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# A Follow-up of Tubectomy Clients in Bangladesh

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## ABSTRACT

Swenson I, Jahan FA, Khan AR (International Fertility Research Program, Research Triangle Park, NC, USA; Dept of Population Dynamics, School of Public Health, The Johns Hopkins University, Baltimore, MD, USA; and Bangladesh Fertility Research Programme, Dacca, Bangladesh). A follow-up of tubectomy clients in Bangladesh.

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Five hundred twenty-one tubectomy clients from two health centers and one sterilization camp were interviewed 1-4 years after their tubectomies to determine: (a) demographic characteristics, (b) reasons for selecting tubectomy and (c) long-term satisfaction. Essentially no differences in demographic characteristics or long-term satisfaction were observed between urban and rural clients or by the type of center where the tubectomies were performed. Mean ages of the clients were 31-32 years; mean parity was 7. Fifty-four percent of the rural and 85% of the urban patients had used contraceptives before tubectomy. Ninety-five percent or more of the patients stated that they were satisfied with the tubectomy.

clients in Bangladesh. They are merely intended to suggest trends which need to be examined in more detail if one wants to make conclusions about the effects of tubectomy on a nationwide basis.

## STUDY POPULATION

The cases included in this study were randomly selected from clients who had tubectomies 1-4 years before interview in the following three centers: the Model Clinic in Dacca City; the Kaliakair family planning center, where a tubectomy camp was conducted one year before this study; and the Christian Health Care Project Hospital at Bollepur in Kustia district. A team of six interviewers and two field supervisors from the Johns Hopkins Fertility Research Project conducted the interviews of the clients from these three collaborating centers.

## RESULTS

The mean ages of the women were 31-32 years at the time of interview. Since the women had their tubectomies 1-4 years before the interview, the majority of the clients were 30 years old or younger when they had their tubectomies. The clients had a mean of five living children at the time of interview, although the mean parity was 7. Approximately half of the women had experienced at least one child death; 20% had three or more child deaths.

All of the women were married at the time of tubectomy, although 1%-2% had become widowed since their surgery. None were divorced since their tubectomy. Two percent said that their husbands had taken a second wife since the client's tubectomy. The majority of the Kaliakair and Model Clinic clients were Muslim, although 64% of the Bollepur clients were Christian. Less than 15% of the clients

## INTRODUCTION

The purposes of this study were to determine the demographic characteristics, previous use of contraception and socioeconomic factors of women who had tubectomies, as well as their reasons for selecting tubectomy and reasons for satisfaction or dissatisfaction with the procedure. Recently, the Bangladesh government undertook a massive sterilization campaign, including vasectomy and tubectomy. The comparisons in this study will indicate whether there are differences in any of the above-mentioned characteristics among clients who had tubectomies performed in a sterilization camp setting or in a health center. The results in this study are not intended to be representative of all tubectomy

were employed outside the home. The majority of the rural Kaliakair and Bollepur clients had husbands employed as agricultural or other unskilled laborers, while most of the urban Model Clinic clients had husbands working in business- or service-related occupations. Eighty percent of the Model Clinic clients' husbands had seven or more years' education, compared to 6.0% and 0.5% respectively, in Kaliakair and Bollepur.

Approximately equal proportions of the Kaliakair and Model Clinic clients had their tubectomies less than two years after their most recent pregnancy termination, while 58% of the Bollepur clients had their surgery performed more than two years after their most recent pregnancy termination. Eighty-five to 95% of the patients had resumed menstruation before tubectomy. Although there was less than six months' difference in the mean ages of the clients' youngest living child, less than half as many urban Model Clinic women were breastfeeding as were the rural women in Kaliakair and Bollepur (Table I).

About 54% of the Kaliakair and Bollepur clients had used contraception before their tubectomy, compared to 85% of the Model Clinic clients (Table II). The majority of previously contracepting women used oral contraceptives. The others used IUDs, condoms, foam, withdrawal or rhythm. Ten to 12% of the Kaliakair and Bollepur clients had discontinued contraceptives because their husbands objected to their use of contraceptives, while a third of the Model Clinic clients gave this reason. In half of these cases, the husband objected because he

**Table I.** Reproductive status of tubectomy clients (percent distribution).

Reproductive Status	Kaliakair Camp (N = 170)	Model Clinic (N = 147)	Bollepur Hospital (N = 204)
<b>Menstrual status</b>			
Menstruating	85.3	96.0	92.1
Amenorrhoeic	14.7	4.0	7.8
<b>Breastfeeding status</b>			
Breastfeeding			
Non-breastfeeding	81.2	32.0	79.4
	18.8	68.1	20.6
<b>Age of the youngest child at the time of interview (in months)</b>			
≤12	5.9	1.0	2.5
13-24	55.9	25.0	34.2
25-36	25.9	28.0	32.7
37+	32.4	33.6	30.6
Mean age	20.3	26.8	25.3

**Table II.** Previous experience of tubectomy clients with contraception (percent distribution).

Previous Experience with Contraception	Kaliakair Camp (N = 170)	Model Clinic (N = 147)	Bollepur Hospital (N = 204)
<b>Previous use of contraception</b>			
Never used contraception before tubectomy	46.0	15.6	41.1
Discontinued using contraception before tubectomy	33.0	23.9	25.8
Used contraceptives up to the time of tubectomy	21.0	60.5	33.1
<b>Reasons for non-use<sup>a</sup></b>			
Did not want FP <sup>b</sup>	33.0	89.4	57.2
Did not know about FP	67.0	10.6	42.8

<sup>a</sup> Percentages of those who never used contraception.

<sup>b</sup> FP = family planning.

wanted more children. In the remaining cases, the husband objected to side effects experienced by the wife (ie, irregular bleeding and weakness). Less than 5% had tubectomies because the previously used contraceptive failed or because they were dissatisfied with the other method. More than 90% said that they wanted a permanent method and definitely wanted no more children.

The most frequent responses for the "person who first informed the client" were family planning workers, doctors, paramedics or dais for the Kaliakair and Bollepur clients, compared to friends and relatives among the Model Clinic clients. The clients most frequently responded that a female family member (mother-in-law, mother, sister-in-law) was the most influential in their decisions to have the tubectomy (Table III). However, about an equal fraction of the Bollepur clients said that they themselves were the most influential in their decisions to have the tubectomy. All of the clients, except 4% from the Model Clinic, said that they discussed the tubectomy with their husbands before surgery. These 4% had tubectomies immediately postabortion.

A total of 39% had an induced abortion on the same visit as the tubectomy in the Model Clinic. These women were equally divided by those who had primarily come in for the menstrual regulation versus the tubectomy. None of the Kaliakair or

**Table III.** Prior advice given to client about tubectomy.

Person Whose Advice Was Most Important	Kaliakair Camp (N = 170)	Model Clinic (N = 147)	Bollepur Hospital (N = 204)
Self	4.0	24.5	30.4
Friend, neighbor	3.5	2.7	0.5
Husband	23.0	17.0	25.5
Family member*	58.0	42.0	31.9
Family planning worker	12.0	3.4	8.8
Other client (friend/family)	1.0	10.2	3.0

\* Mother, mother-in-law, sister.

Bollepur clients had an induced abortion when their tubectomy was performed.

Less than 5% of the clients from all centers had regrets about the tubectomy. Most of the dissatisfied clients had regrets because one of their children had died since they had the tubectomy. However, not all of the clients who stated that one of their children had died since their tubectomy regretted having the procedure. More than 95% of the clients said their husbands were also satisfied with the tubectomy (Table IV).

Most of the clients returned to the clinic only to have stitches removed. Less than 2% recalled having an infection after the tubectomy. Only 3.5% of the Kaliakair clients did not return to the clinic for their follow-up visit. No deaths were reported.

## DISCUSSION

Since about half of the clients from all three centers were 30 years old or younger at the time of interview, at least two births per woman may have been averted in half of the tubectomized women. The majority of those over 30 were less than 40 years of age, so at least one birth may have been averted among these women. The similarities in the age and parity distributions of the tubectomy clients occurred although there were differences in religion, husband's occupation and education and previous use of contraceptives. These similarities persisted among both urban and rural women as well as among clients who underwent tubectomy in a camp setting versus a preexisting health center.

The high rate of postsurgical satisfaction is encouraging. More than 90% of the clients from all three centers said that they selected tubectomy rather than another method of contraception because they definitely did not want more children.

Although there were considerable differences in

the responses of the clients about who first informed them about tubectomy, the clients from all three centers most frequently responded that a close female family member (mother, mother-in-law, sister) was the most influential person in their decision to have the tubectomy. Most of the clients discussed having the tubectomy with their husbands at least a few times before they had the surgery. This suggests that the decision to be sterilized was made over a period of time, even among the clients recruited into the Kaliakair sterilization camp.

The literature suggests that clients who had little or no discussion with their spouses about tubectomy before the surgery are more likely to be dissatisfied with the procedure (1, 3, 7, 8). A higher incidence of dissatisfaction has also been shown among women who had their tubectomy immediately postpartum or postabortion (1, 3). Only two of the 58 Model Clinic clients (3.5%) who had their tubectomies with a menstrual regulation said that they were dissatisfied. None of the Model Clinic clients who had their tubectomies immediately postpartum stated that they were dissatisfied. It should be noted in relation to these findings that a much larger proportion of the Model Clinic clients said that they had first been informed about tubectomy by a friend or relative than was true among the Kaliakair and Bollepur clients. Therefore, some decision-making had probably gone on before the tubectomy was performed, even among these cases.

More than 95% of the clients were satisfied and had no regrets about their tubectomies. Between

**Table IV.** Percent distributions of the clients by long-term responses to tubectomy.

Long-Term Effects of Tubectomy	Kaliakair Camp (N = 170)	Model Clinic (N = 147)	Bollepur Hospital (N = 204)
<b>General response of client to tubectomy</b>			
Satisfied	98.0	95.0	99.5
Dissatisfied	2.0	5.0	0.5
<b>General response of clients' husbands to tubectomy</b>			
Satisfied	98.3	96.4	99.5
Dissatisfied	1.8	2.6	0.5
<b>Number of other women client advised to have a tubectomy</b>			
None	22.0	2.8	30.9
One or more	78.0	97.2	69.2

70% and 97% of the clients had recommended tubectomy to at least one other woman, which further reinforces the clients' satisfaction with the procedure. However, several factors must be considered. Certain responses such as dissatisfaction because of a child death or divorce may be more likely after a longer period of time has elapsed from surgery (4-6). Therefore, the responses of tubectomy clients five or more years after surgery may be different than for these study clients, all of whom were responding less than four years after surgery. The results from this study do indicate a positive prospect for tubectomy as part of family planning services, given that the clients are appropriately selected. The survival of a potential client's children appears to be one major criterion that must be considered.

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