Vol. 8 No. 1 (1993, pp. 39-52)

Client Satisfaction with Sterilization Procedure in Bangladesh

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The findings dispel the misconception that the decline in the number of sterilization cases in the late 1980s was due to growing dissatisfaction among sterilized clients

Since the mid-1960s, sterilization has become tremendously popular in Bangladesh. Currently, it is the leading contraceptive method in the country. The main reasons for its popularity are that it is a one-time method and that, once accepted, relieves couples from continuous worries about protecting against unwanted pregnancies. Further, in a country where the literacy rate is very low and the poverty level is high, the use of such a method makes it easier to get around the difficult problem of sustaining motivation among eligible couples to continue the regular practice of family planning.

The number of sterilization acceptors increased from 48,000 in 1975/76 to 363,000 in 1982/83 - a more than seven-fold increase in seven years - followed by a peak of 552,000 in 1983/84 (Ahmed and others, 1992).

The sharp increase in the number of sterilization acceptors between 1980/81 and 1983/84 can be attributed mainly to (a) an increase in client compensation payments from Taka 96 for a vasectomy and Tk108 for a tubectomy to Tk175 for both types of operation ($US1.00 = about Tk38), (b) the payment of referral fees to family planning workers, (c) the establishment of sterilization targets for those workers, (d) a decline in sterilization-related deaths, (e) special activities of district-level mobile teams providing sterilization services and (f) government measures for maintaining and improving the quality of services.

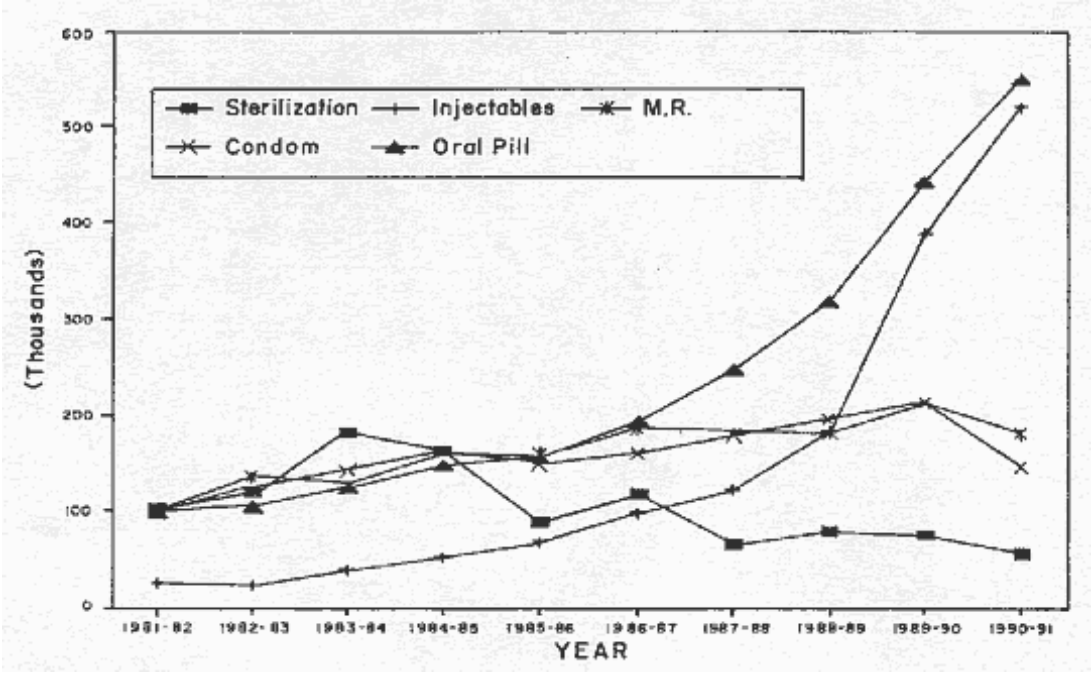
The trend was erratic until 1988/89, when a decline began, as shown in the accompanying figure. There was a marked decrease in the number of sterilization acceptors from 351,000 in 1986/87 to 196,000 in the following year. By 1990/91, the number of sterilizations performed had dropped to 165,000, the lowest number since 1979/80.

While virtually everyone agrees that the increase in the availability and use of temporary methods is a very positive and welcome development in a programme which had previously emphasized permanent methods, the Government of Bangladesh nevertheless views the decline in voluntary sterilization with considerable concern. In both its Third Five-Year Plan (1985-1990) and Fourth Five-Year Plan (1990-1995), the Government set ambitious goals for increasing contraceptive prevalence (Planning Commission, 1990).

The main strategy for promoting contraceptive services during the Third Plan period was to provide couples with a wider range of choices. Emphasis was put on strengthening the distribution system for oral pills with a view to reverse the declining trend in pill use during the pre-implementation period. The programme included provision of adequate facilities in order to maintain a high level of acceptability of IUDs and stressed the need to expand facilities in order to make injectables more widely available. Due importance was also given to increasing the acceptance of sterilization.

In spite of all its efforts, the family planning programme experienced a relatively low level of performance in contraceptive services at the beginning of the Third Plan period. The drop in sterilization was as high as 45 per cent of the previous level and the use of IUDs dropped 15 per cent compared with the previous year (1984/85). However, family planning performance, except for sterilization, greatly improved in subsequent years. During 1987/88, the number of sterilizations performed declined, whereas the use of the IUD and injectable methods exceeded enhanced target levels (Choudhuri, 1989). The acceptors of oral pills and condoms increased by almost 125 per cent and 140 per cent, respectively, over the 1985/86 benchmark level. During the first two years of the Third Plan, sterilizations fell far short of the numbers originally projected for achieving the goals of the national family planning programme (see figure).

Figure: Contraceptive prevalence by year



Source: Ahmed and others, 1992.

Notes: 1981/82 index = 100. Each method indexed to 100, except for injectables, which method is indexed to 25.

The Government is of the view that injectable and IUD services would be major components in the programme of the future. The Fourth Plan aims at phasing out traditional non-programme methods such as rhythm and abstinence by the end of 1995 and is committed to the promotion of other modern methods. The shift in emphasis of the family planning programme from sterilization to reversible contraceptive methods during the Fourth Plan period is also significant. For example, the relative share of sterilization, as was proposed at the beginning of Third Plan (1985/86), was as high as 40 per cent of the total. This proportion is to be brought down to 33 per cent by the end of the Fourth Plan period (1995), thereby increasing the share of modern reversible methods in the total contraceptive mix.

The decline in sterilization acceptance is a phenomenon that began in the mid-1980s. Many reasons for the decline have been suggested, but the exact nature of the causes of decline has yet to be ascertained. Some knowledgeable observers think that one of the factors causing the decline is the growing dissatisfaction among couples who have already been sterilized. The present study has been designed to throw light on this issue by (a) obtaining data on client perceptions about voluntary surgical contraceptive services and (b) identifying the major factors that are associated with the satisfaction or dissatisfaction of sterilized clients.

Data and methodology

The study is based on a large-scale field survey conducted during the period June to August 1990 in 16 rural *thana* (small administrative units) located in four administrative divisions of the country and four urban *thana* located in Dhaka, Chittagong, Khulna and Rajshahi, all of which are metropolitan cities. In order to make the sample of sterilized clients representative nationally, the ultimate sample size was 1,600, out of which 1,120 were tubectomy cases and 480 were vasectomy cases. The ratio of 70:30 conforms with the average actual distribution of sterilization cases during the previous three years.

Sterilizations in Bangladesh are performed mainly in *thana* health centres (THC) and family welfare clinics (FWC) in rural areas. In urban areas, the clinics and satellite clinics of the Bangladesh Association for Voluntary Sterilization (BAVS) with support from the Association for Voluntary Surgical Contraception (AVSC) and the Bangladesh Family Planning Association (BFPA) are the major centres for sterilization operations. Records of sterilized cases are maintained in these offices; they contain the names and addresses of both the clients and those who referred them for services.

The list of clients for the previous three years was disaggregated according to the sex of the client, with a total of 75 of them (50 tubectomy and 25 vasectomy cases) selected from the list of each rural *thana* and 100 of them (70 tubectomy and 30 vasectomy cases) from each urban *thana* by systematic sampling procedure with a random start; missing cases were replaced by the next available client. Of the 1,600 clients, 1,200 were selected from rural areas and 400 from urban areas. Ultimately, 1,348 sterilized clients (360 males and 988 females) were successfully interviewed; these clients constituted the sample for analysis. The sample included 19 per cent of vasectomy clients who underwent sterilization in 1987, 28 per cent of those who had it done in 1988, 39 per cent of those who had it alone in 1989 and 14 per cent of those undergoing sterilization in 1990. Similarly, 16 per cent of the tubectomy clients underwent surgery in 1987, 28 per cent in 1988, 34 per cent in 1989 and 22 per cent in 1990. Male enumerators interviewed the vasectomy clients and female enumerators interviewed the tubectomy clients.

Results

Measurement of satisfaction or dissatisfaction

Table 1 shows the distribution of the sterilized clients by selected variables. It reveals that about 90 per cent of the vasectomy clients and 95 per cent of the tubectomy clients were satisfied, whereas about 4 per cent of the vasectomy clients and 2 per cent of the tubectomy clients regretted their decision. However, 6 per cent of the vasectomy clients and 3 per cent of the tubectomy clients felt neither satisfaction nor regret. The satisfaction level in different studies (Rahman and others, 1978; Mitra and others, 1986, 1987) conducted during the 1970s and 1980s ranged from a satisfaction level of 84 per cent to 95 per cent for vasectomy clients and from 88 per cent to 98 per cent for tubectomy clients. Thus, the level of satisfaction obtained in our study was not less than the level found in other studies.

Table 1: Percentage of vasectomy and tubectomy clients by selected variables

	Vasectomy (N = 360)	Tubectomy (N = 988)
(a) Response to question about satisfaction		
Satisfied	89.7	95.2
Regret	4.4	2.4
Neither	5.9	2.4
(b) Correctness of decision		
Correct decision	94.4	95.0
Incorrect decision	5.6	5.0
(c) Recommendation of sterilization to others		
Have already recommended	63.6	64.5
Have not yet recommended	36.4	35.5
(d) Willingness to recommend sterilization		
Would recommend in future	91.7	91.1
Would not recommend in future	8.3	8.9
(e) Status of conjugal relationship		
Improved	13.9	18.3
Unchanged	83.3	78.3
Deteriorated	2.8	3.4
(f) Status of sexual ability		
Improved	14.4	15.5
Unchanged	82.4	81.8
Deteriorated	3.4	2.7
(g) Health status		
Improved	21.9	25.6
Unchanged	65.8	52.6
Deteriorated	12.3	21.8

The table also shows that almost 95 per cent of the vasectomy and tubectomy clients felt that they had made the correct decision in so far as they felt well about their sterilization operation. About 64 per cent of the male clients and 65 per cent of the female clients reported that they had already recommended sterilization to others although, respectively, about 36 per cent and 35 per cent of them had not yet recommended the procedure to others. Thus, it appears that the satisfaction level was relatively lower compared with those measured directly in panel (a). This indicates that the majority of the sterilized clients, although satisfied with the results, did not feel like discussing the procedure with others. Perhaps they may have come from different social backgrounds. Some of them were highly socialized and did not hesitate to discuss their sterilization operation with others and to recommend it to them. Yet others were hesitant to discuss the matter with potential clients because of their

traditional beliefs.

Panel (e) of the same table gives the distribution of sterilized clients by the status of their conjugal life after the operation. About 97 per cent of males and females reported that their conjugal life either improved or remained unchanged after the operation compared with the time prior to sterilization. The small remaining number of clients reported a deterioration in their conjugal life following sterilization. Only a tiny minority (about 3 per cent) of males and females reported a deterioration in their sexual ability after the operation, but all the others found that their sexual ability either improved or remained unchanged.

The last panel in the table shows the distribution of sterilized clients by their present health status compared with their health prior to undergoing sterilization. About 88 per cent of the vasectomy clients and 78 per cent of the tubectomy clients reported that they experienced either improved or unchanged health after the operation. A little over 12 per cent of the vasectomy clients and nearly 22 per cent of the tubectomy clients felt that their health deteriorated after the sterilization procedure. Although the proportion of clients stating that they experienced a deterioration in health appears to be higher than the proportion of dissatisfied clients measured by indirect measures, the deterioration may have been due to reasons unconnected with sterilization. These include malnutrition and disease, for example. In the opinion of the service providers, of those who perceived that they were suffering from sterilization-related problems, only 13 per cent of them had a real sterilization-related problem. This implies that dissatisfaction because of health-related reasons may be expected to be in the neighbourhood of 13 per cent.

Table 2: Percentage of sterilized clients saying whether they were satisfied with having been sterilized or regretted having been sterilized, by background characteristics

Characteristics	Satisfaction	Regret	Neither	N
Employment status				
Employed	90.5	3.9	5.6	302
	(93.3)	(3.3)	(3.4)	(180)
Unemployed	28.7	7.3	10.0	58
	(95.6)	(2.2)	(2.2)	(808)
Adequacy of household income				
Adequate	97.4	0.0	2.6	38
	(94.7)	(3.4)	(1.9)	(94)
Inadequate	88.8	4.6	6.6	322
	(95.2)	(2.4)	(2.4)	(894)
Household ownership of land				
Own land	95.4	1.5	3.1	131
	(95.5)	(2.6)	(1.9)	(310)
Do not own land	86.5	6.1	7.4	229
	(95.1)	(2.3)	(2.6)	(678)
Knowledge about not having any more children after operation				
Had knowledge	90.9	3.4	5.7	351
	(95.3)	(2.4)	(2.3)	(962)
Had no knowledge	44.4	44.4	11.2	9
	(90.4)	(4.7)	(4.9)	(26)
Ever-use of contraceptives				
Ever used them	93.0	2.3	4.7	129
	(94.1)	(2.7)	(3.2)	(511)
Never used	3.9	3.9	92.2	231
	(96.4)	(2.1)	(1.5)	(477)
Reasons for accepting sterilization				
No more children	1.9	4.4	93.7	270
	(95.5)	(2.3)	(2.2)	(852)
Compensation money	6.0	5.2	88.8	90
	(84.3)	(11.2)	(4.5)	(136)

Note: Figures within parentheses represent tubectomy clients.

Table 2 describes the background characteristics of the sterilized clients whose level of satisfaction or dissatisfaction had been measured directly. The proportion of vasectomy clients reporting satisfaction with their decision was significantly higher ($p < .05$) among those who were employed than among those who were unemployed, but the difference was not statistically significant for the tubectomy clients. The level of income does not appear to be a significant predictor of satisfaction or dissatisfaction. A larger proportion of those who had cultivable land than those who had no land reported that they were satisfied. The difference was statistically significant ($p < .05$); however, this did not hold true for tubectomy clients. There was also a significant difference ($p < .01$) in the level of satisfaction between the proportion of those vasectomy clients who knew that they could not have a child after the operation and those who did not have such knowledge. However, no such statistical association was discerned for the tubectomy clients. Among vasectomy clients, there was a highly significant ($p < .001$) difference in satisfaction status between those who had ever used contraceptives compared with those who had never used them; however, this does not seem to be the case for tubectomy clients. The difference that existed between those tubectomy clients who had a motive for not having more children and those with other motives for sterilization was found to be highly statistically significant ($p < .001$). This finding is in sharp contrast with that for the vasectomy clients. No statistically significant differences were observed with regard to religion, education level or number of living children, among other characteristics.

Reasons for satisfaction or dissatisfaction

Table 3: Distribution of sterilized clients, by reasons for satisfaction/regret

Reasons for satisfaction	Vasectomy	Tubectomy
No more children	64.1	65.9
No fear of pregnancy in cohabitation	27.8	30.0
Other	8.1	4.1
Total	100.0 (N = 344)	100.0 (N = 964)
Reasons for regret		
Frequent illness	43.8	12.5
Deterioration of health	21.3	50.0
Spouse/others look down upon me	10.1	8.0
Want more children	8.8	8.7
Other	25.0	20.8
Total	100.0 (N = 16)	100.0 (N = 24)

Table 3 shows the distribution of sterilized clients by the reasons for their expression of satisfaction or regret. They described these reasons when they were asked why they were satisfied or dissatisfied with their decision to be sterilized. The dominant reason for satisfaction was that they would not have any more children. The second most important reason was that sterilization freed them from continuous anxiety about becoming pregnant and consequently they gained greater sexual satisfaction. This was true for both vasectomy and tubectomy clients. The other reasons for having undergone sterilization did not seem very important: for example, improved economic condition of the household, better education for existing children, and better health for the mother and other children.

On the other hand, the dominant cause for regret among the vasectomy clients was frequent sickness; among the tubectomy clients, it was deterioration of health following the operation. Fewer than one out of every 10 respondents cited a desire for more children as the cause of their dissatisfaction. Among the "other" category of causes, the main ones for both groups of clients were the death of one of their children and the operation facility being located at inappropriate places and the like.

Table 4: Distribution of sterilized clients expressing satisfaction or regret with having been sterilized, by reported reasons

Reason	Satisfaction	Regret	Neither	N
Reception at the waiting room				
Proper reception and care	91.0	4.0	5.0	300

	(96.1)	(2.1)	(1.8)	(938)
Poor reception and care	83.1	6.8	10.1	59
	(76.2)	(8.3)	(12.5)	(48)
Satisfaction with facilities received in the clinic				
Satisfied	93.3	2.0	4.7	345
	(96.3)	(1.7)	(2.0)	(963)
Not satisfied	6.6	60.0	33.4	15
	(56.0)	(32.0)	(12.0)	(25)
Sharing of compensation money with others				
Shared	72.9	12.9	14.2	85
	(91.5)	(3.8)	(4.7)	(106)
Not shared	94.9	0.1	5.0	275
	(95.6)	(2.2)	(2.2)	(880)
Clinical and pathological examination				
Carried out	90.2	3.8	6.0	317
	(95.3)	(2.4)	(2.3)	(970)
Not carried out	86.0	9.3	4.7	43
	(91.7)	(0.0)	(8.3)	(12)
Treatment received in the clinic				
Received	76.9	7.6	15.5	278
	(93.9)	(2.8)	(3.3)	(213)
Not received	75.0	25.0	0.0	82
	(70.0)	(13.3)	(16.7)	(30)
Physical complaints after discharge				
Had complaints	75.6	12.2	12.2	82
	(86.7)	(6.4)	(6.9)	(188)
Did not have complaints	93.9	2.2	3.9	278
	(97.2)	(1.5)	(1.3)	(793)
Death of one's child after undergoing sterilization procedure				
Experienced a death	85.2	11.1	3.7	27
	(82.1)	(10.7)	(7.2)	(28)
No such death experienced	90.0	3.9	6.1	333
	(95.6)	(2.2)	(2.2)	(956)

Note: Figures within parentheses denote tubectomy clients.

The reasons for satisfaction or regret were also analyzed indirectly from the clients' responses (table 4). The table shows that the proportion of tubectomy clients satisfied with their decision was significantly higher ($p < .05$) among those who were given a proper reception at the clinic than among those who were not, but the difference was not statistically significant for the vasectomy clients. The "clinical and pathological examination" does not appear to be a significant predictor of satisfaction or regret for vasectomy or tubectomy clients. A larger proportion of those who did not share the compensation money with others were reported to have been satisfied than those who shared it with others. This difference was statistically significant ($p < .01$) for the vasectomy clients. There is a significant difference ($p < .05$) in the proportion of tubectomy clients who were satisfied between those who received treatment in a clinic and those who received treatment elsewhere. However, no such statistical association was discerned for the vasectomy clients. The difference in satisfaction status was highly significant ($p < .01$) for those who received better service in the clinic than those who were not satisfied with the service facilities. This holds true for both the vasectomy and tubectomy clients. The proportion of satisfied tubectomy clients was higher ($p < .05$) among those who did not experience the death of one of their children after the operation than among those who had experienced the death of a child, but this difference was found to be not significant in the case of vasectomy clients.

Voluntarism in the VSC programme

Almost all of the sterilized clients had universal knowledge about family planning methods prior to undergoing the

operation. About 98 per cent of the vasectomy clients and 97 per cent of the tubectomy clients knew beforehand that they would not be able to bear any more children following the sterilization procedure. They indicated this by signing the consent form or putting their thumb-print on the form. About 85 per cent of the vasectomy clients and 94 per cent of the tubectomy clients reported that their main motive for undergoing sterilization was so that they would have "no more children" and that compensation payments had facilitated their acceptance of the procedure. In the VSC programme, no sterilized client reported coercion.

Discussion and recommendations

Sterilization is the single most preferred method of contraception in Bangladesh. Because of its effectiveness, it has gained tremendous popularity among eligible couples in recent years. This study was undertaken in the face of certain alarming misconceptions regarding the decline in the number of sterilization acceptors in recent years and a misunderstanding regarding voluntarism in the VSC programme. The voluntary nature of the VSC programme is reflected in the findings; no evidence of coercion emerged from the client survey. The findings dispel the misconception that the decline in the number of sterilization cases in the late 1980s was due to growing dissatisfaction among sterilized clients.

What, then, are the principal causes that have contributed to this decline? During the last decade, both the Government of Bangladesh and non-governmental organizations installed an extensive community-based service-delivery system for pills and condoms (to homes) and injectables (in family welfare centres and satellite clinics). It is not surprising therefore to see that pill and injectable use has increased sharply in the 1980s as a result of adopting the so-called "cafeteria" approach which offers a variety of modern contraceptives. These changes in programme strategy have tended to make inroads on the prevalence of sterilization.

Monetary compensation appears to be particularly important in the Bangladesh context; it is perceived as affording the VSC acceptors a respite from their regular daily work and thus increasing their chances of quickly recovering from the operation. Because the amount of compensation has remained at Tk175 since 1983, inflation had eroded the value substantially (to about half of what it was in 1983). The erosion of the value of these payments was one of the reasons most frequently cited by field-level workers for the decline in the number of sterilizations performed.

Until 1988, field-level workers received a token referral fee of Tk45 for each client referred. This system of referral payments was said to result in an abuse of the system, especially by ad hoc agents. As a result, the Government discontinued per case payments in early 1988. Since the abolition of the referral fee, government and NGO workers have been reluctant to spend money out of their own pocket to bring clients to clinics. Further, the absence of travel funds is also believed to have adversely affected the number of sterilizations performed.

There is ample evidence to suggest that the number of trained physicians available to provide sterilization services is declining (Ahmed and others, 1992). The inability to supply adequate services owing to the lack of trained providers at a time when there is substantial demand for such services plays a major role in the decline in the number of sterilizations performed.

Having identified some of the possible factors that appear to have caused the decline, we raise some issues which need to be addressed at the policy-making level by the Government if Bangladesh is to reach its ambitious population goals during the Fourth Plan period.

— An institutionalized system of in-service training for voluntary sterilization should be developed in order to address the existing demand for good quality voluntary sterilization and the deterioration in the capacity for serving that demand.

— The existing system of client compensation should be retained; moreover, the Government should consider adjusting upward the level of this payment in order to offset, at least partially, the effect of inflation on the value of the payment.

— The Government should consider re-instituting a modest allowance for government field-workers. For each voluntary sterilization case that they refer and accompany to a clinic, they should receive compensation for their reported out-of-pocket expenses.

Before concluding, a few more observations seem in order. Although the Government has shown considerable commitment to improving the quality of services in its family planning programme, the sterilization-related mortality rate has increased beginning in 1988. The Government views this increase as unacceptable in the face of the recent downward trend in sterilization acceptance. In addition, a significant proportion of the resources of the Association for Voluntary Surgical Contraception and its work in Bangladesh until recently was devoted to the Bangladesh Association for Voluntary Sterilization. It was planned that this support would be phased out by the end of 1992. These factors are expected to have a further far-reaching effect on the acceptance of sterilization.

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