

Family Planning Practices Prior to the Acceptance of Tubectomy: A Study Among Women Attending a Maternity Home in Bangalore, India

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ABSTRACT

Introduction: The extent of acceptance of contraceptive methods still varies within societies. Reliance on sterilisation is appearing earlier in marriage and among ever-younger ages and lower parities.

Aim and Objective: To study the family planning practices adopted by women who undergo tubectomy before the acceptance of tubectomy.

Material and Methods: Cross-sectional study of tubectomy acceptors who attended a corporation referral maternity home

in Bangalore, India by interview method using a pre-designed a pre-tested structured questionnaire.

Results: Majority 295(73.9%) of the study subjects had not practised any method of contraception before they underwent sterilisation. Increase in the education levels of the study subjects was associated with an increase in the contraceptive use (temporary methods) before they accepted tubectomy; this association was found to be statistically significant ($p < 0.0001$).

Key words: Family planning, Tubectomy, Education, Birth interval

INTRODUCTION

Studies from several developing countries have revealed that surprisingly large number of sterilisation adopters had never used contraception before, suggesting that the women who had the desired family sizes were more concerned about terminating their fertility rather than spacing their births.

When India became “target free” in 1996, the government proclaimed that a ‘basket of services’ would be provided to address the multiple reproductive health needs of the clients. The National Population Policy articulated the ICPD principle of the right of individuals to decide freely and responsibly, the number and spacing of their children and to have the information and means to do so. The RCH rapid household survey which was conducted in the same year as NFHS-2, reported that the unmet need was higher among younger (25%) than among older (17%) women and that most of it was for spacing their births. These findings underscore the importance of providing reversible contraceptive methods to young women [1]. India was the first country in the world to launch a family planning programme in 1952. Undue emphasis which was laid on terminal methods in the programme resulted in a shift in the priority for spacing methods, the use of which not only helps to bring down the birth rate, but also ensures better health for the mother and the child. In the seventh five-year plan (1985-1990), special emphasis was laid on the use of spacing methods on a massive scale, to improve the couple protection rate, especially for the younger age group. However, it made little positive impact, since the percentage of users of spacing methods in the country remained unchanged at the same level of 12.2 percent (National Family Health Survey-2). As per NFHS-2, 15.8 percent of the couples felt the need for spacing or limiting the family, although they were not using any method of contraception. For the effective use of spacing methods by different population groups in our country, there is an urgent need to create awareness among these segments [2].

MATERIAL AND METHODS

This study was conducted at a corporation referral maternity

home in Bangalore, India for a period of one year, between November 2004 to November 2005. This was a descriptive study of all the current tubectomy acceptors at the maternity home during the study period, who included those acceptors who were brought during tubectomy camps, from areas other than the catchment area of the maternity home. Data was collected regarding the family planning practices of the study subjects by the interview method, by using a pre-designed and a pre-tested structured questionnaire. The Chi-square test was used to test the significance of the results.

RESULTS

Among 399 tubectomy acceptors 381(95.5%) had an interval of 1 to 3 years between their ages at marriage and their ages at the first childbirth [Table/Fig-1]. Median interval between marriage and first child birth was 1 year, with a range of 1–10 years. The mean interval between age at marriage and age at first childbirth was found to be 1.49 ± 1.12 years. The median birth interval between children of the acceptors decreased from the first child to the fifth child [Table/Fig-2]. Median birth interval between the most recent birth and the previous birth in the present study was found to be 3 years. A majority 295(73.9%) of the study subjects had not practised any method of contraception before they had undergone sterilisation. Among those who had used a spacing method, the commonest method was an IUD, which was used by 63 (15.8%) of the study subjects [Table/Fig-3]. As many as 343 (86%) of the acceptors were not aware of the use of condoms in the prevention of STDs/HIV [Table/Fig-4]. Many of them had no knowledge about them at all, while others had heard about condoms, but had not known about their uses. This finding was particularly important in the context of the HIV/AIDS epidemic.

[Table/Fig-5] depicts the use of temporary methods of family planning (spacing methods), any time prior to the acceptance of tubectomy, in relation to the education of the study subjects. 295(73.9%) of the study subjects had not used any method of family planning before they had accepted tubectomy and it was evident in the “not literate”, “primary schooling” and “secondary

schooling” categories. However, in the “PUC/degree/ PG” category, a majority 21 (51.2%) had used family planning methods before they had accepted tubectomy. It was observed that with increasing education levels, the proportion of family planning methods which was used prior to tubectomy, was found to increase, which probably was due to the increased awareness levels regarding family planning. This association between the education of the study subjects and the practice of contraception before they had accepted tubectomy was found to be statistically significant ($p < 0.0001$).

Interval (years) between age at marriage & age at first childbirth	No.	%
1-3	381	95.5
4-6	14	3.5
7-9	2	0.5
10-12	2	0.5
Total	399	100

[Table/Fig-1]: Distribution of the study subjects according to the interval between age at marriage and age at first childbirth (n =399)

Birth Interval	Mean	Median	Minimum	Maximum
1 st -2 nd Child	2.98 years	3.00 years	0 years*	11 years
2 nd -3 rd Child	2.94 years	2.50 years	1 years	13 years
3 rd -4 th Child	2.97 years	2.00 years	1 years	8 years
4 th -5 th Child	1.5 years	1.5 years	1.5 years	1.5 years

[Table/Fig-2]: Distribution of the study subjects according to the birth interval between the children of study subjects (n =399) *Twins

Family Planning Method Used	No.	%
None	295	73.9
OCP	6	1.5
Condoms	13	3.3
IUD	63	15.8
OCP and Condom	1	0.3
OCP and IUD	11	2.7
IUD and Condom	8	2.0
Others	2	0.5
Total	399	100

[Table/Fig-3]: Distribution of the study subjects according to the use of temporary methods of family planning any time prior to the acceptance of tubectomy (n =399)

Awareness	No.	%
No	343	86
Yes	56	14
Total	399	100

[Table/Fig-4]: Distribution of the study subjects with respect to their knowledge of the use of condoms in the prevention of STDs/HIV (n =399)

Education of the Study Subjects	Previous H/o Family Planning				Total
	Yes		No		
	No.	%	No.	%	
Not literate	13	16.7	65	83.3	78
Primary Schooling	22	17.9	101	82.1	123
Secondary Schooling	48	30.6	109	69.4	157
PUC/Degree/PG	21	51.2	20	48.8	41
Total	104	26.1	295	73.9	399

[Table/Fig-5]: Distribution of the study subjects with respect to their education and the use of temporary methods of family planning any time prior to the acceptance of tubectomy (n =399) Chi square: 22.96 df: 3 $p < 0.0001$

DISCUSSION

The present study observed that a majority of the study subjects 381(95.5%) had an interval of 1 to 3 years between their ages at marriage and their ages at the first childbirth. If the needs of young, married couples could be addressed, the fertility decline could be significantly accelerated. Increasing the intergenerational gap by delaying the first birth is an important strategy for countering the population momentum effect, which accounts for over 60% of population growth in India [1]. Sterilization is the most commonly used contraceptive method world-wide. China has the highest number of sterilized population (70 million), followed by India (36 million) in the world. However, the newly married women in India who have not completed one year of their marriages should be targeted, to motivate them to use contraceptive methods, which would lead to postponement of their pregnancies. A delayed pregnancy can make a positive difference in the socioeconomic status of the individual, the family and the community as a whole [3].

The median birth interval between children of the acceptors was found to decrease from the first child to the fifth child. Median birth interval between the most recent birth and the previous birth in the present study was found to be 3 years; this is almost similar to the findings of the NFHS-2 study [4], wherein the median birth interval between the most recent birth and the previous birth was found to be 2.56 years. From [Table/Fig-3], it can be observed that a majority [295(73.9%)] of the study subjects had not practised any method of contraception before they had undergone sterilisation. Among those who had used a spacing method, the commonest method was IUD, which was used by 63 (15.8%) of the study subjects. R K Narendra Singh, T Ibetombi Devi, Th. Bidhumukhi Devi, Y Manihar Singh, Th. Nonibala Devi and N Sharat Singh observed that none of the eligible couples had used any kind of temporary methods at zero parity [5].

Research studies have shown a positive association between a widely spaced birth interval and child survival, and an increased mortality risk at a close interval. The child survival becomes more difficult or both the children may become vulnerable, if the first child is not more than a year old. It has been established that a gap of three to five years between two children increases the chances of the survival, not only for the children but also for their mothers. A study which was done on contraceptive prevalence in Bangladesh also revealed that the survival status index among children was high, while birth spacing was followed. The factors that modulate a contraceptive acceptance which leads to birth-spacing are the age at marriage, status of women, education level, etc., and these have been well documented in earlier studies [6].

More than half of all the currently married women who are aged 15–44 years, are exposed to their first cohabitation at ages of less than 18 years and they have two to three children by the age of 24 years (RCH-II). Many of them want to postpone or limit their childbirth, but they don't use any kind of contraceptives. An early age at marriage opens up a wider span of sexual exposure for females and it is quite possible that most of them have two to three children by the age of twenty-four. A “too early, too frequent, too many” reproductive pattern leads to 33 percent births, with an interval of less than 24 months, which results in high infant mortality. Premature babies with low birth weight, unwanted pregnancies which are terminated with induced abortion, maternal and child loss, pregnancy wastage and vulnerable health conditions which include reproductive morbidity are some other well-established consequences of the conception at early ages. In this regards, it is relevant to pay extra attention to the contraceptive behaviours of currently married women who are between 15–24 years of age, simply because proper knowledge and a high prevalence of an appropriate use of contraceptive methods may protect this sensitive age group (15–24) from unplanned pregnancies, early child bearing and high reproductive morbidity [7].

B K Patro, S Kant, N Baridalyne and A K Goswami, in their study, observed the number of living children at the time of the first contraceptive use. It was found that almost three-fourth (74.4%) of the women had two children when they first used a contraceptive method. Use of contraception for the first time after having one live birth was found to be 21.7 per cent. Only less than 2 per cent of the women used contraceptive methods prior to childbirth. The purpose of contraception is to limit the family size rather than to space the births in a majority of the families. This was reflected in the pattern of use of contraceptive methods, where it was seen that only 2 per cent of women used contraceptive methods to delay the first child, while 21 per cent used any method to delay the second child [8].

In the study which was conducted by Dutta P K Vaz L S and Harinder Singh, almost three fifths of the acceptors (58.4%) had not used any contraceptive method prior to accepting sterilisation. Among those who had practiced contraception, IUD was found to be the most popular method (15.7%) [9]. The findings of the present study, as well as those of the study which has been mentioned above, probably reflect that a majority of the women do not use any temporary method of contraception before they accept tubectomy. NFHS-2 revealed almost similar findings;

N K Saini and Mohmder Singh, in their study, revealed that the use of spacing methods was negligible in the couples who had no living child (newly married couples). It was increased in couples with 2 living children and then it had decreased. The use rate had decreased in couples with 3 or more children, since people would go for terminal methods after having 3 children. Low use rate in couples who had no living child was a cause of concern, as it was known that a delay in the first child was very important for a decrease in the total fertility. Similarly, the use rate was also low in couples who had one living child and it needed to be re-looked accordingly. In their study, 18 couples who had 4 or more children had used spacing methods and most of them were continuing with their fertility in the expectation of a male child. Singh et al., in their study, reported that the percentage of acceptors of spacing methods was less among the couples whose youngest child was less than 2 years or not more than 4 years [2].

The present study reflected that 86% of the acceptors were not aware of the use of condoms in the prevention of STDs/ HIV. Many of them had no knowledge about them at all, while others had heard about condoms, but had not known their uses. This was an alarming fact, given the rapidly increasing rates of HIV and other reproductive tract infections in India. In addition, a strong preference among couples for sterilisation as soon as they achieved their desired family size, might shorten the periods of their reproductive exposures, thereby lowering the likelihood of the use of spacing methods [10].

The present study reflected that with increasing education levels, the proportion of the family planning methods which were used prior to tubectomy was found to increase and this association was found to be statistically significant ($p < 0.0001$).

Similar findings were noted in the study of N J Shah, P Pradhan, A S Reddy and B Joseph, who observed that only 14 women had used contraception, of which 13 had an education of above 8th standard, which was statistically significant. Similarly, of the 14 women who had used contraceptives, the husbands of 10 had studied above 8th standard, which denoted that education was complementary to contraceptive use [3].

Y. Dharani Kumari, in her study, observed that women with education up to the higher secondary level (45.38%) had adopted family planning as compared to women who had studied up to the primary level (30.62%). In case of illiterate women, only 20.19 per cent adopted family planning and a majority of them (72.6%) was not using any method of contraception. This was also similar in case of women with primary education, as most of them (65.07%) did not practise any method of family planning at all [11].

N K Saini and Mohmder Singh observed that the use of spacing methods was significantly more in literate couples as compared to that in illiterate couples ($p < 0.001$). The use rate increased as the level of education increased in couples, indicating the importance of the educational status for the acceptance of spacing methods. Women who are well educated are in a better position to discuss the ways and means of avoiding pregnancies with their husbands, as education reduces the communication gap between the husband and the wife [2]. S K Rasania, Suvra Pathi, D. Singh, S Bhalla and J Khandekar observed that as the literacy levels of women increased, more and more women came in favour of birth-spacing [6].

The findings of the present study were substantiated by those of Gupta U, Kumar P, Bansal A and Sood M, who found that the use of temporary methods was largely limited to those who had attained graduation or higher levels of education. This could perhaps be due to the fact that women with higher education were able to understand the functioning of the devices and were less fearful of complications. Hence, it is expected that sterilisation will remain popular for a long time to come [12].

CONCLUSION

While preventing unwanted childbirth and restricting the family size in accordance with the "Small Family Norm" is essential, it cannot be overemphasized that spacing childbirths and the prevention of transmission of STDs/ HIV by using temporary methods of family planning is of utmost importance.

Tubectomy gives almost absolute protection against unwanted childbirths, thereby shortening the period of reproductive sexual exposure. Women desire to have wider birth intervals. Programme initiatives should be undertaken by the health and family welfare personnel and other associated authorities, institutions and individuals, to increase the awareness among women about various available methods of birth-spacing. Intensive IEC activities which are aimed at potential mothers and unmarried boys and girls, should be effectively planned and initiated at the peripheral level, to spread the importance of birth spacing. The present study revealed that tubectomy had become the most often practised method of family planning at even younger ages, thus removing the possibility of the usage of spacing methods of contraception, especially condoms. This could increase the spread of STDs/ HIV in the community and inadequate spacing of childbirths could adversely affect the health of the mothers and their children.

REFERENCES

- [1] Saroj Pachauri. Expanding contraceptive choice in India: Issues and Evidence. *Journal of Family Welfare*, 2004; 50 special issue available at <http://medind.nic.in/jah/t04/s1/jah04s1p13g.pdf> accessed on 29/7/11.
- [2] NK Saini, Mohmder Singh. Awareness and Practice of Spacing Methods in a Rural Block of Haryana. *Health and Population-Perspectives and Issues*. 2004; 27 (1): 1-8.
- [3] NJ Shah, P Pradhan, AS Reddy, B Joseph. Contraceptive Practices in Newly Married Women in Sub-Urban Bangalore. *Health and Population-Perspectives and Issues*. 2006; 29(1): 21-28.
- [4] National Family Health Survey (NFHS-2), India 1998-99: Main report. available at <http://www.nfhsindia.org/india2.html> accessed on 29/7/11.
- [5] RKNarendraSingh, TibetombiDevi, ThBidhumukhiDevi, YManiharSingh, ThNonibala Devi, N Sharat Singh. Acceptability of Contraceptive Methods Among Urban Eligible Couples of Imphal, Manipur. *Indian Journal of Community Medicine*. 2004 Jan.-Mar; 29 (1).
- [6] SK Rasania, Suvra Pathi, D Singh, S Bhalla, J Khandekar. Attitude Towards Birth-Spacing: A Cross-Sectional Study Among Women Living In J.J. Clusters In Delhi. *Health and Population Perspectives and Issues*. 2004; 27(4): 211-17.
- [7] Ranajit Sengupta, Arpita Das. Contraceptive Practices And Unmet need Among Young Currently Married Rural Women In Empowered Action Group (EAG) States of India. *Indian Journal of Community Medicine*. June - 2012; 58 (1).
- [8] BK Patro, S Kant, N Baridalyne, AK Goswami. Contraceptive Practice among Married Women In A Resettlement Colony of Delhi. *Health and Population-Perspectives and Issues*. 2005; 28(1): 9-16.
- [9] Dutta PK, Vaz LS, Harinder Singh. Socio-demographic profile of Tubectomy acceptors-An army experience. *The Journal of Family welfare*. 1990; March; 36(1): 56-60.

- [10] Francis Zavier, Sabu S Padmadas. Use of spacing method before sterilisation among couples in Kerala, India. *International Family Planning Perspectives*. 2000; March; 26(1):29-30.
- [11] Y Dharani Kumari. Women's Position and Their Behaviour towards Family planning In Two Districts of Andhra Pradesh. *Health and Population - Perspectives and Issues*. 2005; 28(2): 58-70.
- [12] Gupta U, Kumar P, Bansal A, Sood M. Changing trends in the demographic profile and attitudes of female sterilisation acceptors. *The Journal of Family Welfare*. 1996; September; 42(3): 27-30.

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