

# **Birth Planning: Awareness, Knowledge and Practice Among Urban Youth in Nepal**

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## **INTRODUCTION**

Since its beginnings in the 1960s, Nepal's family planning program has gained legitimacy on demographic grounds (Thapa, 1989). Over the past four decades, family planning has been accorded an increasingly higher priority in successive development plan documents, and is today an important element of population policy and an essential component of reproductive health services.

The concept of family planning in Nepal was pioneered by the Family Planning Association of Nepal (FPAN), and affiliate of the International Planned Parenthood Federation (IPPF). FPAN was formed in 1958 as a voluntary social organization in Kathmandu, with the mandate of making safe and effective family planning services available to those in need. Another non-governmental organization involved in contraception distribution is the Nepal Contraceptive Retail Sales Company (NCRSC). The principal objectives of the NCRSC have been the promotion, sale and distribution of health and family planning products through commercial channels. In more recent years, family planning services have also been provided through a network of physicians in the private sector.

The government supported family planning program was established in 1968. Services were initially limited to urban areas within the Kathmandu Valley (Thapa, 1989), and expanded in subsequent years to other areas of the country. The aim of the program has been to make family planning and maternal child health services available to all of Nepal's fertile couples, and to encourage an increasing number of these couples to practice contraception to achieve their desired number and spacing of children.

Despite this long record of family planning in Nepal, and the considerable information collected during the various surveys and evaluations over the past forty years, little is known about the contraceptive knowledge, attitudes and practices among Nepal's young adult population. Nearly no data at all are available for unmarried youth. As fertility and contraceptive norms are, in large part, formed during the young adult years, prior to marriage, it is critical to examine these subgroups if information is to be useful in the design and implementation of programs most responsive to target populations.

This is the principal focus of the Nepal Adolescent and Young Adult (NAYA) Survey. The aim of this paper is to assess the awareness, knowledge, perception and practice of family planning of the urban youth in Nepal.

## DATA AND METHODS

The data analyzed in the present paper come from the Nepal Adolescents and Young Adults (NAYA) Survey. The survey was conducted in July and August 2000 in both urban and rural areas. It is the first in Nepal to focus on this segment of the population, and reports data separately by sex, marital status, and age groups. (Previous surveys of this type typically focused exclusively on married females.) The urban population was oversampled to allow reliable estimates based on the urban adolescent and young adult population (Bastola, 2000). The analysis presented here focuses on the urban sample.

The survey's sampling universe included the five largest urban areas—Kathmandu, Lalitpur, Pokhara, Biratnagar, and Birgunj—which together account for approximately 50 percent of the country's urban population as of the 1991 census. Prospective respondents 14–22 years of age were selected by means of a stratified, two-stage sampling design with probability proportional to the estimated number of dwellings in the enumeration area. All the data in this paper are weighted by the population proportional to the size of each domain of study representing each of the five urban areas.

A total of 18,311 houses were visited in all of the urban sample blocks. The houses contained 24,972 households (defined as household members who shared the same kitchen) or about 1.4 households per house visited. Among the total households surveyed, 10,298 had eligible members—that is, males and females aged 14–22 who had spent the previous night in the house. Random numbers and sampling intervals were used to select 3,053 eligible respondents in 2,000 households for interview. The 2,000 households represented 19.4 percent of the 10,298 households containing eligible respondents.

Ninety-six percent of the selected households were successfully interviewed. A total of 2,824 respondents (92%) were successfully interviewed in the five urban areas—1,054 single females, 391 married females, 1,278 single males, and 101 married males (Thapa, Dhital, and Neupane 2000). Given the small sample size for married males, the results for this subgroup should be interpreted with caution.

The survey questionnaire consisted of 13 modules: respondents' background; residential history; family characteristics; puberty; menstruation; friendship, love, and marriage; sexuality; pregnancy and childbearing; knowledge and practice of family planning, sexually transmitted infections, including HIV/AIDS; gender roles; mass-media exposure; awareness of girl-trafficking; and miscellaneous topics, including smoking, alcohol use, and drug use. Separate questionnaires were designed for unmarried females, married females, unmarried males, and married males (Family Health International and

Valley Research Group 2000).

The present paper is based on information collected in the family planning module, which examined respondents' knowledge, attitudes and practices relating to fertility regulation. The majority of the paper is a detailed presentation and discussion of bivariate results for the four subgroups of respondents.

Because gender and marital-status differentials in birth planning may be due to socioeconomic factors, a multivariate statistical analysis is also employed to analyze factors associated with various dimensions related to birth planning. Besides sex and marital-status, other variables included in the multivariate analysis are urban locale, ethnicity, household living standard, age group, education, and work status. The multivariate analysis method is logistic regression, and results are presented as relative odds ratios.

## **RESULTS**

### **Contraceptive knowledge**

Respondents' knowledge of contraceptive methods was assessed in the NAYA Survey through a question combining spontaneous recall and prompting procedures. Respondents were asked to name the methods by which a couple could delay or avoid pregnancy. Interviewers then asked about specific methods not mentioned spontaneously by the respondents. Knowledge was sought about eight modern methods—condom, injectables, female sterilization, male sterilization, pills, implants, IUD, and foam/jelly, as well as two traditional methods—rhythm and withdrawal. Table 1 shows that almost all respondents are aware of at least one modern method. Condoms and injectables are each known by over 90%, with pills and male and female sterilization not far behind; IUDs and contraceptive implants are known to approximately three-fourths of all respondents. Except for condoms, injectables and oral contraceptives, single men are less informed than their married counterparts about modern methods. Differential by marital status are less pronounced for women, but reveal single respondents to be at least as informed as those who are married.

**Table 1.** Percentage of youth (14-22) with contraceptive knowledge: Urban Nepal, 2000

	Male		Female		Total
	Single	Married	Single	Married	
Modern method	99.2	95.6	98.6	97.3	98.5
Condom	98.9	95.6	95.6	82.9	95.1
Injectables	91.4	85.8	96.0	91.8	92.8
Female sterilization	81.8	91.2	90.6	92.7	87.0
Male sterilization	81.1	92.0	87.9	88.7	85.1
Pill	80.2	74.3	90.5	78.9	83.4
Implant	71.9	55.4	85.5	68.2	75.4
IUD	72.7	47.8	82.4	60.9	73.2
Foam/Jelly	67.8	54.9	60.4	46.4	61.3
Traditional method	38.3	53.1	23.4	31.6	32.6
Rhythm	31.8	31.3	22.0	25.1	27.3
Withdrawal	29.2	42.5	6.3	14.9	19.4
Number of cases	1,273	113	988	451	2,824

Traditional methods, on the other hand, are much less known to young adults in the study population: less than one-third had heard of rhythm, and scarcely one in four knew of withdrawal. Males are more informed about these methods than are women; differentials by marital status are low. Low awareness of traditional methods may be due in part to the fact that these methods are not included in public and private sector family planning efforts in Nepal. Another reason may be that learning these methods through others is not easy and comfortable in a society where matters relating to sex, especially in the young population, are not freely discussed.

The ability to name or recognize the name of a family planning method is a nominal test of a respondent's knowledge, and is not necessarily a valid measure of how much they may know about the use of method. In an attempt to learn more about the depth of knowledge about individual methods, respondents were asked whether they know how to use each of the methods that they named.

Table 2 shows the percentage stating that they know how to use particular methods of family planning. Overall, 93 percent respondents reported that they know how to use a modern method—very close to the 99% reported above who said they had heard of such methods. When individual methods are considered, however, the results are less impressive: only 81% know how to *use* condoms (versus 95% who said they had *heard* of them); 78% (versus 93%) know how to use injectables; and 57% (versus 83%) knew how to use pills. Other methods show similar differentials. Marital-specific differences are small among female respondents, but generally favor single males over married ones.

Males are also more likely to be knowledgeable about the use of traditional methods than are females; the least informed group is married females: only 16% know how to practice rhythm, and only 4% know how to use withdrawal as a means of fertility regulation.

**Table 2.** Percentage of youth (14-22) knowing how to use contraception: Urban Nepal, 2000

	Male		Female		Total
	Single	Married	Single	Married	
Any modern method	93.9	91.2	92.3	92.7	93.0
Condom	91.0	88.5	71.3	72.4	81.0
Injectables	72.6	61.9	82.9	85.3	77.8
Female sterilization	63.9	65.5	62.6	67.1	64.0
Male sterilization	64.5	64.6	56.2	61.2	61.1
Pill	53.1	38.1	62.4	60.1	56.8
Implant	45.0	34.5	60.5	56.2	51.8
IUD	38.4	20.4	33.7	29.5	34.6
Foam/Jelly	38.4	32.7	15.6	14.7	26.4
Any traditional method	33.3	47.8	16.4	27.1	27.0
Rhythm	25.2	25.9	15.7	21.1	21.2
Withdrawal	26.4	38.6	4.3	12.9	17.0
Number of cases	1,272	113	988	451	2,824

The following table presents data on the *average* number of modern methods (out of eight) respondents knew how to use, by selected socio-economic variables. It is a summary index of breadth of knowledge, and does not purport to represent *how well* respondents know how to use the number of methods named. Rather, it attempts to point out gross differences among all respondents, and the married subset of them, by background factors such as residence, ethnicity, living standard, birthplace, age and age at marriage, education and work status.

Respondents of Pokhara and Biratnagar appear to have relatively higher knowledge of modern methods; while knowledge is lowest in Lalitpur for all respondents (and Birgunj for those who are married).

By ethnicity, the average knowledge is higher for Brahman, followed by Chhetri and Newar. As will be discussed later, Brahmans are the lowest ever users and current users of contraception, but they are more knowledgeable about contraception than other ethnic groups in urban Nepal.

Although the difference is not great, the average knowledge of use is lower among higher living standard household youth than youth from lower standard households. Youth who were born in rural areas have higher average knowledge of use than youth who were born in urban areas. By marital status, average knowledge is highest for single male and lowest for married males. However, among married youth, average knowledge is higher for females than their married males.

**Table 3.** Mean number of modern methods respondents (14-22) know how to use, by selected characteristics: Urban Nepal, 2000

Characteristic	All respondents	Married respondents
Urban locale		
Kathmandu	4.54	4.45
Lalitpur	4.13	4.03
Pokhara	4.84	5.09
Biratnagar	4.91	4.73
Birgunj	4.27	3.94
Ethnicity		
Brahman	5.38	5.68
Chhetri	5.01	4.91
Newar	4.29	4.07
All other	4.18	4.19
Household living standard <sup>a</sup>		
Lower	4.54	4.40
Higher	4.52	4.29
Birthplace		
Urban	4.43	4.25
Rural	4.83	4.69
Sex and marital status		
Single male	4.67	na
Married male	4.05	4.05
Single female	4.45	na
Married female	4.47	4.47
Age at marriage		
Less than 18	na	4.31
19 or more	na	4.74
Age group		
14-16	4.12	3.27
17-19	4.58	4.41
20-22	4.95	4.62
Education		
None	3.48	3.78

Primary	3.37	3.80
Secondary	4.05	4.63
High school or college	5.15	5.56
Work status		
Not working	4.66	4.41
Working	4.18	4.33
Number of cases	2,824	563

<sup>a</sup>Household living standard is a composite variable. Higher status refers to a house having all the following four attributes: piped water, toilet with pan or flush system, roof made of concrete materials, and floor made with cement, tile or marble materials.

na = not applicable.

Respondents married at age 19 or older are more knowledgeable about using contraception than those who were married before age 19, showing the positive relationship between age at marriage and knowledge about family planning. Similarly, age is generally positively associated with knowledge, for both all respondents and those married. As expected, as education level increases, the average knowledge of use also increases, indicating the impact of education on contraceptive information. Still, even those with schooling through the secondary level knew how to use less than six of the eight modern methods. Non-working respondents have higher average knowledge of use of contraception than their working counterparts.

### Sources of information

For each method recognized, respondents were asked if they knew of a source or a person from whom they could obtain the information. Table 4 shows that majority of youth (88 percent) obtained information about family planning from television, followed by radio (69 percent) and newspapers (44 percent). Friends are also powerful source of information, from whom 33 percent of total youth obtained information about family planning. Single youth are considerably more likely to have received information from each of these sources than are their married counterparts.

Only one fourth of all respondents obtained information about family planning from school, suggesting that population education curricula at the secondary school level could be more effective. Over one fourth of married females obtained information about family planning from their husbands; however, only 4 percent married males said they received this type of information from their wives. These findings indicate that discussion about family planning among urban youth is not common, and that married are reluctant to discuss family planning with their husbands.

In general, males are more likely to report that they have heard family planning messages from the various sources presented in Table 4, and single respondents are more informed than their married counterparts. Implications for IEC program focus are clear:

increased emphasis on the use of electronic media—clearly the most popular source of information, and increased focus on women and married youth.

**Table 4.** Percentage of youth (14-22) who have heard about contraception from various sources: Urban Nepal, 2000

Source of information	Male		Female		Total
	Single	Married	Single	Married	
Television	91.1	75.4	93.0	70.9	87.9
Radio	76.4	63.1	69.2	51.4	69.4
Newspaper	54.5	32.2	43.0	18.4	43.9
Friends	46.1	61.5	13.8	31.9	33.2
School	33.4	13.5	26.1	3.2	25.3
Poster/pamphlet	29.8	26.9	13.3	6.0	20.2
Hospital	9.9	9.5	8.0	14.6	10.0
Cinema	12.1	10.7	7.4	5.7	9.4
Neighbors	3.2	6.9	5.8	27.6	8.1
Spouse	na	3.7	na	25.8	4.2
Other family member	2.5	4.5	12.8	17.8	8.6
Private clinic/doctor	3.2	2.4	1.9	4.7	2.9
Other	12.5	19.1	10.9	8.4	11.6
Number of cases	1,263	110	974	439	2,786

na = not applicable.

### Family planning decision-making

Discussion between spouses and the process of making the decisions are important issues in determining the extent of acceptance of use of family planning. In the NAYA survey, married youths were asked whether they ever discussed about contraceptive methods with their partner. Table 5 presents the results from this question. Nearly 70 percent said that they had discussed contraceptive methods with their partner. Table 5 shows that 71 percent of married female respondents reported that they discussed family planning with their husbands, and 65 percent of married male respondents said that they discussed the topic with their wives. These findings indicate that dialogue on fertility regulation between married young adults is common in urban Nepal, although fully one-third of husbands and slightly less wives do not report any discussion on this important subject.



**Table 5.** Percent of married youth (14-22) respondents who ever discussed contraception with spouse: Urban Nepal, 2000

Discussed contraception	Male	Female	Total
Yes	65.4	71.0	69.9
No	34.6	29.0	30.1
Total	100.0	100.0	100.0
Number of cases	107	421	528

Married respondents who did not discuss contraception with their partner were further asked the reasons for not talking about family planning. Table 6 shows that the majority (58 percent) reported that they were embarrassed/hesitant in discussing this topic. Others gave “other” (unspecified) reasons or said they didn’t have any reason for not discussing contraception. As shown in the table, responses for male (note that the distribution is based on only 38 cases) and female respondents are nearly identical.

**Table 6.** Percent distribution of married youth (14-22) respondents who have never discussed contraception with spouse, according to reason: Urban Nepal, 2000

	Male	Female	Total
Embarrassed/hesitant	57.9	57.8	57.9
Other reason <sup>†</sup>	36.8	36.4	36.5
Don't know	5.3	5.8	5.7
Total	100.0	100.0	100.0
Number of cases	38	121	159

<sup>†</sup>includes, no child, not living with spouse or recently married.

Discussion of family planning between spouses is likely a strong indicator of contraceptive use—both current and planned. In the following table, we examine the level of discussion according to selected background characteristics of married

**Table 7.** Percentage of married youth (14-22) respondents who ever discussed contraception with spouse, by selected characteristics, and adjusted odds ratios: Urban Nepal, 2000

Characteristic	Ever discussed contraception with spouse	Odds ratio
Urban locale		
Kathmandu	82.3	1.0 (r)
Lalitpur	81.1	1.162
Pokhara	80.9	1.040
Biratnagar	62.1	.607
Birgunj	58.9	.534
Ethnicity		
Brahmin	80.8	1.0 (r)
Chhetri	83.3	1.629
Newar	80.6	1.606
All other	66.0	1.098
Household living standard <sup>a</sup>		
Lower	67.5	1.0 (r)
Higher	82.9	1.967
Sex		
Male	65.4	1.0 (r)
Female	71.0	1.451*
Age group		
14-16	37.7	0.245***
17-19	74.9	1.0 (r)
20-22	72.6	1.024
Education		
None	54.4	.609
Primary	66.4	1.0 (r)
Secondary	77.7	1.644
High school or college	84.3	2.067*
Work status		
Not working	68.1	1.0 (r)
Working	73.8	1.563
Number of cases	528	528

(r) = reference category.

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ .

<sup>a</sup>Household living standard is a composite variable. Higher status refers to a house having all the following four attributes: piped water, toilet with pan or flush system, roof made of concrete materials, and floor made with cement, tile or marble materials.

respondents in order to see which, if any, of these factors are associated with inter-spouse discussion. Next, as observed differentials may be associated with compositional differences in these background variables, we use multivariate analysis to estimate net

effects, presented as adjusted odds ratios relative to an arbitrary reference category for each variable.

Table 7 shows that married Kathmandu youth are more likely to discuss family planning with a partner than youth from other urban locales. However, adjusted odds ratios show that with other background characteristics controlled, Lalitpur and Pokhara youth are the most likely to discuss contraception in this context, although the differences are not statistically significant. Both bivariate and multivariate analysis show that married youth from Biratnagar and Birgunj are less likely to discuss family planning with their partner than are young married respondents from the other three urban locales. By ethnicity, Chhetri youth are most likely to discuss family planning issues with a spouse; this finding is confirmed under multivariate analysis, also. Young marrieds with higher household living standards are more likely to discuss family planning with a spouse than are those from lower household living standards; this finding also remains after controlling the effects of other variables. Table 7 shows that the observed differential between married females (71 percent) and married males (65 percent) holds up under multivariate analysis and that the difference is statistically significant.

Young marrieds from the older age groups (ages 17-22) are more likely to discuss family planning with a spouse than youth from youngest age groups (14-16). Similarly, inter-spouse discussion is significantly associated with education, although the small observed differential according to work status is not significant.

### **Ever use of contraception**

Young married male and female respondents who said they had heard of family planning were asked if they had ever used a method. (Ever use makes no distinction between past and current use.) Collection and analysis of ever use data have special significance for family planning programs. These data indicate the proportion of the young population having exposure to contraceptive use.

While over 98 percent of young married both male and female (14-22) reported having knowledge of at least one modern method of family planning, only 40 percent reported ever using a method. Table 18 shows that 43 percent of married males and just under 40 percent of females said they had ever used contraception.

**Table 8.** Percentage of married youth (14-22) respondents ever used a contraception: Urban Nepal, 2000

Ever used	Male	Female	Total
Yes	43.4	39.6	40.3
No	56.6	60.4	59.7
Total	100.0	100.0	100.0
Number of cases	113	450	563

Ever users were asked what was the first method they used. Table 9 shows that nearly all respondents first used either condoms (46%), injectables (32%) or oral contraceptives (17%). Married men were more likely to report condoms; married women more likely to say they first used injectables. Less than one-half percent said they first used a traditional method.

**Table 9.** Percent distribution among married youth (14-22) respondents according to first method used: Urban Nepal, 2000

First method	Male	Female	Total
Condom	58.0	42.5	45.9
Injectables	12.0	37.0	31.6
Pill	16.0	16.6	16.5
Foam/Jelly	8.0	0	1.7
Implant	6.0	0.6	1.7
Withdrawal	0	1.1	0.9
IUD	0	0.6	0.4
Female sterilization	0	0.6	0.4
Male sterilization	0	0.6	0.4
Rhythm	0	0.6	0.4
Total	100.0	100.0	100.0
Number of cases	50	181	231

The following table shows that married females initiated contraceptive use at an earlier age than married males. Over 21 percent had started to use a method by age 16, a rate more than twice that for males. Over half of the married females started use at age 17-19; less than a fourth at age 20 and over. Among married males, more than half began use at age 20 and over. These data indicate that Nepalese youth appear willing to try methods early in their reproductive lives.

**Table 10.** Percent distribution among married youth (14-22) ever-users of contraception, according to age at first use: Urban Nepal, 2000

Age group	Male	Female	Both
12-16	10.0	21.4	18.8
17-19	38.0	54.2	50.5
20-22	52.0	24.4	30.7
Total	100.0	100.0	100.0
Number of cases	50	168	218

In order to assess the relative importance of various sources of contraceptive supply, the NAYA survey included a question about where ever users of contraception obtained their method. Forty two percent said they obtained their (first) method from a pharmacy; 34 percent and 12 percent respectively reported they obtained the method from hospitals/health posts and private clinic respectively (data not shown in a table). These data, along with the distribution of first method used as given in Table 9, suggest that many ever users purchased condoms from a pharmacy rather than obtaining them free from government hospital and health posts.

### Current use of contraception

In a society in which fertility out of wedlock is not socially acceptable, questions regarding current use of family planning to single males and females are not appropriate. For this reason, only currently married respondents were asked about their current contraceptive behavior.

Tables 11 and 12 show the percent of currently married males and females currently using a method of family planning (known as *contraceptive prevalence*), and the percentage distribution of both sexes by current method. The findings show that one fourth of married youth age 14-22 are currently using contraception in Nepal. A slightly higher percentage of females (25%) than males (23%) said they were current users.

**Table 11.** Percent of married youth (14-22) respondents currently using contraception: Urban Nepal, 2000

Currently using	Male	Female	Total
Yes	23.0	25.3	24.9
No	77.0	74.7	75.1
Total	100.0	100.0	100.0
Number of cases	113	450	563

Modern methods account for nearly all current use (Table 12). The most popular current method by far is injectables, which accounts for over half (53%) the total use by married women. The second most popular method, condoms, is used by 20 percent of women and 30 percent of men, while oral contraceptives (the pill) account for 12 percent of all users. About 5 percent of current users—presumably those who have already achieved their desired family size—are using a permanent method.

**Table 12.** Percent distribution of married youth (14-22) contracepting respondents according to current method: Urban Nepal, 2000

Currently used method	Male	Female	Total
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Injectables	25.9	53.0	47.9
Condom	29.6	20.0	21.8
Pill	18.5	10.4	12.0
Withdrawal	7.4	4.3	4.9
Female sterilization	3.7	4.3	4.2
Implant	11.1	1.7	3.5
Rhythm	0	4.3	3.5
IUD	0	0.9	0.7
Foam/Jelly	3.7	0	0.7
Male sterilization	0	0.9	0.7
Total	100.0	100.0	100.0
Number of cases	27	115	142

### Differentials in contraceptive use

One of the objectives of the family planning module of the NAYA survey was to determine which socio-economic background variables are associated with ever- and current use of contraception. As shown in Table 13, ever use is highest in Kathmandu (64%), but Lalitpur's 50 percent prevalence is highest for current use. Biratnagar and Birgunj have the lowest levels, with Pokhara in the middle. The wide range reported for current use suggests the varying intensity of family planning program effort in urban centers.

Among ethnic groups, Chhetri are most likely to be ever users, while Newars have the highest rate of current use. Curiously, ever use is higher among those with a higher household living standard, while those with a lower standard are slightly more likely to be currently practicing contraception. Respondents born in rural areas are substantially more likely to be both ever and current users than those born in urban areas—half again as likely to have ever used a method, and nearly twice as likely to be currently contracepting.

Both measures of contraceptive use are strongly and positively associated with respondent's age. Ever use increases from 17 percent among those aged 14-16 to nearly 50 percent among those aged 20-22. The relative differential is even greater for current use: a 6 percent prevalence is reported among 14-16 year-old marrieds, compared to 29 percent among those aged 20-22.

Ever use increases with age at marriage. Respondents who were married at age 18 or higher are more likely to have ever used a method than those married before age 18: 46 percent versus 38%. The differential for current use is smaller, and favors those married at the earlier age.

The relationship between contraceptive use and the number of children ever born is a complex one. Ever use peaks at 47 percent of respondents with one or two children,

**Table 13.** Percentage of married youth (14-22) respondents ever using contraception and currently using contraception, by selected characteristics: Urban Nepal, 2000

Characteristic	Ever using contraception	Currently using contraception
Urban locale		
Kathmandu	63.8	47.5
Lalitpur	62.3	50.0
Pokhara	45.1	23.2
Biratnagar	21.6	14.6
Birgunj	31.7	10.4
Ethnicity		
Brahman	40.4	25.0
Chhetri	58.0	40.0
Newar	51.6	45.2
All other	36.7	18.8
Household living standard <sup>a</sup>		
Lower	37.6	23.4
Higher	52.8	19.1
Birthplace		
Urban	33.9	17.7
Rural	48.7	30.0
Sex		
Male	43.4	21.2
Female	39.0	23.3
Age at marriage		
Less than 18	37.6	23.2
18 and over	46.4	21.2
Total number of children ever born		
None	34.4	12.7
1	47.3	33.7
2	46.9	34.7
3 or more	25.0	12.5
Age group		
14-16	16.9	5.6
17-19	37.2	19.1
20-22	46.8	28.7
Education		
None	22.7	14.7
Primary	34.4	20.1
Secondary or higher	54.7	29.7
Work status		
Not working	35.8	19.4
Working	49.4	30.1
Total	40.0	22.7
Number of cases	563	563

<sup>a</sup>Household living standard is a composite variable. Higher status refers to a house having all the following four attributes: piped water, toilet with pan or flush system, roof made of concrete materials, and floor made with cement, tile or marble materials.

. and then declines—precipitously—to 25% among those with three or more children. Current use has a similar association: one third of those with one or two births are currently practicing, compared with 13 percent of those with no children or more than two. This finding is likely explained by the relative fertility and family size goals of respondents at differing parities: those with no children are likely seeking to have a first birth before adopting a method to space future pregnancies, while young adults who already have three or more children are likely to have either high family size norms or be uninformed about family planning—or both.

A strong and positive association is seen between education and both indicators of contraceptive use. Among those with no education, 23 percent have ever used a method and 15 percent are currently practicing. For those who have gone beyond the secondary level of schooling, well over half (55%) are ever-users and 30 percent are currently using a method. A similar differential is found for those currently working relative to those not working.

As discussed earlier in regard to spousal discussion and approval of family planning, differentials in ever and current use may be associated with differentials in socio-economic background variables. In order to examine the influence of these background factors on ever and current use of contraception among married youth in Nepal and to estimate net effects of the variable considered, multivariate analysis was carried out, yielding adjusted odds ratios as given in Table 14. The table presents adjusted effects of residential locale, ethnicity and other selected variables on ever use and current use of contraception.

Relative to residents of Kathmandu, those living in Pokhara, Biratnagar and Birgunj are significantly less likely to have ever used contraception or be a current user. These differences are substantial, and point out where future program efforts could be focused.

A study by Aryal (1995) shows that Brahmans use contraception mainly for limiting family size rather than spacing. Chhetris are significantly more likely than Brahmans to have ever used a method, while there are no significant differences in current use among the ethnic groups surveyed.

Married youth from higher standard of living households report higher ever use and lower current use of contraception, although the differences are not statistically significant. Similarly, both indicators are higher—though not significantly so—for those who were born in rural areas than who were born in urban areas.

A significant difference in current use is found according to age at marriage. Those married before age 18 are more likely to be practicing than those born at age 18 or over.

Education is also closely linked with levels of ever and current use. Relative to those with a primary education, respondents with no schooling are half as likely to have ever used or be currently using contraception, while those who have gone beyond the secondary level are more than twice as likely.



**Table 14.** Adjusted effects (relative odds ratios) of selected background factors on ever and current use of modern contraception method among married youth respondents (14-22): Urban Nepal, 2000

Characteristic	Ever use	Current use
Urban locale		
Kathmandu	1.0 (r)	1.0 (r)
Lalitpur	1.091	.916
Pokhara	.487*	.249***
Biratnagar	.231***	.184***
Birgunj	.466*	.140***
Ethnicity		
Brahman	1.0 (r)	1.0 (r)
Chhetri	2.579*	1.576
Newar	2.221	2.611
All other	1.856	1.298
Household living standard <sup>a</sup>		
Lower	1.0 (r)	1.0 (r)
Higher	1.448	.752
Birthplace		
Urban	1.0 (r)	1.0 (r)
Rural	1.477	1.122
Sex		
Male	1.0 (r)	1.0 (r)
Female	1.128	.873
Age at marriage		
Less than 18	1.0 (r)	1.0 (r)
18 and over	.679	.416**
Number of children ever born	1.212	.171***
Age Group		
14-16	.439*	.324
17-19	1.0 (r)	1.0 (r)
20-22	1.484	1.550
Education		
None	.470*	.542
Primary	1.0 (r)	1.0 (r)
Secondary or higher	2.629***	2.183**
Work Status		
Not working	1.0 (r)	1.0 (r)
Working	1.789*	1.936*
Number of cases	561	561

(r) = reference category.

\* p ≤ .05, \*\* p ≤ .01, \*\*\* p ≤ .001.

<sup>a</sup>Household living standard is a composite variable. Higher status refers to a house having all the following four attributes: piped water, toilet with pan or flush system, roof made of concrete materials, and floor made with cement, tile or marble materials.

Finally, work status is often considered to be a major determinant of fertility behavior, and thus show strong associations with contraceptive use. Table 14 shows, even controlling the effect of other variables, a clear pattern that married youth who were working show higher levels of ever and current use of contraception than those not in the work force.

## **SUMMARY AND CONCLUSION**

Nepal's family planning program was formally initiated in 1968. Its aim has been to encourage couples to practice contraception and to make family planning services available and accessible to all couples in need. Conventionally, the services have been limited to married couples only. Not surprisingly, nearly all the family planning surveys conducted over the years in Nepal has focused on married women. Very little is known about the unmarried male and females, particularly those under 25 years of age.

The situation is, however, changing. Following the 1994 International Conference on Population and Development (ICPD), there has been greater awareness and recognition on the part of the government as well as the private sector to given attention to the needs of the youth population (Thapa et al. 2001). The marital eligibility criterion for access and use of family planning services has been dropped, although it will take time for the program to cater to the needs of the unmarried young people in a user-friendly manner.

The NAYA survey focuses on the young adult population of Nepal, a group for which little representative survey data exist in the area of reproductive health. Moreover, this survey also included both married and unmarried youth, and interviewed a sufficient number of individuals to yield age- and marital status specific results within the 14-22 year age group. Accordingly, information obtained from the survey provides new insights into policy implications for Nepal.

This paper focuses on analyses of data pertaining from the family planning module of the survey. Knowledge and practice of methods of fertility regulation are analyzed, based on individual-level interviews in the five large urban areas of Kathmandu, Lalitpur, Pokhara, Biratnagar and Birgunj.

One of the major findings is that almost all young adults (99 percent) interviewed as part of the survey are aware of at least one method of contraception, and 93 percent of them state that they are generally familiar with how to use it. It is also found that single males and females are generally more aware about contraception than are their married counterparts.

Television is the most common source of information about contraception among youth in urban Nepal, followed by radio and newspapers. Friends are also an important

source of information, though less so than the electronic or printed media. These findings suggest that these means of communication, most popular among the young adult population, should be used to provide information about family planning for youth of urban Nepal.

Over two thirds of married youth, both male and female, have discussed family planning with their partners. Respondents who had not discussed asked the reason why they had never done so. Over half reported that they were embarrassed/hesitant in discussing this topic with their spouse. One of the strategies of the family planning program should be to encourage partners to talk with each other about this important subject, and to provide tools to enable them to do so.

The ever and current use of contraception are also different with different backgrounds of respondents. Biratnagar and Birgunj youth are less likely to have ever used or be currently using contraception than those from any of the other three urban locales. Among ethnic groups, Newar are the higher current users than other ethnic groups. There is sharp difference between educational levels. Higher the educational level of respondents higher is the ever and current use of contraception. Similarly, current and ever use of contraception are higher among working groups than their not working groups. These findings suggest that family planning program should give more attention not only to ethnic disparity but also to Terai areas. Moreover, government policies and programs should be focussed to implement population education program at school level education.

As knowledge and use of family planning is shown to be positively associated with education, a clear implication of the findings of the present study is to give priority to educational opportunities for young women. More educated persons tend to participate more in fertility decision-making and are more likely to know about and use family planning contraception.

It is hoped that the findings of this report, in conjunction with other inputs, will assist those in policy and program management positions in Nepal to address the family planning needs of the nation's young adult population. Improving the reproductive health of the next generation at the beginning stages of its childbearing years is not only the right thing to do, but it is likely to have a lasting and positive impact on the quality of life and improve social and economic conditions throughout Nepal. ❖

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