

Original Research



Factors affecting the use of most preferred method of modern contraceptives among married women in the district of Dang, Nepal

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DOI: <https://doi.org/10.4038/jccpsl.v24i2.8130>

Received on: 11 November 2017

Accepted on: 28 June 2018

Abstract

Background: Improving reproductive health is central to achieving sustainable development goals on improving maternal health, reducing child mortality and eradicating extreme poverty. This requires access of the women to safe and effective methods of fertility control.

Objective: To identify the factors that affect the preferred use of modern contraceptives

Methods: A cross-sectional study was conducted in Ghorahi, District Dang, Nepal in 2015 among 176 married women of reproductive age currently on a modern contraceptive method. Simple random sampling method was used for recruiting the sample. Data were collected on the characteristics of women, their most preferred modern contraceptive method, and the currently used contraceptive method including its mode of supply and decision making status, using a semi-structured interviewer-administered questionnaire.

Results: Among 176 women in the sample, 30.1% were of 25-30 years in age while 79% were literate. Around 57% had adequate knowledge on modern contraceptives. With regard to current modern contraceptive practices, women relied on hospitals (38.6%) and family planning clinics (28.4%) as the main sources for contraceptives. Their decision on the current method was based on their own choice (60.8%) or of others (39.2%) while contraceptives were either self-prescribed (78.4%) or prescribed by others (21.6%).

Depo-Provera (58.5%) was the most preferred modern contraceptive method while Norplant (2.8%) was the least preferred. Majority of the women (84.7%) were using contraceptives according to their preference. Among others, the most preferred method could not be practised due to denial by husband (51.9%), side effects (18.5%) and contraindications (29.6%). Current practice of women using the most preferred modern contraceptive method was significantly associated with decisions made on their own on contraceptives ($p=0.01$) and with self-prescribing of contraceptives ($p=0.01$).

Conclusions: The current use of modern contraceptives in the majority of women was according to their preference. This status could be further improved by conducting programs related to effective counselling to enable couples on decision making before adopting any modern contraceptives.

Key words: cross-sectional study, family planning, contraceptives, district Dang

Introduction

Globally each year, nearly 350,000 women die while another 50 million suffer illness and disability from complications of pregnancy and child birth (1). Family planning is shown to have a strong effect on the health of women, children and families worldwide especially in the developing countries. This requires that women have access to safe and effective methods of fertility control. Therefore, promotion of family planning, so that women can avoid unwanted pregnancies, has been central to the World Health Organization (WHO) work on improving maternal health and is the core for achieving millennium development goals (2).

The total fertility rate of the world during 1970, 1980 and 2004 had been 4.8, 3.7 and 2.6, respectively. This reduction has contributed substantially to the decrease in population growth rate in the world 1.9% during 1950-1980; 1.7% during 1980-1990 and 1.4% during 1990-2004 (3). The reduced fertility rates are assumed to be the result of an increase in the use of family planning methods from 10% in 1960 to more than 60% in 2003. This decline in fertility and shifting to smaller families occurred much faster in developing countries. Earlier studies in 1990s have shown that about half the fertility decline in the developing countries is largely attributable to the family planning programs since 1960s. Further, after decades of implementing family planning programs worldwide, it has been realized that family planning is not only a means to control population and prevent unwanted pregnancies but also to provide many other benefits for improving the overall health status of mothers, children and families, and the quality of life of people. A variety of methods of contraception are available, which are generally safe (4). Further expanding the family planning options available for women is a critical part in increasing the contraceptive coverage, decreasing the unintended pregnancy and reducing the maternal morbidity and mortality around the globe.

The use of contraceptives has increased in many parts of the world especially in Asia and Latin America. However, the use of modern contraception has risen only slightly from 54% in 1990 to 57% in 2012. The proportion of women aged 15-49 years reporting the use of modern contraceptive methods has risen minimally or plateaued between 2008 and 2012. However, significant variation is noted in the regions.

In Africa, it has increased from 23% to 24%; in Asia, it has remained at 62%; and in Latin America and the Caribbean, it has increased slightly from 64% to 67% (5).

According to the Census 2011, Nepal has a population of 26.4 million with an inter-censal population growth rate of 1.35% and total fertility rate of 2.5 (6). The National Health Policy Nepal took an initiative in 1991 to expand and sustain adequate family planning services at the village level through health facilities and to encourage the private sector participation to complement and supplement the government efforts. The Nepal Demographic Health Survey in 2006 indicated that 48% of the married women were using family planning methods, of whom 44% were using modern contraceptives (7).

Despite the progress made in family planning, there are still 201 million women in developing countries including Nepal who are in need but not using modern contraceptives; 137 million women at risk of unintended pregnancy are not using any method while an additional 64 million are relying on traditional methods for family planning (8). With regard to Nepal, the contraceptive prevalence rate has been relatively low with a default rate of 6%, resulting in a high total fertility rate (2.5%) (4, 9-10). This highlights an excessive unmet need (27%) compared to other countries, which may be due to the gap between the preference and use of preferred modern contraceptives. Therefore, this study was conducted with the aim of identifying the various factors that influence the preferred use of modern contraceptives.

Methods

A community-based, cross-sectional study was carried out in Ghorahi Municipality area in the district of Dang, Nepal during the period of January-March 2015. This district is situated in mid-Western part of the country in an area of 2,995 km² and has a population of 584,141 (11). The sample comprised 176 married women in the reproductive age (15-49 years) who were currently on a modern contraceptive method and residing in Ghorahi during the study period. Un-married women, widows and non-users of contraceptives were excluded. The sample size was calculated as 384 in order to detect an expected proportion of 50% of women using a contraceptive according to their own choice with Z value of 1.96 and precision of 5%. Simple random sampling technique was used to select the

sample, while taking the voter list as the sampling frame and lottery method for random selection.

A pre-designed interviewer-administered questionnaire with open- and closed-ended questions was used to obtain data on socio-demographic characteristics of the participants, their most preferred modern contraceptive method, type and source of the currently used contraceptive method, and the mode of supply (prescribed by health care worker or self-prescribed) and decision making on the current method (own choice or choice of others). The questionnaire was prepared in English language and later translated to local Nepali language and pretested before data collection. Data collectors were identified on the basis of having adequate knowledge on the subject matter and background. They were given a training followed by regular supervision done to minimize error.

Data were analysed using the Statistical Package for Social Sciences (SPSS) software version 18. Descriptive statistics and chi-squared test were used for data analysis. Ethics approval was taken from the NIHS College Research Committee and District Public Health Office, Dang, Nepal. Verbal informed consent was taken from all the participants before interviewing and was assured about the privacy and confidentiality.

Results

A total of 384 participants were initially invited for the study. Of them, 150 refused to participate while 58 were not available during the time of data collection, giving a non-response rate of 54.2%. Of the 176 participants who were interviewed, majority (30.1%) were from the 25-30 year age group, followed by 20-25 year age group (22.2%) (Table 1). Their age ranged from 17 to 45 years. Mean age was 29.71 years (SD=6.72) while the median age was 30 years. Nearly 80% were literate while 39.8% had two children and 21.6% only one child. The majority (57.4%) had adequate knowledge on modern contraceptives. A total of 94 (53.4%) participants had fear of side effects, while a similar proportion (52.8%) was educated on the mechanism of modern contraceptives by healthcare workers.

The most preferred method of modern contraceptive in the sample was Depo-Provera injection (58.5%), followed by oral contraceptive pill (25.6%), Copper T (8%), female sterilization (5.1%) and

Norplant (2.8%) (Figure 1). The modern contraceptive method that they were currently on was according to this preference in the majority of participants (n=149, 84.7%). Others (n=27, 15.3%) were not using their most preferred method because of its denial by their husbands (n=14, 51.9%), side effects on health (n=5, 18.5%) and due to contraindications (n=8, 29.6%). In the same group of women (n=27), 77.8% were literate and 41.6% had inadequate knowledge on modern contraceptives.

With regard to the current practice of modern contraceptives in the sample, they relied on different sources, with the majority receiving it from hospital (n=68, 38.6%) or family planning clinic (n=50, 28.4%) (Table 2). Decision on the current contraceptive method was made by 107 (60.8%) based on their own choice and by 69 (39.2%) based on the choice of others. Majority (n=138, 78.4%) self-prescribed the contraceptives while 21.6% (n=38) got it prescribed by a healthcare worker. Current use of the most preferred modern contraceptive among women was significantly associated with decisions made on their own on contraceptives (p=0.01) and with self-prescribing of contraceptives (p=0.01) (Table 3).

Table 1. Characteristics of the women in the sample (N=176)

| Characteristic | No. | % |
|----------------------------------|-----|------|
| Age (in years) | | |
| 15 – 20 | 15 | 8.5 |
| 20 – 25 | 39 | 22.2 |
| 25 – 30 | 53 | 30.1 |
| 30 – 35 | 34 | 19.3 |
| 35 – 40 | 24 | 13.6 |
| 40 – 45 | 11 | 6.2 |
| Educational status | | |
| Literate | 139 | 79.0 |
| Illiterate | 37 | 21.0 |
| Educational level (n=139) | | |
| Informal education | 23 | 16.5 |
| Class 1 to 5 | 20 | 14.4 |
| Class 6 to 10 | 59 | 42.4 |
| Above class 10 | 37 | 26.6 |

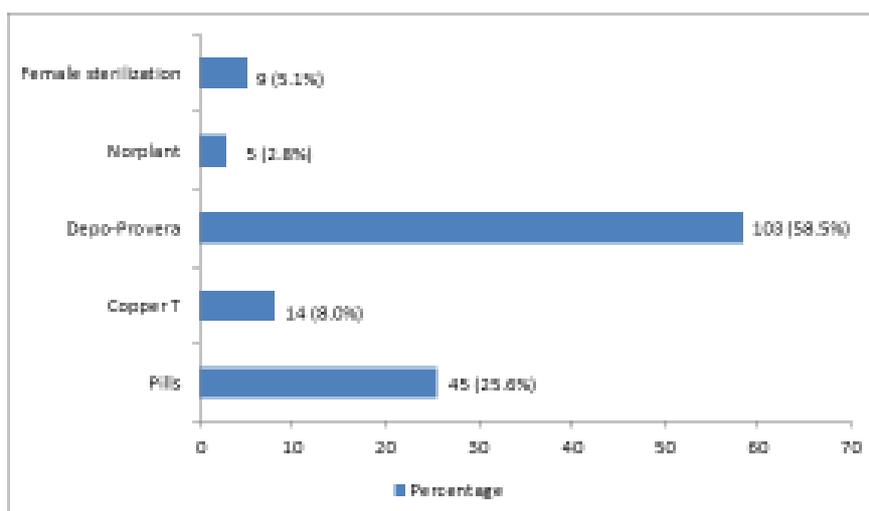


Figure 1. Preferred use of modern contraceptives among women in the sample (N=176).

Table 2. Sources used in the current practice of modern contraceptives in the sample (N=176)

| Source of modern contraceptive | No. | % |
|------------------------------------|------------|--------------|
| Pharmacy | 37 | 21.0 |
| Hospital | 68 | 38.6 |
| Health post | 14 | 8.0 |
| Family community health volunteers | 5 | 2.8 |
| Family planning clinic | 50 | 28.4 |
| Husband | 2 | 1.1 |
| Total | 176 | 100.0 |

Table 3. Associations of their use of the most preferred modern contraceptive with decision making status of women and mode of choice (N=176)

| Factor | Current use of their most preferred modern contraceptive, No. (%) | | | p value ¹ |
|--|---|-------------------|-------------------|----------------------|
| | Yes (n=149) | No (n=27) | Total | |
| Decision making status of women | | | | |
| Self | 97 (65.1%) | 10 (37.1%) | 107 (60.8%) | 0.01 |
| Others | 52 (34.9%) | 17 (62.9%) | 69 (39.2%) | |
| Mode of supply | | | | |
| Self-prescribed | 122 (81.8%) | 16 (59.3%) | 138 (78.4%) | 0.01 |
| Prescribed by others | 27 (18.2%) | 11 (40.7%) | 38 (21.6%) | |
| Total | 149 (84.7%) | 27 (15.3%) | 176 (100%) | |

¹Bold lettering indicates significant associations at 5% significance level.

Discussion

Modern family planning methods are preferred for many reasons such as pregnancy planning, limiting the number of children, avoiding unwanted pregnancy and avoiding health risks (12-13). Currently there is a variety of safe modern contraceptives available and to select from. Yet, there are many unwanted pregnancies, large family size and less spacing between the children.

Our study showed that Depo-Provera was the most preferred (58.5%) modern contraceptive by women. Similar results had been reported in a study in the district of Khotang, Nepal conducted in a camp (14), and also in the latest demographic health survey and in some developing countries (7, 15). However, the neighbouring developing countries show that pills and intrauterine devices are commoner (16-17). In contrast, a study conducted in Kenya revealed that the most preferred future contraceptive method is injectable (18).

Over time, the tendency among nonusers to consider injectables as their preferred future contraceptive method has increased from 33% in 1989 to 40% by 1998, in contrast to a declining trend seen with pills (from 31% in 1989 to 21% by 1998). In contrast, the preference for female sterilization has sharply increased across years with increasing age and number of living children. Female sterilization is particularly popular among older women (over 35 years) and those with at least five living children, with at least one in five citing it as the preferred future method. Preference for injectables by age or number of living children is less consistent, but there is some indication that the method is less popular among young women or those with no living children. In general, higher educational attainment is associated with increased preference for the pill and other methods, while low education is associated with increased preference for female sterilization and to some extent for injectables. The pill is by far the preferred method of choice at first use. Studies show that irreversible contraceptive methods tend to be chosen by older women with higher educational level who have completed the desired family size or have at least two children (19-21).

In the current study, the majority of participants practised their most preferred modern contraceptive method (n=149, 84.7%). A prospective study in Indonesia (22) showed that discontinuation is predo-

minantly related to their contraceptive choice. In a study conducted to assess the compliance to contraceptive methods over 12 months, 86% of the users were offered their chosen method. Nearly three-fourths of those whose choice was denied discontinued in the first year, compared to only 9% discontinuation among women who received their method of choice (3).

In the current study, 51.9% of the women who were not on their most preferred modern contraceptive method faced denial from husband. The role played by male partner in the discontinuation of contraceptives has been shown in a study in Sunsari an Eastern Terai district, reflecting the male dominance in the society that is attributed to social norms in the South Asian region (23). Also, contraceptives were predominantly used for limiting child birth than for spacing, showing a higher unmet need for spacing, as observed in the study at Sunsari.

In the current study, side effects on health (18.5%) and contraindications (29.6%) were seen as major reasons for not being on their most preferred modern contraceptive method. In a study conducted among slum dwellers in New Delhi, more than 70% women claimed that their experience of side effects such as irregular menstruation following the pill and ill health from tubectomy were the leading reasons for not using any method (24). Another study in Maldives suggested various obstacles to modern contraceptive use among married women; husband's disapproval of modern contraceptive use, poor communication between wife and husband on use, health concerns and fear of side effects, wife's refusal to use modern contraceptives and dissatisfaction with sexual sensation with using contraceptives (25). Some of these factors were observed in our study.

In the current study, using the most preferred modern contraceptive among women was significantly associated with decisions made on their own on contraceptives (p=0.01) and with self-prescribing of contraceptives (p=0.01). Males play a vital role in the decision making on fertility within and outside the family, and should therefore be educated on being sensitive on the choices of female partner. In this regard, offering many method choices encourages the use of contraception among women, making it easier to choose a method that they like and to switch methods. It is shown that the proportion of married women using contraception could increase by 3.3%, for each additional contraceptive method that is widely available in a country (5).

Conclusions and Recommendations

Our study shows that Depo-Provera was the most preferred (58.5%) modern contraceptive method while the least preferred was Norplant (2.8%) among married women in Nepal. Majority (84.7%) were using modern contraceptives according to their preference. Factors significantly affecting the use of most preferred modern contraceptives were based on the decision making and self prescription of contraceptives. Programs to improve the decision making process of women should be initiated by service providers for couples seeking services on modern contraceptives.

Public health implications

Improving reproductive health is central to achieving sustainable development goals on improving maternal health, reducing child mortality and eradicating extreme poverty, which requires access to safe and effective methods of fertility control. This study describes factors that affect the use of most preferred modern contraceptives related to their independent decision making process. These findings highlight the need for addressing this issue for ensuring better reproductive health care for Nepalese women.

Author Declarations

Competing interests: None

Ethics approval and consent to participate: The study protocol was approved by NIHS College Research Committee, Kathmandu, Nepal (Reference No. 2015/11). Verbal informed consent was taken from all the participants before interviewing.

Funding: None

Acknowledgments: Our deepest appreciations to all the participants of the study.

Author contribution: SS participated in designing the study, data collection, data entry and analysis, data interpretation, draft writing and editing. PG and PP participated in designing the study, data entry and analysis, data interpretation, draft writing and editing. MHS has participated in study design, data analysis and data interpretation, draft writing, editing and submission. All authors have read and approved the final manuscript.

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