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MODIFIED CONTRACEPTIVE DISTRIBUTION PROJECT

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PREFACE

The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) is an autonomous, international, philanthropic and non-profit centre for research, education and training as well as clinical service. The Centre is derived from the Cholera Research Laboratory (CRL). The activities of the institution are to undertake and promote study, research and dissemination of knowledge in diarrhoeal diseases and directly related subjects of nutrition and fertility with a view to develop improved methods of health care and for the prevention and control of diarrhoeal diseases and improvement of public health programmes with special relevance to developing countries. ICDDR,B issues two types of papers: scientific reports and working papers which demonstrate the type of research activity currently in progress at ICDDR,B. The views expressed in these papers are those of authors and do not necessarily represent views of International Centre for Diarrhoeal Disease Research, Bangladesh. They should not be quoted without the permission of the authors.

ABSTRACT

The study presents results of a survey conducted on women who opted for sterilization in the MCH/FP program initiated by the Cholera Research Laboratory, in 70 villages of Matlab thana.

The study of the characteristics of the sterilization acceptors, the circumstances surrounding their operation, and the post-operative experience revealed that the mean age of the acceptors was 33.2 years, and in the majority of cases the decision was taken less than 2 years after the last live birth while the woman was breastfeeding or still amenorrheic.

The decision taking process followed a uniform pattern. Following transmittal of information by the FVWs, the women first discussed the procedure with close female relatives in the same bari, before seeking the approval of and permission from husbands and mothers-in-law. The decisions were thereafter conveyed to the FVWs.

One of the most relevant findings of the survey was the concern the women expressed about the implications of the operation for their health. The fear that they may not be able, after the operation, to perform the tasks and attend to their daily chores was very strong. Such strong concern points to the need of careful pre-operation counselling and examination as well as post-operative care to avoid a possibility of complications and prolonged convalescence. One such case in the rural setting may not only ruin the woman's life in her family, but may do irreparable damage and jeopardize the program.

INTRODUCTION

Technological advances in the field of contraception resulted in major shifts in program focus from the less effective methods of fertility control, such as condoms, withdrawal, rhythm, first to modern contraceptives -- IUD, oral pill, and injectable contraceptives -- and second to surgical methods such as induced abortion, menstrual regulation and sterilization. This development is reflected, among others, by the liberalization of population control related policies in many developing countries and by more favourable social attitudes toward sterilization in the low fertility countries (1).

In Asia, male and female sterilizations are offered as a part of the population control and family planning programs in several countries (e.g. China, Korea, Singapore, Taiwan, India, Thailand, Bangladesh) in others they are easily available even if not actively promoted.

This study presents results of a follow-up survey of women who opted for sterilization in the family planning program initiated by the Cholera Research Laboratory, Dacca, in its field station in Matlab thana.

The study was undertaken because of the unexpectedly high demand for sterilization amongst the rural Bangladeshi women generally considered to be conservative. The women were interviewed when they registered for tubectomy at Matlab FP Clinic. Follow-up interviews were conducted by the Female Village Workers (FVW) a month later to determine the socio-psychological impact and sequelae of sterilization.

The areas of inquiry included: discussion concerning acceptance, attitude of the persons with whom sterilization was discussed, how the respondent came to the clinic, and the post acceptance information, such as attitude of husband and mother-in-law, attendance to household tasks, side-effects experienced, and resumption of sexual relations. Successful interviews were conducted among 275 clients.

CRL Family Planning Project in Matlab

The Cholera Research Laboratory, in collaboration with the Ministry of Health and Population, initiated in October 1975 a

simple but intensive house-to-house distribution program of non-clinical methods of contraception (oral pills and condoms) in the villages of Matlab thana. After an initial relatively high acceptance, continuous evaluation revealed by 18 months a limited impact (2).

To overcome the deficiencies of the simple household distribution system, major modifications in the field structure and program activities were introduced in October 1977. The restructured program utilized a new cadre of better educated and better trained female village workers (FVW) backed by stronger field supervision and support and technical staff. Eighty female village workers were recruited and trained to discuss family planning with potential clients, provide supply of non-clinical methods, inform potential clients about the availability of clinical fertility control services at the Matlab Centre and refer those desiring such services to the clinic. The contraceptive methods being provided since November, 1977 include IUD insertions, menstrual regulation, pills condoms and injections Depo-provera. Male and female sterilization services were added in January, 1978.

The Sterilization Program

All women desiring sterilization are counselled by the FVW in their homes and by the clinic staff in Matlab. They explain the procedure and the irreversible nature of the operation. The women are brought to Matlab a night before surgery.

In the clinic, abdominal ligations are performed via a mini-laparotomy incision. The tubes are ligated by absorbable sutures and the loops excised. The procedure is carried out under local anaesthesia and post-operatively, the clients stay in Matlab for 2 nights, to provide them with some rest before they get back to their daily chores. Antibiotic cover is provided by giving a daily injection of Penicillin and Streptomycin for five days. The last 3 days' injections are given at home by the FVW.

The skin stitches are removed in the client's home by the FVW on the 7th day.

THE SURVEY

A questionnaire was designed to obtain information on circumstances leading to the acceptance of sterilization and on the post-operation situation. Consequently, the questionnaire was divided into two blocks and the survey conducted in two parts.

The first block related to the factors leading to acceptance of surgical sterilization. The items of information sought included the source of information regarding sterilization, discussion about the method, peers' attitude toward the operation, husband and mother-in-law's attitudes. The interview was conducted in the clinic prior to sterilization.

The second block related to post-acceptance situation including the attitude of husband, mother-in-law, and friends, ability to attend to household tasks, side-effects experienced, resumption of sexual relations, and general feeling concerning sterilization. The second interview was conducted about one month after the operation in the woman's home.

RESULTS

Socio-demographic Background

Between January and May, 1978, a total of 294 tubectomies were performed in the Matlab clinic. Because of the one month time lag between the operation and the second interview, complete questionnaires were available for 275 women.

Table 1 presents the distribution of the women according to the characteristics obtained from the clinic records. One in four clients was less than 30 years of age and one in ten, beyond 40 years. The average age of the clients was 33.2 years. More than half (55.6%) of the husbands were 40-49 years of age and 15.2% were 50 years or older. On average, the husbands were 43.7 years old - that is, more than 10 years older than their wives (3).

As expected for this locality, 80% of the clients were Muslims. A third of the acceptors (33.1%) had children who were less than 12 months of age and 27% had children 1-2 years old. The average number of living children was 5, but more than a third (37.9%) had less than 4 children. All but 4 women had at least one living son.

The average number of live births was six, but almost half (43.6%) had seven and more live births.

More than half of the husbands were engaged in agricultural occupation and this broadly agrees with the occupational structure in the Matlab thana.

TABLE 1

PERCENTAGE DISTRIBUTION OF STERILIZATION ACCEPTORS
BY SELECTED CHARACTERISTICS

Characteristics

<u>Age of Client</u>	<u>No.</u>	<u>%</u>
20 - 24	14	5.1
25 - 29	55	20.0
30 - 34	106	38.5
35 - 39	74	26.9
40+	26	9.5
Total	275	100.0

Mean = 33.2

Age of Husband

20 - 29	2	.7
30 - 39	78	28.5
40 - 49	153	55.6
50+	42	15.2
Total	275	100.0

Mean = 43.7

Religion

Muslim	220	80.0
Hindu	55	20.0
Total	275	100.0

Education of Wife (Years)

None	209	76.0
1 - 5	53	19.3
6+	11	4.0
Total	275	100.0

TABLE 1 Contd.

Education of Husband (Years)

	<u>No.</u>	<u>%</u>
None	139	50.5
1 - 5	71	25.8
6 - 10	53	19.3
11+	10	3.6
Unknown	2	.8
	<hr/>	<hr/>
Total	275	100.0

Occupation of Husband

Agricultural	145	52.7
Non-agricultural	130	47.3
	<hr/>	<hr/>
Total	275	100.0

No. of Livebirths

1 - 2	4	1.5
3 - 4	45	16.4
5 - 6	106	38.5
7+	120	43.6
	<hr/>	<hr/>
Total	275	100.0
		Mean = 5.98

No. of Living Children

1 - 2	12	4.4
3 - 4	92	33.5
5 - 6	123	44.7
7+	48	17.4
	<hr/>	<hr/>
Total	275	100.0
		Mean = 4.6

TABLE 1 Contd.

No. of Living Sons

	<u>No.</u>	<u>%</u>
0	4	1.5
1 - 2	136	49.5
3 - 4	125	45.5
5+	10	3.5
Total	<u>275</u>	<u>100.0</u>
		Mean = 2.5

No. of Living Daughters

0	10	3.7
1 - 2	142	51.3
3 - 4	107	39.0
5+	16	6.0
Total	<u>275</u>	<u>100.0</u>
		Mean = 2.5

Age of Youngest Child (Months)

<12	91	33.1
12 - 23	75	27.3
24 - 35	27	9.8
36 - 47	39	14.2
48 - 59	21	7.6
60+	22	8.0
Total	<u>275</u>	<u>100.0</u>
		Mean = 24.0

Breastfeeding Status

Breastfeeding	218	79.3
Not breastfeeding	57	20.7
Total	<u>275</u>	<u>100.0</u>

TABLE 1 Contd.

Menstrual Status

	<u>No.</u>	<u>%</u>
Menstruating	105	38.2
Amenorrhea	170	61.8
Total	275	100.0

Previous Use of Contraception

Pill	53	18.7
Injection	88	32.6
Condom	5	1.9
Loop	5	1.9
None	124	44.9
Total	275	100.0

Menstrual Regulation

Yes	6	2.2
No	269	97.8
Total	275	100.0

The level of education in this area is low among females as well as males and this is also reflected by the educational characteristics of this group: 76% of the wives and 50.5% of the husbands were illiterate.

More than half (55.1%) of the wives had used contraception prior to acceptance of sterilization. The main methods used were injections and pills. Six of the women submitted to menstrual regulation prior to the operation.

The decision to accept sterilization was generally taken within two years after the last birth. (60.4 percent of the clients had the youngest child aged less than two years).

Consequently, most of the women (79.3%) were breastfeeding at the time of acceptance and 61.8% were amenorrheic.

Circumstances Leading to Sterilization Acceptance

Table 2 presents the steps leading to the decision to accept surgical sterilization. As would be expected, the major source of information regarding the method was the female village worker (81.1%). The FVWs contact all eligible women fortnightly to discuss the various contraceptive methods.

It is not surprising to note that upon transmittal of the information by the female village workers, 81.4% of the women turned to their female relatives, mainly sister-in-laws, to discuss the procedure. The women in the rural areas have a confined social life and very restricted mobility. They will seldom leave their "baris" (4) and so their sole contact is with women within their own baris. The social structure is such that the women residing in one bari are interrelated.

The major single concern, (49.5%), in discussing the method was the health consequence of submission to the operation with its possible impact on the physical activities of the woman. This was so for at least two reasons: the rural housewives are kept busy from dawn to late hours of the night doing various household chores, like cooking and fetching for the family, taking care of the children, poultry and livestock. They grow most of the family fruits and vegetables in order to supplement the family's diet and income. During the harvest time, they are responsible for grain processing and storing (5). In the weaving and fishing communities, the women contribute substantially by making nets and spinning thread. Secondly, to undergo an operation is for a simple, uneducated village woman a great step the outcome of which she hardly can perceive. Psychologically, she has to overcome the fear of the unknown future and implications of her decision as it may affect her health and, hence, her usefulness to her husband and family.

The main questions raised during the discussion were:-

"Will I be able to continue work after the operation?"

"Will the abdominal incision burst open when I resume working after the operation?"

"I am the oldest daughter-in-law (in an extended family) and have to do the maximum work in the household, will I be able to continue doing so?"

TABLE 2

DISTRIBUTION OF RESPONDENTS ACCORDING TO CIRCUMSTANCES
LEADING TO STERILIZATION ACCEPTANCE

<u>Source of Information</u>	<u>No.</u>	<u>%</u>
Female Village Worker	223	81.1
Relatives	36	13.1
Friends, Neighbours	11	4.0
Husband	3	1.1
Village Leaders	2	.7
Total	275	100.0

With Whom Sterilization was Discussed

Own relatives	224	81.4
Female village worker	13	4.7
Friends	17	6.2
Husband	12	4.4
Village Leaders	5	1.8
Mother-in-law	4	1.5
Total	275	100.0

Discussion Content

Attitude of Other People	61	22.2
Matlab facilities	9	3.3
Consequence of operation	136	49.5
Justification for operation	69	25.0
Total	275	100.0

Attitude of Persons With Whom
Sterilization Was Discussed

Positive	238	86.5
Negative	36	13.1
Uncommitted	1	.4
Total	275	100.0

TABLE 2 Contd.

<u>Attitude of Husband and Mother-in-law</u>	<u>No.</u>	<u>%</u>
Both permitted	261	94.9
Husband permitted/Mother-in-law objected	3	1.1
Mother-in-law permitted/Husband objected	4	1.5
Both objected	1	.4
Did not discuss with either	6	2.2
Total	275	100.0

<u>Knowledge of Other Sterilization Acceptors in the Village</u>		
Yes	236	85.8
No	39	14.2
Total	275	100.0

<u>How Respondent Came to the Clinic</u>		
Self	58	21.1
Female Village Worker	185	67.3
Other Health Personnel	32	11.6
Total	275	100.0

<u>Mode of Transportation</u>		
Walking	62	22.5
Rickshaw	36	13.2
Country boat	126	45.8
Others (Launch, Motor vehicle)	51	18.5
Total	275	100.0

One fourth of the women attempted to justify their decision for operation during the discussion. The main arguments put forward were:

"If I have too many children I will not be able to feed and clothe them properly."

"I have used pills and injections and I have bleeding problems with both so I want to change over to tubectomy as I don't want any more children."

"I find pills a great bother - I cannot use them for the rest of my reproductive life."

"I have a difficult time during child birth, I don't want another child."

It is interesting to note that the majority of arguments used as a justification were also primarily related to personal health aspects.

Among a fifth of the women the primary interest was focused on what their peers will think if they submit to the operation. This concern was mainly exhibited by women who had decided to get a tubectomy done but were seeking endorsements from their peers. With only a small proportion of the women (3.3%) the availability of the clinical facilities at Matlab formed the main content of the discussion.

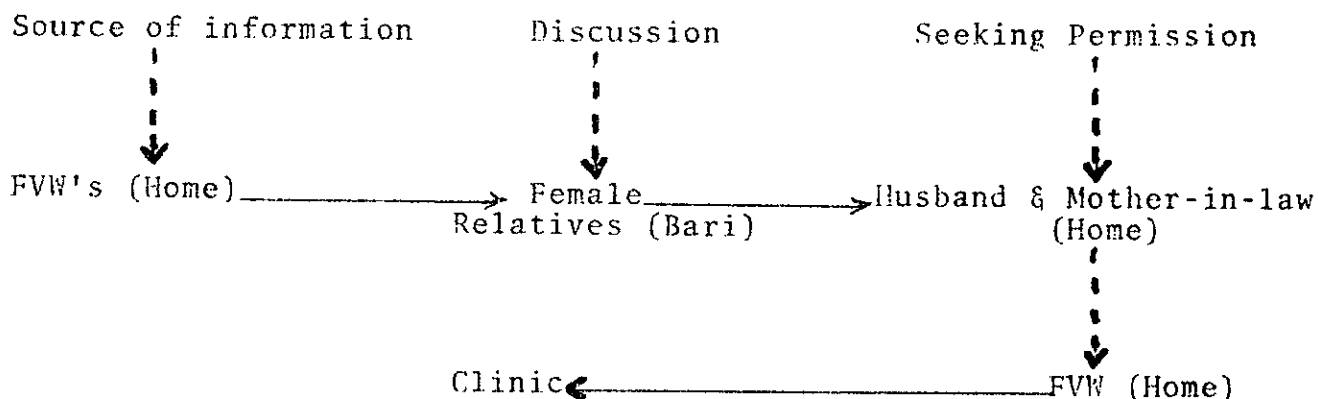
It is interesting to note that the response and attitude of the sister-in-laws and the other female relatives with whom the discussion was carried out was positive in the overwhelming majority (86.5%) of cases. This could largely be due to the fact that 85.8% had knowledge of other women who had been sterilized. They were, therefore, able to allay the fears raised by the prospective acceptors regarding the consequences on physical health and well being following sterilization. 13% had a negative attitude, the main reasons given being religious and the fear of the impact on health.

Following the discussion with the female relatives the women then approached the husband and mother-in-law to convince them and to seek their permission. In 94.9% of the cases the attitude of both the husband and mother-in-law was positive. Only six women said they had no discussion with either. In those cases the women were visiting their own parents when they decided to be sterilized.

Although 96% of the husbands were in agreement with the wives and permitted them to submit to the operation not a single one came to visit his wife post-operatively. This indicates that the husband wanted to disassociate himself from the decision in case there was any untoward reaction to, or following surgery.

After the husband agreed the wife conveyed the decision to the female village worker. More than 2 in 3 were accompanied by female village workers to the clinic and the country boat was commonly used as the mode of transportation.

The process which takes place before the respondent is able to submit to the operation may be outlined in the following manner:-



The graph suggests that in accordance with the data in Table 2 the reinforcement comes from the relatives in the initial period; the wife then turns to the husband and mother-in-law prior to the operation.

Post-acceptance Situation

In Table 3 the results are set out of the interview held about a month after the operation. The general feeling was stated to be excellent by 89.0% and good by 10.2% of the women. Husband and mother-in-law manifested a positive reaction toward the operation in 97.2% of the cases and both helped the woman with the household tasks. A large majority of the husbands bought special foods like fish, milk and eggs for the wives during the post-operative period. Most of the friends (80.2%) showed a favourable attitude to the woman.

TABLE 3

PERCENTAGE DISTRIBUTION OF STERILIZATION ACCEPTORS
ACCORDING TO THEIR POST OPERATIVE INFORMATION

<u>Attitude of Husband and Mother-in-law after operation</u>	<u>No.</u>	<u>%</u>
Both favourable	267	97.2
Both unfavourable	2	.7
Husband unfavourable/Mother-in-law favourable	2	.7
Husband favourable/Mother-in-law unfavourable	2	.7
Unknown	2	.7
Total	275	100.0
 <u>Attitude of Friends</u>		
Favourable	221	80.4
Unfavourable	51	18.5
Don't know	3	1.1
Total	275	100.0
 <u>Attendance to Household Tasks</u>		
Yes	224	81.5
No	51	18.5
Total	275	100.0
 <u>Side Effects Experienced</u>		
None	217	78.9
Weakness	15	5.5
Bleeding	4	1.5
Induration or inflammation at surgical site	6	2.2
Unspecified	16	5.8
Abdominal pain	17	6.1
Total	275	100.0

TABLE 3 Contd.

<u>Resumption of Sexual Relations after Sterilization</u>	<u>No.</u>	<u>%</u>
Less than 1 week	2	.7
During 2nd week	9	3.3
3rd week	40	14.5
4th week	101	36.7
More than 4 weeks	123	44.8
Total	275	100.0
		Mean = 27 days

General Feeling

Excellent	245	89.0
Good	28	10.2
Fair	1	.4
Poor	1	.4
Total	275	100.0

Majority of the wives (81.5%) reported that they were able to attend to their household tasks immediately. More than three-fourths (78.9%) of the women did not experience any side effects; 11.3% had vague complaints, 2.2% had induration or inflammation at the operation site.

Of the women interviewed 44.8 percent had not yet resumed regular sexual relations at the time of the interview, that is about a month after the operation. About one-third (36.7%) resumed sexual relations during the fourth week after the operation and 8.5 percent did so earlier (mainly during the third week after the sterilization).

DISCUSSION

A study of the characteristics of the sterilization acceptors, the circumstances surrounding their operation, and the post-

operative experience revealed several points of importance for the further development and strategy of the program itself as well as for other such programs to be initiated elsewhere in Bangladesh in the future.

As long as the age at first marriage of women remains as low as it is presently in rural Bangladesh (6) it may be expected that by the time the women turn about 30 years of age they will have the number of surviving children they themselves and, perhaps even more importantly, their husbands and in-laws desire (7). Being aware that the surgical sterilization is irreversible very few - presumably only those who feel that they cannot cope with any more children - could decide for it at some younger age. The mean number of surviving children (4.6) reported by the acceptors of sterilization with 95% having three and more children further supports this conclusion.

In a traditional society with a strong preference for male offspring shared by both wife and husband - the former in particular depending in old age almost solely on her son - the fact that 98 percent of the women who decided for sterilization had at least one surviving son comes as no surprise (8).

In the majority of cases the decision to undergo an operation virtually excluding a possibility of subsequent pregnancy and childbirth was taken less than two years after the last live birth while the woman was breastfeeding or still amenorrheic. This may well be the stage of the reproductive life cycle when the woman is most likely to decide for a terminal method of fertility control. It would also appear from the data presented here that those women that already made some attempt to control their fertility (ever users of contraception) are more likely to decide for sterilization than never users (9). Also a significant proportion of women justifying their decision in the pre-operation interview pointed to problems with the use of contraceptives as a reason for deciding to undergo the operation.

The decision-taking process has been outlined in the text. Because of the social structure and the isolation of the women within the confines of the bari, the support and encouragement by her family and close relatives is of paramount importance.

However, one of the most relevant findings of this survey appears to be the concern the women expressed about the implications of the operation for their health. The fear that she may not be able after the operation, to perform the tasks and attend to the chores everyone expects from her was surprisingly strong. Obviously, her position in the family would be seriously endangered if she were incapacitated and reduced in her ability

to do productive work. This interpretation of the returns of the interviews is further strengthened by the conspicuous abstention of the husband - without a single exception - from accompanying the wife to the hospital. Such strong concern about the health implications of the operation points to the need of careful pre-operation counselling and examination as well as post-operation care to avoid a possibility - however remote and slight - of complications and prolonged convalescence or even fatality.

It is quite obvious that an unsuccessful case - for whatever objective reasons - may ruin the woman's life in her family. For the rural setting, it is likely that as much as successful operations will help to promote the program and dispel the understandable fears, one unsuccessful case may do irreparable damage and jeopardize the program.

The former point is well illustrated by the experience in one of the villages in the program area from where no woman opted for sterilization. It was learnt that this was due to the fear of the health consequences of sterilization. The FVW of the area decided to allay these fears by getting herself sterilized. Within 2 weeks of her operation 48 women got sterilized from that village. By mid-October 750 tubectomies have been performed in the Matlab clinic.

It is reassuring that after the operation all but two women felt good or excellent; only one described her condition as "poor".

CONCLUSIONS

Two findings of this study appear to be particularly relevant to the strategy of the programme that incorporates surgical sterilization as one of the options. First is the decision taking process. The women were informed by the FVW of the availability of the operation at the Matlab clinic. In the discussions that followed, most frequently with close female relatives in the same bari, the women sought re-assurance and support. Then the proposition was discussed with the husband and mother-in-law and approval was elicited. Only thereafter the woman informed the FVW and, in most cases, was accompanied by her to the clinic.

Second was the focus of the woman's concern on the health sequelae of the operation. Relatively rarely did the women attempt to justify their decision by referring to a large number

of children or by referring to the economic disadvantages of a large family. The concern about health was not abstract or in health by itself. Rather it was manifested as a fear that after the operation she may not be able to perform her household duties and chores thus not only degrading the living conditions of her family but also calling upon herself the wrath of her husband and in-laws.

It would be of interest to investigate the decision making process through its stages among the women who considered sterilization but were dissuaded or prevented at some stage or another (10). Even the review of the experience of the relatively small group of the successful women, however, points to the importance of the role of the FVW who has to be able and capable to dispel the woman's fears from the start, often by being able to point to examples from the village and also by providing good follow-up and care during the post-operation period. Also, in the explanation of the operation and subsequent discussion, she should equip the woman with strong enough and persuasive arguments that the latter may be able to use during the subsequent stages of the decision taking process.

FOOTNOTES

- (1) KING Timothy, (ed.) Population Policies and Economic Development. World Bank Staff report. The Johns Hopkins University Press, Baltimore 1974.

LAPHAM R.J. and MAULDIN W.P., National Family Planning Programs - Review and Evaluation. Studies in Family Planning, March 1972:29-52.

NORTMAN Dorothy, Population and Family Planning Programs: A Factbook, Reports on Population/Family Planning. Population Council, New York 1976.
- (2) The earlier program known as Contraceptive Distribution Project, its results and demographic implications are described, for instance, in

OSTERIA T. et al. Assessment of the Matlab Contraceptive Distribution Project - Implications for Program Strategy. Working Paper No. 4, Cholera Research Laboratory, Dacca, April 1978.
- (3) Age differences of 10 years and more between husband and wife is found commonly in rural Bangladesh. See for instance L.T. RUZICKA and A.K.M.A. CHOWDHURY, Demographic Surveillance System - Matlab, Vol. Five: Vital Events, Migration and Marriages - 1976, (part B). Scientific Report No. 13. Cholera Research Laboratory, Dacca, March 1978.
- (4). 'Bari' is a collection of a few households sharing a common courtyard but often with separate kitchens. The persons living in a 'bari' are related by blood and marriage.
- (5) ABDULLAH T, and ZEIDENSTEIN S., Bari based post harvest operations and livestock care: Some observations and case studies by Saleha Khatun and Gita Rani. Report No. 48. The Ford Foundation, Dacca, December 1977.

- (6) The age at first marriage estimated from the census data for Bangladesh by Hajnal's method has been slowly increasing from 14.4 years in 1951 to 15.9 years in 1974 for females, and from 22.4 to 24.0 years for males during the same period. The census in the Matlab Demographic Surveillance System in 1974 revealed singulate mean age at marriage of women to be 17.0 years. See: K.M.A. Aziz, Marriage practices in a rural area of Bangladesh. Paper submitted to the Symposium on Marriage System (Fifth Annual Conference of the Indian Anthropological Society, Midnapore, West Bengal, 28-29 October 1978).
- (7) The desired number of children returned by the KAP survey in the Matlab area was 4.5; young women under 25 years of age wanted about the same number of children on average as the women aged 40 years and over. (R. LANGSTEN and J. CHAKRABORTY, constraints on use and impact of contraceptives in rural Bangladesh: Some preliminary speculations. Working Paper No. 6. Cholera Research Laboratory, Dacca, August 1978).
- (8) Only four women who opted for sterilization had no surviving sons.
- (9) This follows indirectly from the observation that the percentage of 'ever users' in the Matlab population was 14.4 percent according to a KAP survey (reported by Langsten and Chakraborty, op. cit. footnote (6) but the percentage of ever users among the woman under-going sterilization was 55%.
- (10) This study is underway in the Matlab DSS area.

ICDDR,B (CRL) publications can be obtained from Publications Unit, International Centre for Diarrhoeal Disease Research, G.P.O. Box 128, Dacca - 2, Bangladesh.

List of current publications available:

A. CRL Annual Report 1976.

CRL Annual Report 1977.

B. Working Paper:

No. 1. The influence of drinking tubewell water on diarrhea rates in Matlab Thana, Bangladesh by George T. Curlin, K.M.A. Aziz and M.R. Khan.

No. 2. Water and the transmission of El Tor Cholera in rural Bangladesh by James M. Hughes, John M. Boyce, Richard J. Levine, Moslemuddin Khan and George T. Curlin.

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