INJECTABLE CONTRACEPTIVES IN RURAL BANGLADESH
A Preliminary Report

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Introduction

Depo-Provera, a long acting (3 month) injectable contraceptive was introduced into the Fertility Research Project (FRP) family planning clinic in Matlab Thana, Comilla District in July 1975. The following is a preliminary report of the early experience with this contraceptive among rural women in this area.

Background

Depo-Provera is a preparation of medroxy progesterone acetate in a micro-crystalline form produced by the Upjohn Company. In this study women were given an injection of 3 ml containing 150 mgm (50 mgm/ml). Because of the large volume, most injections were given in the gluteal region rather than in the arm.

All women were fully informed of possible side effects, particularly menstrual irregularities. Injections were only given to women who requested them. All women were carefully followed up; particular efforts were made to visit at home the women who did not return for subsequent injections in order to learn their reasons for discontinuing use.

Results

The results will be reported on 34 women who have been in the study for at least 6 months. These women ranged in age from 18 to over 40 (Table 1). Twenty-one were in the 30 to 40 year age group.

Most (82%) of the women had 4 or more living children (Table 2). Only 5 women (15%) were interested in having additional children. Only 3 women (9%) reported previous use of any other contraceptives.

Although many of the women were older, and high parity, most were still within their active reproductive years as evidenced by the fact that

31 (91%) were still breast feeding their youngest child. Eighteen (53%) of the women came within 1 year of their last pregnancy termination, 28 (82%) within two years (Table 3).

One result of this relatively early initiation of contraception while still breast feeding is that 25 (74%) of the women were still in a state of lactational amenorrhea when starting injections. This means, of course, that as long as contraceptive use overlaps with the expected period of lactational amenorrhea, the contraception is not having any effect on birth rates, since the women would not be getting pregnant in any event. For example, the average duration of lactational amenorrhea in Matlab is close to 2 years, but women are starting injections at one year postpartum on average (Table 3). Therefore, one cannot expect to see much effect in preventing pregnancies for about 9-21 months from starting to use injectables, and of course, births will not be prevented until about 18-21 months assuming all women continue to use the injection.

Continuation rates and reasons for discontinuation in this limited series of cases appear to follow a pattern broadly similar to pill use. The data are summarized in Table 4. Among 34 women receiving the first injection only 27 (79%) came for a second injection. Of 17 due for a third injection only 6 (35%) took the third injection. If this pattern persisted for a larger group of cases, one could estimate by a simple life table analysis that of 100 women receiving the first injection, the numbers accepting a second and third injection would be 79 and 40 respectively.

Excluding 3 cases lost to followup, the reasons for drop out are almost equally divided between medical reasons (7 cases) and social reasons (8 cases). The most common social reason was that the "husband objects" (4 cases). Two women dropped-out because of the death of children in their own, or another, family which they superstitiously related to their own use of injection.

The most common medical problem causing drop-out was irregular and/or heavy menstrual bleeding (5 cases). Most women complained of general weakness and dizziness, but this was a direct cause of drop-out in only one case.

Depo-Provera is known to cause irregular bleeding in most women. Generally bleeding is not excessive and after 6 months half or more of the women will have sustained amenorrhea.

This study gave some evidence of these effects on bleeding, though the numbers of cases are small, and the duration of follow-up short. Although 25 of the 34 women were in postpartum amenorrhea at the time of the first injection, 9 experienced some bleeding after the first injection. The pattern of bleeding, based on 17 cases recorded after the first injection, and 9 after the second injection showed increasing irregularity. Following the first injection, no women reported amenorrhea (after a period of menstruation), 35 percent of the women reported irregular bleeding, and 18 percent reported excessive flow. Following the second injection, these same three problems were reported by 22 percent, 71 percent, and 43 percent of the women respectively. Two cases required supplemental estrogen (Norinyl) to control the bleeding after the second injection.

Effects on breast milk production were based on the women's reports, but unfortunately these could not be assessed objectively. Thus it is not clear whether the reports are meaningful. In other studies, injectable contraceptives have been shown to increase the volume of breast milk produced as well as prolonging the mean duration of lactation (Population Reports, Series J, No. 4, George Washington Univ., July 1975). In addition, it is known that milk production decreases in all women at some point during the period of lactation. In this study, only one woman dropped-out due to her subjective assessment of a decrease in breast milk production (along with irregular menstruation).

Summary and Conclusion

Preliminary experience with three-month injections of Depo-Provera in a rural family planning clinic indicates that this method can have some applicability in a well supervised family planning programme. The data suggest that about 40 percent of women may complete 3 injections. Only one half the drop-outs however, seem to be clearly related to known side effects, that is, irregular bleeding. In fact, a number of the women are continuing in spite of bleeding problems. It is clear, however, that

adequate medical supervision and appropriate counselling must be available in a programme using injections to manage the frequent menstrual problems.

For women who cannot continue injections, yet do not desire children, other contraceptive methods must be available. Unfortunately, in this study none of the medical drop-outs switched to another method probably because IUD's and pills also have bleeding and other problems. Tubectomy, which some studies have found to be the best "backup" method is not available in Matlab.

Drop-outs for social reasons particularly "husband objects" in this group of injection clients parallels experience of this clinic with oral contraceptive users. The significance of this objection becomes more apparent when it is recognized that a number of women are taking contraceptives secretly without informing their husbands. Often the discovery of such deception has led to a beating for the wife, and verbal abuse of the clinic staff. Obviously, introducing another technology is not going to help these women. It appears that the motivation of these women has far surpassed their husbands. Motivational approaches in these cases must be directed at the husbands.

Further experience with injectable contraceptives covering a larger sample of women over a longer period of time is necessary to draw more valid conclusions. A more detailed report is expected in the near future. Until such a report is available the use of injectables in family planning programs and projects in Bangladesh should be closely monitored, perhaps limited to distribution through well-equipped clinic outlets by well-trained personnel.

TABLE 1

AGE DISTRIBUTION OF DEPO-PROVERA CLIENTS

	Age Group				
	Under 20	20-29	30-39	40+	Total
Number of clients	1	6	21	6	34

TABLE 2

DISTRIBUTION OF WOMEN BY NUMBER OF LIVING CHILDREN AND NUMBER AND PERCENT WANTING ADDITIONAL CHILDREN

	Number of Living Children			
	0-3	4-6	7+	Total
Number of clients	6	21	7	34
Number wanting more children	3(50%)	2(10%)	0	5(15%)

TABLE 3

DISTRIBUTION OF WOMEN BY INTERVAL SINCE LAST PREGNANCY TERMINATION

	Interval in Months				
	<6	6 to <12	12 to <24	24+	Total
Number of clients	5	13	10	6	34

TABLE 4

SUMMARY OF NUMBER OF WOMEN RECEIVING EACH INJECTION, AND REASONS FOR DROP-OUT

Injection	Number Injected	Reason for Drop-Out		Lost to Follow-Up	Next Injection Not Due
		Medical	Social		
First	34	2	3	3	-
Second	27	5	6	-	10
Third	6	-	-	-	6

BANGLADESH FERTILITY RESEARCH PROGRAMME

AND

THE JOHNS HOPKINS UNIVERSITY FERTILITY RESEARCH PROJECT

DACCA

WORK SHOP ON

"The Role of Injectable Contraceptives in Bangladesh"

Date : Tuseday, Ist March, 1977

Place : Atomic Energy Centre, Dacca

Time : 8 A.M. To 2 P.M.