.

Table 3Percentage Distribution of Currently Married Adolescents Age 15-19 Who Are Not Using A Contraceptive Method by Intention to Use in The Future, by Background Characteristics, Nepal

Characteristics	Intent to	Unsure about	Total
	use	use	
Place of res	sidence		
Urban	96.2	3.6	263
Rural	95.3	0.6	278
Ecological	zone		
Mountain	92.9	2.1	28
Hill	97.2	`1.7	178
Terai	94.9		336
Province			
Province 1	94.0	6.0	67
Province 2	94.0	1.4	215
Province 3	100	-	51
Province 4	88.9	2.8	36
Province 5	98.8	1.2	83
Province 6	100	-	45
Province 7	97.7	1.7	44
Educationa	l level		
No education	93.7	3.8	79
Primary	94.2	0.7	138
Secondary	97.1	1.6	309
Higher	93.3		15
DIIC 2016			

DHS 2016

Wealth i	ndex		
Poorest	96.8	2.4	124
Poorer	94.9	2.5	118
Middle	95.5	0.6	155
Richer	95.6	0.9	113
Richest	96.8	3.2	31
Total	95.7	1.7	542

Source: Ministry of Health (MOH) [Nepal], New ERA, and ICF. (2017).

Discussion

Researchers and service providers often overlook the issue of unmet need for contraception among young married women. This article examined the database on unmet need for family planning to assess the situation of adolescents in Nepal. The results showed that around35 percentage of respondentsreported having an unmet need for family planning, which is consistent with findings from a study conducted among young women in India. This articlerevealed that the primary need for contraception among young women is to postpone their first pregnancy. The use of contraceptives to delay first pregnancy is determined by premarital awareness of sexual and reproductive matters, including contraceptive methods and services. Activity, spousal communication, and value of sex education also play a serious role in allowing young women to use contraceptive methods to delay their first pregnancy (Jejeebhoy, Santhya, and Zavier, 2014).

Studies have shown that various factors such as age, marital status, education level, religion, occupation, and household wealth are strongly linked to unmet need for family planning. Fear of health risks and misconceptions about contraceptive methods have been identified as major factors that hinder contraceptive use and contribute to high levels of unmet need, particularly among young married women. However, in Nepal, there is a lack of research on this topic, and the determinants of unmet need among young women have not been adequately explained.

The results of thisarticlerevealed that a significant number of Nepalese adolescents have an unmet need for contraceptives, by various background characteristic have found different unmet need of contraceptives. Region-related natureand demand of unmetneed of family planning method, it is crucial to implement effective interventions designed to the unique socio-economic and infrastructural development of Nepal. However, there is a less research that examines the broader range of socio-economic and demographic factors that contribute to unmet need for contraceptive among young women. As such, this article aims to delivervisions into this important issue.

Conclusion

This articleexamines the prevalence and factors influencing the unmet need contraceptive services among currently married adolescents in Nepal. Results indicate that the overall unmet need for contraceptive among adolescent women is 34 percent, which is significantly higher than the national average of 23 percent among all women of reproductive age according to the 2016 NDHS. The article also reveals that factors such as place of residence, ecological zone, province, educational level, and wealth index are significantly associated with unmet need for contraceptive among adolescent women. Interestingly, the study shows that the intention to use contraceptives is higher across all background characteristics

The results of this article shows that large number of Nepalese adolescents have unmet need of contraceptive, particularly when considering their socio-geographic background. Nepal has unique socio-economic and infrastructural characteristics, effective interventions designed to the local context are essential. However, a comprehensive investigation of the socio-economic and

demographic factors contributing to the unmet need for contraceptive among young women in Nepal is currently lacking. Therefore, this article aims to shed light on this issue and provide valuable insights for future interventions.

It is essential to have access to family planning services, which should be readily available, of high quality, and tailored to each person's preferences and requirements. This will empower individuals to reliably choose the most proper and safe techniques and use them. Women's employment, economic well-being, and education all have the potential to increase the use of family planning services and reduce the number of unmet needs. Governments and international organizations should prioritize the upkeep and enhancement of family planning services due to their potential impact on society's overall well-being.

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