

Use-effectiveness and Safety of Oral Contraceptives in Rural Bangladesh : Sulla Case Study*

by

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I. INTRODUCTION

With the rapid increase of oral acceptors in the wake of fertility regulating programmes of both government and non-government agencies in the recent years, an assessment of the use effectiveness of oral contraception and an analysis of its side effects is becoming increasingly important. The use-effectiveness of contraception has two basic dimensions : (a) continuation and (b) effectiveness. "Continuation" relates to the number of months an acceptor practises a method, while "effectiveness" means the average extent to which natural fecundability (the woman's monthly chance of conception during a fecundable month) is reduced by the use of contraceptives [10].¹

The importance of studying the use-effectiveness of oral contraception in both these dimensions need hardly be emphasized. It is obvious that an increase in the number of acceptors may not be enough to bring about a sustained

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¹An evaluation of use-effectiveness admits of the possibility of sporadic periods of non-use of the method. Once contraception is discontinued, however, i.e., if non-use is no longer sporadic or casual but endures for a month or more, accidental pregnancy is not attributed to contraceptive failure [3 ; 11].

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fertility decline, unless the couples have the ability and willingness to practise contraceptives consistently. Apart from accidental failures, there may be systematic forces, such as lack of motivation, low parity, side effects etc., which may contribute to reducing the use-effectiveness of contraception. This paper intends to examine the use-effectiveness of oral contraception in Bangladesh and tries to identify the factors affecting it.

The findings of this paper are based on the information of one particular area of the country. The conclusions must, therefore, be treated as tentative while generalising for the country as a whole. Section II of the paper describes the data, research methodology and its limitations. Sections III and IV present respectively an assessment of use-effectiveness and an analysis of side effects. Finally, Section V presents a summary and conclusions.

II. DATA, METHODOLOGY AND LIMITATION

The data used in this study refer to a project area, viz., Sulla, where the Bangladesh Rural Advancement Committee undertook in the seventies, a multi-sectoral rural development programme, with family planning as one of the components. The family planning programme of the project, mainly with the orals, began in January 1974 and after two years, during mid-February to Mid-March 1976, an "Oral Pill Follow-up Survey" was conducted for generating information from all contraceptors constituted with the cross-section of women in the society.²

In order to analyse this information, a number of tables cross-classified with socio-demographic characteristics of acceptors were generated and using "multiple decrement life table", gross rates were computed for various cohorts of women.³ For comparative analysis, gross rates, otherwise called absolute or true rates [1], of decrement are more meaningful, particularly when one is interested to look at the patterns of termination. The word 'termination' is applicable to a woman who discontinued oral contraceptives for some reasons. For the purpose of analysis, each cohort starts with the total number of acceptors who adopted oral contraceptives. As the time elapses from acceptance, the time rates of termination, as demonstrated by a cohort of acceptors, typically decrease at a decremental rate [10].

²The contraceptors were married women, secund (aged 10-49) and currently living with husbands. The details of the programme activities, survey methodology and data, and basic characteristics of both contraceptors and other women of the study area were discussed in an earlier paper [6].

³See [1], for details of the construction of multiple decrement life table.

Thus to evaluate use-effectiveness, one needs to know the proportion of acceptors that are still successfully practising contraceptives at specified intervals after its acceptance. It is also important to measure the relative intensities of the various causes interrupting the use of the method.

The following information were collected on contraception, in addition to other information on socio-demographic characteristics of an acceptor :

- (i) when a woman began her first cycle,
- (ii) whether she was still practising the pill on the date of enquiry and, if not,
- (iii) when she stopped using it and for what reasons,

The reasons for discontinuation were recorded as (a) planned pregnancy, (b) accidental pregnancy, (c) serious symptoms, (d) fear of the method, (e) husband's unwillingness, (f) do not feel any more need for the method, and (i) other problems.⁴

For multiple decrement life table analysis, we have conveniently grouped these information under four heads, viz. (i) planning pregnancy, (ii) accidental pregnancy, (iii) medical and health reasons, and (iv) others. The category of "accidentally pregnant" defines the number of failures [9].

This study is primarily based on those acceptors who reported to be the users of the first segment only. The proportion of multiple users (37 out of 2359) were excluded from analysis.⁵

For obvious reasons, the life table approach is less reliable in the case of oral contraception than in the case of IUD [4].⁶ During the process of data collection, however, specific care was taken to minimise related problems, with the help of check questions. Since the pill usage is linked up with menstrual cycles, cycles and not the calendar months were accepted in the analysis as time indicator to avoid any presumable technical hitch which might have resulted in over-estimation [1 ; 2 ; 6].

⁴Other problems, include husband's absence, separation, sterility, sub-fecundity and widowhood.

⁵Clients (numbering 30) who switched over to other methods were included in the terminal status "others".

⁶Limitation of the life table approach was discussed in details in an earlier paper [6].

In order to analyse safety we have looked at the percentage distribution of acceptors who reported to have either suffered from or discontinued for various symptoms and side-effects during the use of contraceptives.

III. USE-EFFECTIVENESS OF ORAL CONTRACEPTIVES FOR WOMEN OF DIFFERENT CHARACTERISTICS

The effects of a number of social, demographic and economic variables on the use-effectiveness of oral contraception were considered in this section. But only those variables have been included which were found to have distinctive effects on the level of oral contraceptive used. These are religion, age, parity, desire for additional children and level of education of contraceptive users [6].

Religion

Table I(A) presents cumulative continuation rates estimated for (a) all acceptors, (b) the Muslims and (c) the Hindus. The percentage of acceptors continuing after 21 cycles (roughly equivalent to 19 calendar months) is 49 for all acceptors, 56 for the Muslims and 43 for the Hindus. When compared to the respective sets of rates estimated earlier with single decrement life-table approach [6], it amply justifies the observation that the total cumulative continuation rates computed by both multiple and single decrement life table approaches produce nearly same results [1]. The findings of both approaches show that the Muslims had higher continuation rates than the Hindus meaning the former to be the more consistent users.

It is worthwhile to look at the cumulative discontinuation rates pertaining to different reasons of termination among each group of users. Table I(B) shows that, among specific reasons, discontinuation due to medical and health reasons is the most prominent one for the group "all acceptors" throughout the length of exposure. The same trend holds true in the case of the Muslims and Hindus, the latter showing higher rates of discontinuation for this particular reason. Discontinuation rates for accidental pregnancy (or failure rates) is 10 per cent for all acceptors, 7 per cent for the Muslims and 12 per cent for the Hindus after 18 cycles of use.

TABLE I (A)

CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR
ORAL ACCEPTORS BY LENGTH OF EXPOSURE AND RELIGION ;
SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Cumulative Continuation Rates					
	Multiple	Decrement	Approach	*Single	Decrement	Approach
	^b All Accep- tors (n=2300)	Muslims (n=853)	Hindus (n=1447)	All Accep- tors (n=2331)	Muslims (n=863)	Hindus (n=1468)
3	82.0	85.0	80.6	82.0	84.4	80.6
6	71.4	74.1	69.9	71.2	73.5	69.8
12	61.9	65.3	59.6	60.7	64.5	58.4
18	53.5	58.3	50.7	51.8	57.2	48.8
21	49.1	55.7	42.8	47.6	54.7	45.8

Notes :

^aSee [6].

^bAcceptors numbering 37 and 22 were excluded respectively for multiple dropouts and not being specific to either number of cycles or status of termination.

TABLE I (B)

CUMULATIVE DISCONTINUATION RATES (PER CENT PER CYCLE)
FOR ALL ACCEPTORS BY RELIGION, CAUSES OF TERMINATION
AND LENGTH OF EXPOSURE ; SULLA, JANUARY 1974 TO
FEBRUARY/MARCH 1976

Religious Status and Causes of Termination	Length of Exposure (cycle)			
	3	6	12	18
All				
Planning Pregnancy	3.3	6.4	9.9	12.1
Accid. Pregnancy	2.9	5.1	7.7	9.8
Medical & Health Reasons	5.7	9.4	13.7	17.5
Others	7.4	11.2	13.9	18.2
Muslims				
Planning Pregnancy	1.9	4.8	7.8	9.2
Accid. Pregnancy	2.6	4.6	5.8	6.7
Medical & Health Reasons	4.1	7.5	11.3	14.8
Others	7.2	11.9	14.8	19.3
Hindus				
Planning Pregnancy	4.0	7.5	10.8	13.3
Accid. Pregnancy	3.1	5.4	9.6	12.0
Medical & Health Reasons	6.6	10.5	15.1	19.0
Others	7.2	10.7	13.3	17.9

Further light can be thrown by analysing the data after controlling the age of acceptors with religion. The cumulative continuation rates for the acceptors of each religion, with a three-fold classification of age-groups, are presented in Table II(A). The percentage of acceptors continuing with the orals are higher among the Muslims in each age group and this trend is valid almost over the entire length of exposure (except the Hindus aged 35 and over, showing higher continuation rates upto 6 cycles of use). It further appears that the youngest acceptors have the lowest continuation rates ; and more often they discontinued because they had accepted the method for spacing reasons [6].

TABLE II (A)

CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR
ORAL ACCEPTORS BY LENGTH OF EXPOSURE, RELIGION AND
AGE ; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Religion and Age (years)					
	Muslims			Hindus		
	< 25 (n=82)	25-34 (n=481)	35+ (n=290)	< 25 (n=178)	25-34 (n=758)	35+ (n=511)
3	79.1	87.3	81.4	73.6	79.4	84.5
6	73.3	76.1	71.6	61.5	69.5	73.1
12	65.2	65.1	66.8	50.8	58.0	63.8
18	54.5	57.2	60.7	42.2	49.8	53.9

The behaviour of the acceptors among these two communities may also be observed from Table II(B). Cumulative discontinuation rates for planning pregnancies are higher among younger women of both the communities, while it is substantially higher among the Hindus. On the contrary, cumulative discontinuation rates due to medical and health reasons are observed higher for older women in both the communities. While accidental pregnancy or failure rates are found to be higher for the younger acceptors of both the communities,

TABLE II (B)

CUMULATIVE DISCONTINUATION RATES (PER CENT PER CYCLE) BY RELIGION, AGE, LENGTH OF EXPOSURE
AND CAUSES OF TERMINATION ; SULLA. JANUARY 1974 TO FEBRUARY/MARCH 1976

Religion and Age (years)	Length of Exposure (cycle) and Causes of Termination											
	6				12				18			
	Planning Preg.	Accid. Preg.	Med./ Health Reasons	Others	Planning Preg.	Accid. Preg.	Med./ Health Reasons	Others	Planning Preg.	Accid. Preg.	Med./ Health Reasons	Others
Muslims												
<25	9.3	3.1	(*)	(*)	12.6	10.6	(*)	(*)	(*)	15.9	(*)	(*)
25-34	5.0	4.9	6.4	10.0	8.4	5.9	11.2	15.0	12.2	6.7	14.4	18.4
35+	3.0	4.6	9.0	15.0	5.5	(*)	12.1	15.7	(*)	(*)	15.1	20.7
Hindus												
<25	15.0	7.4	8.9	14.2	20.8	15.8	12.5	(*)	27.4	22.6	(*)	(*)
25-34	8.8	6.3	10.8	8.8	12.6	11.0	16.6	10.5	14.9	13.9	21.7	13.1
35+	3.2	3.7	10.2	12.7	5.4	5.7	13.5	17.2	7.5	7.8	16.8	23.9

Note : Asterisk mark indicates that values are either too small or not further cumulated over the length of exposure.

Age and Parity

It is said that age and parity go together. Higher is the age of mother, greater is the number of living children. For this reason it is often difficult to isolate the effect of these two variables. However, an attempt is made here to look at the behaviour of acceptors cross-classified by their age and number of living children.

In Table III(A), cumulated continuation rates of acceptors in each broad age group are cross-classified by the number of living children. It appears that acceptors with lower parity have lower continuation rates in each age group and this trend holds good over the length of exposure. This implies that parity is more important than age and acceptors with higher parity are more consistent users of oral contraception.

TABLE III (A)
CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR
ORAL ACCEPTORS BY AGE, NUMBER OF LIVING CHILDREN
AND LENGTH OF EXPOSURE ; SULLA, JANUARY 1974 TO
FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Age and Number of Living Children					
	Aged <25		Aged 25-34		Aged 35+	
	Living Children		Living Children		Living Children	
	<3 (n=205)	3+ (n=55)	<3 (n=388)	3+ (n=851)	<3 (n=67)	3+ (n=734)
3	72.0	87.9	81.3	82.8	76.1	84.0
6	62.0	77.6	67.6	73.9	63.6	73.3
12	51.2	70.4	55.1	63.0	51.9	66.7
18	44.2	54.3	46.2	55.2	(*)	58.2

Note : Asterisk mark indicates that the values are not further cumulated over the length of exposure.

Table III(B) shows that women of all ages with fewer number of living children are more inclined to discontinue oral contraceptives for planning pregnancies. It is plausible that they adopted contraceptives for spacing reasons, and subsequently decided to discontinue in order to have additional children or they might not feel as compelled as those with larger number of living children to practise the method. Acceptors with larger number of living children in the age group under 25 tend to have higher accidental pregnancy rates, percentages being 29 for them as against 21 for the rest.

TABLE III (B)
CUMULATIVE DISCONTINUATION RATES (PER CENT PER CYCLE) BY AGE, NUMBER OF LIVING CHILDREN, CAUSES OF TERMINATION AND LENGTH OF EXPOSURE; SULLA,
JANUARY 1974 TO FEBRUARY/MARCH 1976

Age & No. of Living Children	Length of Exposure (cycle) and Causes of Termination											
	6				12				18			
	Planning Preg.	Accid. Preg.	Med./Health Reasons	Others	Plan. Preg.	Accid. Preg.	Med./Health Reasons	Others	Plan. Preg.	Accid. Preg.	Med./Health Reasons	Others
Aged < 25												
No. of Living Children < 3	13.2	6.0	10.7	15.0	18.1	14.7	13.7	(*)	24.0	20.8	14.7	(*)
No. of Living Children 3+	(*)	17.3	2.1	4.2	4.8	21.2	4.6	(*)	(*)	29.1	(*)	(*)
Aged 25-30												
No. of Living Children < 3	12.2	6.2	5.6	13.2	18.7	10.3	9.3	16.7	25.0	11.6	11.9	21.0
No. of Living Children 3+	5.2	5.6	10.7	7.6	8.0	8.5	16.6	10.2	9.4	10.9	21.5	12.8
Aged 35+												
No. of Living Children < 3	10.9	1.8	19.2	10.2	17.5	2.0	25.8	13.6	(*)	(*)	(*)	(*)
No. of Living Children 3+	2.5	4.2	9.0	13.8	4.0	5.4	11.9	16.7	5.1	6.5	15.3	22.5

Note : Asterisk mark indicates that values are either too small or not further cumulated over the length of exposure.

Desire for Additional Children

Since the survey was directed to oral contraceptors, the use-effectiveness in relation to the attitude towards additional children had also been limited to them. From the demographic point of view, the contraceptors' attitude towards additional children in general and sex preference in particular is important [8]. Positive attitude in either case may exert a significant influence on contraceptive use, because couples in that case might not feel a strong need to limit their children to a small number.

Table IV(A) presents the cumulative continuation rates for those contraceptors who desire to have additional children and those who do not. The continuation rates are markedly higher in the later group. This is plausible because the contraceptors who decided not to have any additional children might have by then completed their family size and were persistent users of oral contraception. It is evident from Table IV (B) that a greater number of acceptors desiring additional children reported to have discontinued orals for planning pregnancies throughout the length of experience (18 per cent and 24 per cent after 12 and 18 cycles of use respectively). Although the discontinuation rates for planning pregnancy is substantially lower for those who reported to have no desire for additional children, yet there appears to be some inconsistency in the fact that at least some of those who reported to have no desire for additional children did discontinue after all. However, in a male-dominated society the chances are high that some acceptors might have yielded their desire to their husband's decision and terminated the practice of orals for planning pregnancies.

TABLE IV (A)

CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR ORAL
ACCEPTORS BY ATTITUDE TOWARDS ADDITIONAL CHILDREN
AND LENGTH OF EXPOSURE ; SULLA, JANUARY 1974
TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Attitude Towards Additional Children	
	Desiring Children	Not Desiring Children
3	79.0	85.0
6	68.0	75.0
12	55.0	69.0
18	44.0	63.0

TABLE IV (B)

CUMULATIVE DISCONTINUATION RATES (PER CENT PER CYCLE) FOR ORAL ACCEPTORS BY ATTITUDE
TOWARDS ADDITIONAL CHILDREN, REASONS FOR DISCONTINUATION AND LENGTH OF
EXPOSURE ; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Desiring Additional Children				Not Desiring Additional Children			
	Planning Pregnancy	Accidental Pregnancy	Health & Medical Reasons	Others	Planning Pregnancy	Accidental Pregnancy	Health & Medical Reasons	Others
3	6.1	4.1	6.2	6.7	0.3	1.9	5.2	7.9
6	11.4	6.3	9.5	9.8	1.4	3.8	9.4	12.3
12	18.1	10.6	14.1	12.1	1.6	5.5	12.6	15.2
18	23.7	14.7	19.6	15.9	1.6	5.8	15.0	19.7

TABLE V (A)
CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR ORAL ACCEPTORS BY NUMBER OF
LIVING SONS, ATTITUDE TOWARDS ADDITIONAL CHILDREN AND LENGTH OF EXPOSURE ; SULLA,
JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	No. of Living Sons and Attitude Towards Additional Children											
	0				2				3			
	Desi- ring Son	Not Desi- ring Son	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter	Desi- ring Son	Not Desi- ring Son	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter	Desi- ring Son	Not Desi- ring Son	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter
3	73.0	79.0	64.0	80.0	82.0	86.0	81.0	86.0	81.0	86.0	83.0	85.0
6	62.0	74.0	50.0	73.0	74.0	75.0	74.0	76.0	75.0	76.0	73.0	75.0
12	53.0	63.0	41.0	64.0	58.0	68.0	51.0	67.0	59.0	68.0	57.0	68.0
18	46.0	63.0	—	62.0	47.0	61.0	42.0	58.0	48.0	61.0	41.0	62.0

TABLE V (B)
CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR ORAL ACCEPTORS BY NUMBER
OF LIVING DAUGHTERS ATTITUDE TOWARDS ADDITIONAL CHILDREN AND LENGTH OF
EXPOSURE; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	No. of Living Daughters and Attitude Towards Additional Children											
	0				2				3			
	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter	Desi- ring Son	Not Desi- ring Son	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter	Desi- ring Son	Not Desi- ring Son	Desi- ring Daugh- ter	Not Desi- ring Daugh- ter	Desi- ring Son	Not Desi- ring Son
3	77.0	81.0	72.0	85.0	79.0	85.0	82.0	86.0	81.0	85.0	74.0	85.0
6	64.0	75.0	61.0	65.0	73.0	76.0	74.0	76.0	72.0	75.0	59.0	74.0
12	52.0	66.0	49.0	56.0	57.0	67.0	59.0	71.0	58.0	67.0	34.0	68.0
18	42.0	63.0	48.0	48.0	50.0	61.0	48.0	65.0	49.0	58.0	23.0	59.0

The attitude of the contraceptors towards having either additional sons or daughters was cross-classified with the existing number of living sons and daughters. The acceptors who have a larger number of daughters (3 or more) have strong desire for sons and their continuation rates are markedly lower than those who desire daughters in this category (Tables VA and VB).

Literacy

Education is often considered a crucial factor which on the one hand provides opportunities for personal advancement, and on the other provides "new outlook, the freedom from traditions, the willingness to analyse institutions, the values and patterns of behaviour and the growth of rationalism". The educated couples are thus expected to be more conscious and rational in fertility behaviour as well as in the practice of a suitable method of contraception, particularly when availability of such contraception is presumed not to be constrained [5 ; 7].

Since this study is based on the oral contraceptors at village level only and since higher-educated couples are very few in the sample, the scope of detailed analysis of contraceptive practice in relation to the contraceptors' levels of education is limited in this paper. However, within the domain of limited data an attempt is made here to examine the relationship between use-effectiveness and acceptors' level of education along with their husband's level of schooling.

TABLE VI (A)

CUMULATIVE CONTINUATION RATES (PER CENT PER CYCLE) FOR
ORAL ACCEPTORS BY LITERACY AND LENGTH OF EXPOSURE ;
SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Length of Exposure (cycle)	Literacy Status					
	Acceptors Education < 5 Years of Schooling			Acceptors Education 5 Years & More of Schooling		
	All (n = 1541)	Husbands' Education		All (n = 759)	Husbands' Education	
		< 5 Years of of School- ing (n = 1494)	5+ Years of School- ing (n = 47)		< 5 Years of School- ing (n = 521)	5+ Years of School- ing (n = 238)
3	81.5	81.3	88.4	85.2	82.0	84.5
6	71.2	70.6	74.7	73.1	72.3	72.7
12	61.1	60.2	59.5	63.8	64.7	64.7
18	52.7	52.2	—	56.6	55.6	57.1

TABLE VI (B)

CUMULATIVE DISCONTINUATION RATES (PER CENT PER CYCLE) BY LITERACY OF COUPLES, CAUSES OF TERMINATION AND LENGTH OF EXPOSURE ; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Level of Schooling	Length of Exposure (cycle) and Causes of Termination											
	6				12				18			
	Plann- ing Preg.	Accid. Preg.	Med. / Health Reasons	Others	Plann- ing Preg.	Accid. Preg.	Med./ Health Reasons	Others	Plann- ing Preg.	Accid. Preg.	Med./ Health Reasons	Others
Acceptors' Education < 5 Years												
All	6.0	5.4	9.3	11.7	9.1	8.9	13.7	14.6	11.3	11.0	17.4	19.2
Husbands' Education < 5 Years	5.5	5.8	9.1	12.6	9.0	8.9	13.9	15.6	11.4	10.5	17.8	20.3
Husbands' Education 5+ Years	2.4	2.4	13.9	8.7	22.4	2.9	14.9	(*)	(*)	(*)	21.0	(*)
Acceptors' Education 5 + Years												
All	9.5	3.2	9.8	7.5	13.2	5.1	13.5	10.1	16.4	7.3	17.5	11.5
Husbands' Education < 5 Years	7.1	4.4	9.8	9.3	9.3	7.0	13.2	11.6	11.3	10.3	16.7	16.1
Husbands' Education 5+ Years	11.0	3.4	8.9	7.2	11.5	3.6	13.3	10.3	15.2	8.3	16.6	12.0

Note : Asterisk mark indicates that the values are not cumulated further over the length of exposure.

It is found that cumulative continuation rates for the acceptors with 5 years or more of schooling is higher than those with less than 5 years of schooling (Table VI). And this pattern of relationship holds good in all the cycles of use. On the other hand, the husbands' formal education does not seem to have a substantial influence on the continuation rates for orals when the contraceptors themselves have 5 years or more of schooling.

Table VI (B) presents the cumulative discontinuation rates by reasons and the level of education of the couples. It appears that the discontinuation rates due to medical reasons is high for each group irrespective of the level of education. But discontinuation for planning pregnancy is higher for those couples who reported to have completed 5 years or more of schooling. At the same time, the rates for accidental pregnancy is lower for them.

VI. SYMPTOMS AND SIDE-EFFECTS

Since medical symptoms appeared to be the most important reason for discontinuation with the oral contraceptors, it is worthwhile to analyse these information further and explore the nature of side-effects.

In our analysis, about 60 per cent of all respondents reported that they had experienced side-effects (Table VII). However, not all of them discontinued the method. The percentage of acceptors having such experience varied from age to age and tended to be higher for higher age groups.

A great majority (74%) of the acceptors who experienced side-effects reported to have suffered from more than one medical symptom. Roughly half of them complained that they were experiencing three or more medical symptoms (Table VIII). The age distribution of the complainants have demonstrated that experience of three or more symptoms was the highest for the acceptors in each age group. And between the age groups, the older women appear to have been the worst sufferers.

Table IX presents the proportion of all acceptors who reported to have experienced side-effects and also those who discontinued as a result of such experience over the length of exposure. Nearly one-fifths of the total acceptors complained of adverse reactions during the first three cycles of use. Over the

TABLE VII

ORAL ACCEPTORS (PER CENT) BY AGE, AND SIDE-EFFECTS SUFFERED,
SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Age (years)	Status		
	No. of Acceptors	Acceptors Suffering from Side-effects	
		No.	Per Cent
<25	264 (11.4)	147 (10.5)	56.0
25-34	1247 (53.7)	736 (52.5)	59.0
35+	811 (34.9)	518 (37.0)	65.0
Total	2322 (100)	1401 (100)	60.0

Note : Parentheses indicate percentage values to the corresponding total values of all ages.

TABLE VIII

ORAL ACCEPTORS (PER CENT) BY AGE AND NUMBER OF SIDE EFFECTS
(PROBLEMS) ; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

No. of Problems Suffered	Age (years)			
	<25 (n=147)	25-34 (n=736)	35+ (n=518)	Total (n=1401)
	Per Cent	Per Cent	Per Cent	Per Cent
1	23.8	25.7	25.7	25.5
2	30.6	27.4	22.0	25.8
3+	45.6	46.9	52.3	48.8
Total	100	100	100	100

TABLE IX
 ORAL ACCEPTORS (PER CENT) COMPLAINING SIDE EFFECTS AND DROPOUTS FOR MEDICAL AND
 HEALTH REASONS BY AGE AND LENGTH OF EXPOSURE, SULLA, JANUARY 1974 TO
 FEBRUARY/MARCH 1976

Length of Exposure (cycle)	No. of Acceptors (n=2300)	Complaining Side Effects				Dropouts for Medical and Health Reasons			
		Aged <25 (n=145)	Aged 25-34 (n=724)	Aged 35+ (n=510)	All (n=1279)	Aged <25 (n=20)	Aged 25-34 (n=127)	Aged 35+ (n=185)	All (n=332)
0-3	793	22.3	19.9	16.5	19.0	5.8	4.9	4.4	4.8
4-6	469	11.5	11.5	15.6	12.9	0.8	1.9	3.1	2.2
7-12	397	11.9	12.5	10.0	11.6	0.8	2.2	1.5	1.8
13-18	371	8.8	8.5	11.7	9.7	0.4	1.0	1.0	0.9
18+	270	2.7	7.1	10.5	7.8	—	0.2	0.6	0.3

Note : Twentytwo acceptors who were not specific to the number of cycles and status of termination were excluded.

length of use, however, the proportion of them relative to the total number of clients gradually came down and only 8 per cent reported any side-effects after 18 cycles of use. This leads one to believe that the level of tolerance increases as the clients increasingly become habituated with the method.

A number of side-effects or symptoms were mentioned when the acceptors were enquired about. Table X has been arranged in order of importance of side-effects experienced and reported by the acceptors. The most important symptoms are dizziness (62%), headache (36%) and vomiting (32%). Next comes neurosis disability, irregular menses and break-through bleeding, fatigue, colic & dyspepsia. The age-specific reporting of the symptoms does not appear markedly different from the aggregate pattern of all ages. It does not appear from the reports that the clients were suffering from severe diseases, nor is it indicated that the symptoms were outside the control of medical care. Some of the symptoms may not even be due to use of pills at all. Only reassurance of follow-up may help control many of the symptoms the clients reported to have suffered from.

TABLE X
ORAL ACCEPTORS BY AGE AND SYMPTOMS AND SIDE-EFFECTS
SUFFERED ; SULLA, JANUARY 1974 TO FEBRUARY/MARCH 1976

Reported Symptoms and Side Effects	Age			
	<25	25-34	35+	Total
1. Dizziness	59.0	62.0	61.0	62.0
2. Headache	29.0	38.0	36.0	36.0
3. Vomiting	36.0	32.0	31.0	32.0
4. Neurosis Disability	21.0	19.0	22.0	21.0
5. Irregular Menses and Bleeding	23.0	20.0	22.0	21.0
6. Fatigue	12.0	17.0	15.0	16.0
7. Colic and Dyspepsia	19.0	12.0	15.0	14.0
8. Difficulties with Breast Feeding and other Breast Diseases	6.0	5.0	4.0	5.0
9. Mental Weakness	3.0	4.0	5.0	5.0
10. Skin Diseases, Diseases with Uterus, Weight Gain/Loss, Jaundice	3.0	2.0	3.0	3.0
11. Others	13.0	10.0	13.0	11.0

Note : Seven acceptors were excluded because they were not specific about the symptoms.

V. SUMMARY AND CONCLUSION

An attempt has been made in this study to understand the pattern of discontinuation of oral contraceptive and the factors affecting it, as well as the nature of medical symptoms and safety associated with the use of the method. The major findings are as follows :

(i) The Muslims were found more consistent than the Hindus in the use of the method concerned. The analysis of the pattern of termination reveals that, for any specified reason, the discontinuation is higher for the Hindus than for the Muslims.

(ii) The younger acceptors particularly those with fewer number of living children tend to discontinue more. Planning of pregnancy is the major reason for their discontinuation. But the discontinuation due to medical and health reasons is highest for women with lower parity for both younger and older women.

(iii) The acceptors who do not desire additional children are more persistent users of the method than those who do. But some acceptors seem to have yielded their desire to the husband's decision to discontinue even if they themselves do not want any more children.

(iv) The acceptors completing 5 years or more of schooling are better users of the method. Husband's level of education itself has no substantial influence on the orals use.

(v) Discontinuation due to medical and health reasons is quite high for all groups of acceptors irrespective of their level of education, while the discontinuation due to planning pregnancies is lower for the couples who reported to have completed 5 years or more of schooling.

(vi) A larger number of acceptors reported an experience of medical symptoms and almost three fourths of them indicated such experience with more than one symptom. Many of the acceptors experiencing medical symptoms have discontinued the method, while others have not.

(vii) Nearly one-fifth of the total acceptors have complained of adverse reactions during the first three cycles of use, and their experience of such adverse reactions have gradually declined over the length of exposure. The proportion of clients terminating the use of this method due to medical symptoms also has gradually declined to a low level over the length of experience.

(viii) Most important medical symptoms are dizziness, headache, vomiting, irregular menses and break-through bleeding. The disease pattern indi-

cates that the symptoms are not of severe nature and as the clients get habituated with the use of this method, the intensity of discomforts comes within the level of tolerance. Even some temporary discomforts, however, should have serious "spread effects" and may heavily discourage both "acceptance" and "continuation" of the method. In order to curb 'spread effects' and ensure comforts to the users, adequate and timely medical attention need to be directed to the clients, particularly at the initial stage of acceptance.

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