Change and Differentials in Women's Knowledge of, Attitude towards and Practice of Family Planning in Pakistan during the 1960s

J. GILBERT HARDEE AND MOHAMMAD AZHAR*

Introduction

The objectives of this study are five-fold. First, to examine evidence of changes which may have occurred among Pakistani women in their knowledge of, attitude towards and practice of family planning up to 1968-69 after eight to nine years of experience with Government-supported programmes aimed at reducing fertility; second, to examine in considerable detail differentials among women in their knowledge of, attitude towards and practice of family planning; third, to analyze the effects of knowledge and attitudes on behavioural change—i.e. practice of family planning; fourth, to examine possible programme and policy implications of findings from this study; and fifth, to identify areas of future research and analysis which would appear needed.[1] The study could provide further insights into effectiveness of the Family Planning Programme (now renamed as the Population Planning Programme) during a major part of the Third Five-Year Plan period, 1965-70.

The main rationale for limiting this analysis to the period of up to 1968-69 is that relatively little information is as yet available for the post-1969 period—none at the national level. With the Pakistan Fertility Survey being conducted in 1975 as a national sample survey, important comparisons could be made with the data from the 1968-69 National Impact Survey. After attempting a systematic comparative analysis using data from several Knowledge-Attitude-Practice (KAP) studies reported earlier in Pakistan, it was finally decided that there was not adequate comparability among the various studies. Of the studies conducted during the 1960s, only the Impact Survey used a national probability sample and permits urban and rural comparisons. A number of retrospective questions were asked on the Survey which are used as a basis for some indication of change.

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*The authors are, respectively, Adviser to the Population Section and Staff Demographer at the Pakistan Institute of Development Economics (PIDE).

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[1] A similar analysis is planned for men, also with data from the National Impact Survey of 1968-69.

After a decade and a half of experiences with family planning programmes (both voluntary and government-supported) in an increasing number of developing countries, concern has been widespread—a concern highlighted at the 1974 World Population Conference in Bucharest—that such programmes will not in themselves effectively bring about a reduction in fertility of a magnitude desired by many governments.

With the preliminary population count of 64.89 million in the 1972 Census, reflecting an intercensal increase of 51.2 percent over the 1961 Census count of 42.88 million [3], some observers conclude that, at best, Pakistan's efforts at family planning during the 1960s may have served only to suppress what might have been an even higher growth rate [2]. Other observers are more severe critics in taking a position that the programme was essentially a failure and the approach taken to attempt reduction in fertility was, to a great extent, a poor use of funds [5, 6].

In examining the relationship between family planning programme inputs and fertility change within 33 countries having national programmes beginning in the 1960s, Mauldin [13] concludes that, in general, "the performance of family planning programmes to date has been mixed, ranging from poor to nearly spectacular."

The present study is seen primarily as a broad analytical approach towards deriving deeper insights into differential responses of people to the Government's efforts to bring about widespread acceptance and effective use of contraception. It is recognized that the analysis has important limitations in that only some of the many factors affecting knowledge of, attitude towards and practice of family planning are available for empirical examination. Future analyses, as discussed later, should provide substantially greater understanding of the complex set of factors influencing couples to use contraception and thus reduce their fertility.

Family Planning in Pakistan : Social, Economic and Cultural Setting

It is beyond the scope of this study to examine in detail the complex social factors impinging upon fertility decisions of families. However, it is important to identify a few factors that would tend to be associated with differentials in knowledge-attitude-practice. The social, economic and cultural setting in Pakistan during the 1960s did not appear to foster the type of rapid behavioural change implied in the Government's goal of inducing widespread acceptance of contraception and bringing about substantial reduction of fertility. Some of the obstacles believed to be important were noted in the Government's Family Planning Scheme in 1965 [18, pp. 135-137] and may be summarised as follows : a predominantly agricultural society ; the existence of high mortality with its presumed influence on continued high fertility and couples' desire for security through their children in old age ; cultural values emphasizing differential preference for sons ; and prevalence of fatalistic beliefs. Perhaps reflected in the above obstacles would be the extremely high rate of illiteracy among married women (though a lower illiteracy rate among men) and a low labour force participation rate for women.

Family Planning Programmes in Pakistan: 1950s and 1960s

Succinct published descriptions highlighting the development of family planning programmes in Pakistan are available and will not be addressed here in detail. [See, e.g., 1 and 9].

The Family Planning Association of Pakistan, established in 1963, was given Government support, along with other voluntary organizations, in the late 1950s by an amount of Rs. 500,000 [1]. The first official Government programme, established in 1960 with a budget of Rs. 30.5 million for five years, set four major goals: to provide family planning services to about 10 percent of the married women of child-bearing age; to establish 3,000 family planning centres in existing health facilities and develop a distribution system for conventional contraceptive supplies; to train the required motivational and technical personnel, including 1,200 health personnel (doctors, nurses, health visitors and midwives) each year; and to promote research and pilot projects in the field of family planning [1].

A greatly expanded Government programme was established in July 1965, though services started in September 1965, with a five-year budget of Rs. 136.5 million for operations in the former West Pakistan, which is now Pakistan, and of Rs. 11 million for the National Centre, the latter being allocable to supporting programme services in the former provinces of East and West Pakistan [11]. Planned as a "grass roots" approach to cover all fertile-aged couples by 1970, the programme utilized as field workers largely illiterate *dais* (traditional midwives) to serve as the main source of motivational contact and to provide programme services [11]. Large numbers of shopkeepers were also utilized as agents for selling conventional contraceptives. By July 1968 all districts in the country and some tribal areas were covered under the programme [1]. To support the efforts of the grass roots family planning workers mass communication techniques were extensively employed.

From the very limited evidence that was available at the time, it appears that knowledge about family planning in terms of methods for delaying or preventing pregnancy among Pakistani women was not substantial before or near the very beginning of the programme of 1965-70 [24, 7 and 12]. Thus, it might be expected that the inputs briefly described above under the programme for 1965-70 had considerable impact on both general awareness and specific knowledge about family planning techniques. On the other hand, an increased knowledge of family planning might not have been expected necessarily to result in substantial early adoption of contraceptive use. Moreover, intervening factors also enter into the hypothesized knowledge-use relationship—e.g. factors such as cultural values, assumptions held about life and one's degree of control over it, attitudes, aspirations for family members, etc. Finally, it must be assumed that factors other than the programme might have had some effect on knowledge of, attitude towards and practice of family planning.

Sources and Limitations of Data

Limitations of data impose severe constraints on addressing the first objective of the study, viz. assessing possible change over time. As mentioned above, retrospective questions from the National Impact Survey of 1968-69 are used as an indication of change.[2] Original data have been analysed to supplement previously published reports. (See, e.g. [19] and for summary design of the Survey, see [10]). The original plan to include both males and females in this analysis was dropped in favour of a first and later phase of this area of analysis. Respondents consisted of 1180 urban and 1730 rural women currently married at the time of the survey. The survey utilized a two-stage probability sample of Pakistan, excluding tribal areas, which was self-weighted within urban and rural subsamples.

Published documents on planning and conducting the Impact Survey strongly suggest rigorous attention to minimizing non-sampling error [16, 17]. The problem of memory in recalling past events is common to all surveys. On this point, it should be noted that interviewers on the Impact Survey were required to use a widely known national event which occurred in September 1965 (the war between Indian and Pakistan) as a memory probe on the question of the first use of any contraceptive method.

No hypotheses are formulated for empirical testing of relationships; however, the Chi-square test for statistical significance is employed in the analysis of differentials in the knowledge of, attitude towards and practice of family planning. In each table, the Chi-square test for significance of differences is applied separately for the urban and rural subsamples and, where relevant, for subcategories of respondents.

Change in Knowledge

By 1968-69 the great majority of both urban and rural wives of reproductive age had heard of at least some family planning method (84 percent and 75 percent, respectively), as is evident from responses to the question : "Have you ever heard of any method that delays or prevents pregnancy ?"

Significantly, only 25 per cent of urban and 10 per cent of rural wives reported having first heard of some method before 1966 [19, p.47].

Responses to the question, "Have you ever heard of any method that delays or prevents pregnancy ?" are cross-tabulated by period of first hearing in Appendix Table 1. About 70 per cent of urban wives who had heard of some method said they first heard of it less than three years prior to the interview, which approximates the beginning of the programme in 1965. Of rural wives 87 percent reported first hearing less than three years before the interview. As for the source of first

[2] For a discussion of methodological problems involved in KAP Surveys, see [14].

hearing, friends|relatives|neighbours were by far the most important for both urban and rural wives reporting first hearing in the more recent as well as the earlier period. Medical personnel were the second most prevalent source for those first hearing in less or more than three years before the interview. While responses requiring memory of period identification are particularly subject to error, the data suggest that the national programme had a substantial influence on increasing knowledge about family planning in rural areas but somewhat less in urban areas. It might be argued that a two-step flow of information may have operated in which informal leaders among "friends|relatives|neighbours" transmitted information obtained through the programme.

Change in Family Planning Practice

For each specific contraceptive method which was known to the respondent in the Impact Survey of 1968-69, the following question was asked: "Have you (or your husband) ever used (name of method)?" The interviewer was instructed to probe as to whether the first use of each method mentioned was before or after September 1965, a date coinciding with initial field activities in the new family planning programme and roughly coinciding with the war between India and Pakistan (an event used in the probe). The responses presented in Appendix Table 2 relate to the period (before or after September 1965) when at least one of 15 specific methods could be reported as first used. There is a marked contrast between the urban and rural patterns. Whereas slightly more urban respondents reported first use before the programme began than those reporting first use afterward (10.3 percent vs 8.9 percent of all urban wives), more than twice as many rural wives reported first use after the beginning of the programme as those reporting first use before the programme began (6.3 percent and 2.7 percent). Some age patterns emerge. Among rural wives, proportions in each 5-year age group reporting first use after September 1965 were considerably higher than proportions reporting first use before then. Among urban women aged 35-39 and 40-49 substantially greater proportions reported first use during the earlier period than those that reported first use afterward, and no difference is found in the proportion aged 30-34 years in terms of when first use was reported (13.9 percent for each period). For younger urban women proportions in each 5-year age group under 30 years first using after September 1965 were higher.

When only those methods promoted by the programme—i.e. modern methods—are considered (Appendix Table 3), it is evident that the first use of any of these methods was overwhelmingly after September 1965.[3] This pattern was true for each age group among urban and rural wives.

Having at least some education (in urban areas, where the percentage literate permitted comparisons) appears to have had an important influence on earlier use of contraception. Among urban wives 30 years of age and over at the time of interview, 40 percent of those literate

[3]See Table 1 for a list of modern and traditional methods.

reported first using any method before September 1965 (Appendix Table 4) compared with only 13 percent of those illiterate. Among urban women under 30 years of age, the proportion of those literate reporting first use of any method was 7 percent before the programme began and nearly 20 percent afterward. However, among those illiterate, the proportion reporting first use was about 3 percent prior to the programme and only 5 percent after the programme. When husband's education is considered, a similar pattern is observed, again with data for urban respondents only. Among women 30 years of age or over whose husbands had completed at least 10 grades in school, 36 percent reported first using some method prior to the programme; and so did about 19 percent of those whose husbands had reported schooling of less than 10 grades (table not shown). These proportions contrast with about 10 percent reporting earlier use for those whose husbands were illiterate.

Differentials in Knowledge of and Attitude Towards Family Planning

Knowledge of Methods and Services

It can be assumed that contacts with persons working in the national programme or others who may have been identified by respondents as persons who "give advice or help on family planning" might result in increased knowledge of specific methods. While the responses reported in Table 1 are based on respondent's mere knowledge or lack of knowledge of such a person (s) and not on the respondent's actual contact with them, it may be reasonably inferred that knowledge of such persons could have brought about a noticeable increase in the knowledge of specific methods.[4] The differences between percentages of those knowing about each method and those knowing as opposed to not knowing persons are especially pronounced for the modern methods, promoted through the family planning programme. Among rural respondents 93 percent of those who reported knowing family planning persons had knowledge of the IUD as compared with only 54 percent of those not knowing a person (s).[5]

Factors Associated with General Knowledge of and Attitude Towards Family Planning

The first questions asked about family planning in the Impact Survey questionnaire were "Have you ever heard about family planning? (IF YES) : People may have different ideas about what family planning is. What does family planning mean to you?" To the first question, 83 percent of urban respondents and 36 percent of rural respondents said they had heard of family planning (Table 2). Responses among wives reporting having heard are examined here in relationship to their

[4]Data on whether or not respondents "had met such a person" were obtained but not analyzed in this study.

[5]It should be noted that percentages in Table 1 are based on respondents' responses to the question "whether ever heard" of contraceptive methods after each method was read to them by the interviewer.

Table 1

Percentage Reporting Having Heard of Specific Family Planning Methods by whether They Reported Knowing Persons Giving Help/Advice on Family Planning : Urban and Rural Wives, 1968-69

Methods[1]	Respondents (number)						Percentage Reporting Knowledge of Methods by whether they knew Persons Giving Advice/Help					
	Urban			Rural			Urban			Rural		
	Know Persons	Don't Know Persons	All Respondents	Know Persons	Dno't Know Persons	All Respondents	Know Persons	Dno't Know Persons	All Respondents	Know Persons	Don't Know Persons	All Respondents
Modern Methods												
IUD	386	791	1,177	645	1,080	1,725	93.5	76.9	82.3	93.0	53.7	68.4
Male Sterilization	384	785	1,169	642	1,081	1,723	55.7	48.7	51.0	31.6	31.5	31.5
Female Sterilization	385	784	1,169	643	1,082	1,725	71.4	61.4	64.7	47.6	38.3	41.7
Pills	385	787	1,172	641	1,078	1,719	72.5	51.1	58.1	38.5	25.3	30.3
Condoms	387	786	1,173	643	1,076	1,719	73.1	55.1	61.0	55.2	23.5	35.4
Foam	386	784	1,170	643	1,083	1,726	45.9	21.7	29.7	30.5	11.5	18.6
Diaphragm	386	785	1,171	634	1,080	1,714	30.3	11.7	17.8	15.1	4.4	8.4
Tampon or Sponge	386	781	1,167	644	1,078	1,722	15.8	7.4	10.2	12.0	2.5	6.0
Jelly or Cream	388	783	1,171	642	1,083	1,725	17.5	6.0	9.8	9.3	2.5	5.0
Traditional Methods												
Abstinence	388	790	1,178	642	1,084	1,726	87.1	80.6	82.8	83.8	80.8	81.8
Breast feeding	383	787	1,170	640	1,079	1,719	81.2	70.5	74.0	74.2	62.0	66.7
Rhythm	386	788	1,174	643	1,082	1,725	24.9	16.2	19.1	17.4	8.5	11.8
Withdrawal	385	789	1,174	641	1,085	1,726	30.9	16.2	21.0	24.2	9.1	14.7
Douche	387	785	1,172	641	1,084	1,725	23.5	10.4	14.8	15.6	3.9	8.2

[1]Percentages based on responses to the question : "Have you ever heard of (method specified)?" The question was asked for each method not voluntarily mentioned by the respondent in a prior question. Slight variations in number of respondents given in the table are explained in terms of no response on specific methods.

Table 2

***Percentage** Reporting whether Ever Heard of Family Planning and Giving Negative or Positive Responses about Family Planning by Husband's Education : Urban and Rural Wives, 1968-1969*

Husband's education	Respondents (Number)		Percentage Reporting whether Ever Heard and Giving Negative or Positive Responses about Family Planning							
			Urban[2]				Rural[2]			
	Urban	Rural	Never heard	Heard and gave negative responses	Heard and gave positive responses	Total	Never heard	Heard and gave negativ responses	Heard and gave positive responses	Total
Illiterate	520	1,237	22.6	43.7	33.7	100.0	69.6	16.1	14.3	100.0
1-5 grades	188	177	16.5	49.5	34.0	100.0	57.1	23.2	19.7	100.0
6-9 grades	204	197	12.7	44.2	43.1	100.0	51.2	23.9	24.9	100.0
10+ grades	246	106	7.7	32.9	59.4	100.0	31.1	31.1	37.8	100.0
Total	1,158	1,717	16.8	42.5	40.7	100.0	63.8	18.6	17.6	100.0

[1] Based on responses to question : "Have you ever heard of family planning? (IF YES), what does family planning mean to you?" No information available on 22 urban and 13 rural respondents.

[2] Differences significant by X^2 test at $< .001$. In this and subsequent tables the X^2 test is applied separately within the subsamples of urban and rural respondents.

perceptions about the meaning of family planning and selected independent variables. Responses on "what family planning means" to them were classified as being either positive or negative.[6] The proportion of urban women who had both heard of family planning and given positive responses about its meaning to them was more than double that of rural wives—41 percent and 18 percent, respectively.

Knowledge|Attitude and Husband's Education. A higher level of education, whether that of wives or of their husbands, would be expected to have an influence both on conceptualization of family planning and on behavioural change implicit in contraceptive use. A highly significant relationship is observed among both urban and rural wives between educational level of their husbands and their own reported knowledge and perception of family plauning (Table 2). For example, 59 percent of urban wives and 38 percent of rural wives having husbands with at least 10 years of schooling reported hearing and also reported positive responses about family planning as contrasted with 14 percent of rural wives whose husbands were illiterate and 20 percent of rural wives whose husbands had completed 1-5 grades in school.

Knowledge|Attitude and Husband's Opinion. Wives were asked whether or not they knew their husband's opinion about family planning and if so whether they approved or disapproved. As shown in Table 3, whether the wife knew her husband's opinion and whether he approved is related to her own perception of family planning, either positive or

Table 3

Percentage Reporting Negative or Positive Responses about Family Planning by Knowledge of Husband's Opinion about Family Planning: Urban and Rural Wives Having heard of Family Planning, 1968-69

Wife's knowledge and perception of husband's opinion	Respondents (Number)		Percentage Giving Negative or Positive Responses about Family Planning[1]					
			Urban[2]			Rural[2]		
	Urban	Rural	Negative responses	Positive responses	Total	Negative responses	Positive responses	Total
A. Don't know husband's opinion about Family Planning	303	261	61.7	38.3	100.0	57.1	42.9	100.0
B. Know husband's opinion about Family Planning								
(1) He disapproves	279	155	62.7	37.3	100.0	58.1	41.9	100.0
(2) He approves	378	205	33.3	66.7	100.0	40.0	60.0	100.0
Total	960	621	50.8	49.2	100.0	51.7	48.3	100.0

[1] See footnote reference No. 6 for explanation of how responses were classified as positive or negative on the question "What does family planning mean to you?"
[2] Differences significant at $< .05$ by X^2 test.

[6] Responses classified as positive include such as: family planning promotes the health of the mother and economic development; children should be had according to parents' inco me; people should produce more food and fewer children. Responses classified as negative include those such as: It is wrong; family planning is like killing life; family planning is against religion.

Table 4

Percentage Reporting whether Ever Heard of Family Planning and Giving Negative or Positive Responses about Family Planning by Extent of Exposure to Mass Media Sources : Urban and Rural Wives, 1968-1969

Number of mass media sources to which exposed[1]	Respondents (Number)		Percentage Reporting whether Ever Heard and Giving Negative or Positive Responses about Family Planning							
			Urban[2]				Rural[2]			
	Urban	Rural	Never heard	Heard and gave negative responses	Heard and gave positive responses	Total	Never heard	Heard and gave negative responses	Heard and gave positive responses	Total
None	311	1,051	30.5	44.1	25.4	100.0	75.4	14.8	9.8	100.0
One	334	503	22.2	47.0	30.8	100.0	54.6	20.7	24.7	100.0
Two	216	107	7.9	45.8	46.3	100.0	20.6	38.3	41.1	100.0
Three +	279	39	2.9	31.9	65.2	100.0	5.1	28.2	66.7	100.0
Total ..	1,140	1,700	17.0	42.3	40.7	100.0	64.1	18.4	17.5	100.0

[1]Sources refer to newspapers, radio, TV and cinema. For newspaper, exposure is defined as whether respondent reads newspaper or some one reads to her ; for radio and TV-whether the respondent ever listened to radio, watched TV ; and for cinema-whether the respondent went during the past 12 months.

[2]Differences are significant by X^2 test at $< .001$.

negative. Thus, it would seem especially relevant for educational and informational programmes to be focused on husbands as well as wives, and more importantly on couples [23]. In the programme of 1965-70 a strong bias in educational programmes and local-level contacts seems to have been toward wives. It is interesting to note that both urban and rural wives who had heard about family planning were about equally divided in both positive and negative perceptions of its meaning to them.

Knowledge|Attitude and Exposure to Mass Media. The programme in 1965-70, as reported earlier, utilized a range of mass media to inform the public about family planning. A strong and direct relationship is found between exposure to mass media sources on the one hand and wives' having heard of family planning and the positive or negative nature of their perception of it on the other (Table 4). This relationship is particularly strong among women in rural areas where 75 percent of those reporting no exposure to mass media sources had never heard of family planning compared with only 5 percent of those reporting exposure to three or more sources. It is recognized that other factors may affect this relationship.

Knowledge|Attitude and Knowledge of Programme Personnel. After a period of three to four years of operation of the family planning programme prior to the 1968-69 survey it might be expected that women who said they knew of programme personnel, i.e. a person(s) who gives advice or help on family planning, would also likely have more positive perceptions about family planning than those not knowing programme personnel. Thirty-two percent of rurban wives and 38 percent of rural wives reported knowing at least one such person. Furthermore, 24 percent of urban wives and 22 percent of rural wives said they had met some such person [19, p. 51]. The data from Table 5 do not bear out

Table 5

Percentage Giving Negative or Positive Responses about Family Planning By Knowledge of Persons Giving Advice/Help on Family Planning: Urban and Rural Wives, 1968-69

Whether know persons giving advice/help on family planning	Respondents (Number)[1]		Percentage Giving Negative or Positive Responses about Family Planning					
			Urban[2]			Rural[2]		
	Urban	Rural	Negative responses	Positive responses	Total	Negative responses	Positive responses	Total
Don't know persons	618	289	54.4	45.6	100.0	56.4	43.6	100.0
Know persons	353	333	44.5	55.5	100.0	47.4	52.6	100.0
Total	971	622	50.8	49.2	100.0	51.6	48.4	100.0

[1] Based on respondents who reported having heard of family planning (see footnote 1 to Table 2).

[2] Differences not significant by X^2 test.

the assumption of a direct relationship between knowing persons giving advice or help and having positive perceptions of family planning. In neither urban nor rural areas is there any difference in the proportions of wives who report knowing persons and having either a negative or positive perception about family planning. The supposition that the largely illiterate midwives (*dais*), who were the principal type of persons reported by rural women, might have been poor communicators is by no means clearly supported by the data from Table 5. In urban areas proportionately more women knew medical and paramedical personnel than those who knew *dais* (16 percent and 12 percent, respectively).

Age and Knowledge of Services. It might be argued that in Pakistan, as in other countries where contraceptive practice has been low, with increasing age or married person there would be a tendency for an increased need of and interest in learning about ways to delay or prevent pregnancy. Thus, even in the absence of a family planning programme older women with more children might be expected to report greater use of contraception. It is assumed also that with increasing age women would tend to seek out information about services provided by a new Government programme. Another factor which might be operative is that programme personnel might tend to seek out older-aged couples in offering services. The data for Table 6 show that, in general, percentages reporting knowledge about persons offering advice or help, places where one can get advice or help, and both persons and places increase substantially with the age of wives. Differences are especially great between those under 20 years and those older.[7]

Number of Living Children and Knowledge of Services. It might be argued that as couples have an increasing number of children their interest in seeking out information about services would increase whether or not there is a family planning programme. The extent to which programme personnel may have ignored younger couples with few children is not known. From Table 6 it is seen that women with larger numbers of living children were more likely to have knowledge of programme services. In the case of urban respondents it is not clear why a smaller proportion of those with four living children reported knowledge of services than of those with three living children.

Education and Knowledge of Services. One of the uncertainties about the possible effectiveness of family planning programmes in developing countries concerns the possibility of providing adequate information to the large proportion of couples with low levels of education leading to a substantial practice of contraception. It is clear from Table 7 that education is positively associated with the knowledge of services, in terms of both wife's literacy status and husband's education. It should be observed, however, that even in rural areas more than a third of the women who were themselves illiterate and about the same proportion of those whose husbands were illiterate reported knowing of a person(s) giving advice or help. About one out of five rural wives reported knowledge of both persons and places.

[7]Some respondents saying they know persons may also be included in the category "know places" and vice versa.

Table 6

Percentage Reporting Knowledge of Family Planning Services by Current Age and by Number of Living Children : Urban and Rural Wives, 1968-1969.

Current age and number of living children	Respondents (Number)[1]		Percentage Reporting Knowledge of Specified Family Planning Services					
			Urban			Rural		
	Urban	Rural	Know Persons[2]	Know Places[2]	Know Persons and Places[2]	Know Persons[2]	Know Places[2]	Know Persons and Places[2]
Current age								
< 20 years	112	231	20.5	21.4	11.7	24.2	18.6	10.4
20-24 years	215	366	31.6	40.0	23.8	33.3	26.5	18.5
25-29 years	273	346	29.3	37.7	22.3	37.3	30.3	21.7
30-34 years	201	258	35.3	47.8	27.4	46.5	33.7	28.7
35-39 years	187	271	43.3	42.8	32.1	40.2	30.3	21.8
40+	192	258	34.4	46.9	26.6	42.2	32.2	24.9
Total ..	1,180	1,730	33.0	40.6	24.7	37.3	28.7	21.1
Number of living children								
0-2	474	826	27.0	32.9	19.1	31.2	24.2	16.4
3	173	257	37.6	44.5	28.3	38.5	27.6	21.8
4	157	130	30.6	37.6	25.5	45.7	30.9	25.4
5+	376	417	39.4	49.7	29.8	43.9	37.2	27.3
Total ..	1,180	1,730	33.0	40.6	24.7	37.3	28.7	21.1

[1]The base number of respondents for categories of age and number of living children are the same for computing percentage knowing persons, places, both persons and places. Respondents who said they know persons may also have reported knowing places and vica versa. The opposing percentages for each category of age and number of living children " not knowing " persons, places, and both persons and places are omitted.

[2]All differences within categories of whether know persons, know places and know both persons/places are significant at < .01.

Table 7

Percentage Reporting Knowledge of Family Planning Services by Literacy Status and by Husband's Education : Urban and Rural Wives, 1968-69

Wife's literacy status and husband's education	Respondents (Number)[1]		Percentage Reporting Knowledge of Specified Family Planning Services					
			Urban			Rural		
	Urban[1]	Rural	Know Persons[2]	Know Places[2]	Know both Persons and Places[2]	Know Persons[2]	Know Places[2]	Know both Persons and Places[2]
Literacy status								
Illiterate	965	1,689	31.8	36.4	22.8	36.6	28.3	20.5
Literate	215	40	38.1	59.5	33.0	65.0	47.5	45.0
Total ..	1,180	1,729	33.0	40.6	24.7	37.2	28.7	21.1
Husband's education								
Illiterate	527	1,243	31.3	34.5	20.9	34.8	26.2	19.3
1-5 Grades	188	178	29.8	34.6	23.0	37.1	30.3	21.3
6-9 Grades	209	200	35.9	47.8	29.8	48.5	35.0	27.1
10+ Grades	249	107	36.1	51.0	29.3	45.8	43.9	30.2
Total ..	1,173	1,728	32.9	40.4	24.6	37.3	28.8	21.1

[1]See footnote 1 to table 6.

[2]All differences within categories of whether know persons, know places and know both persons/places are significant at < .01 except for whether "know persons" by literacy status, urban respondents. (See footnote 2 to table 6.)

Frequency of Visits to Towns|Cities and Knowledge of Service. A major aim of the national programme was to bring family planning "to the doorsteps of the people" [1]. Thus, with large numbers of midwives under the supervision of the Family Planning Officers, and of agents (mostly shopkeepers) who sold conventional contraceptives, services were intended to be within the reach of the majority of people. The data in Table 8 reveal a highly significant relationship between the knowledge of services among rural women and reported frequency of visits to towns|cities. It appears that essential programme services, i.e. both personnel and places, known to rural women, were not known especially by those women reporting little or no contact with towns|cities.[8]

Differentials in Family Planning Practice

Earlier in the paper it was seen that both ever-use and current use of contraception were very low in the late 1960s. Reported levels of use after more than three years of the operation of the national programme appear to be much lower than the level expected by the programme. Thus, the next step in our analysis is to examine factors which may be associated with differential practice of family planning. Findings from this analysis could have important implications for future programme planning and policies.

Number of Living Children. It might be expected that compared with more developed countries Pakistan and other developing countries would have a strong tendency for contraceptive use to be considerably less among couples with no children or with perhaps one or two children. The assumption here is that in Pakistan there is a strong cultural value attached to early conception after marriage and that the use of contraception prior to the first child is generally considered inappropriate. Among a number of other factors, the low labour force participation rate for women would most likely not be supportive of early planning of families—either spacing or inducing change to the small family norm. Data in Table 9 reveal extremely low use of contraception, either past or current, among rural women with fewer than 4 children. The reported incidence of use among urban women with fewer living children is only somewhat higher than among rural women. Freedman and Coombs [8, pp. 36-37] report the following percentages for current use among married women 20-39 years of age having (a) no children, (b) one child and (c) two children for selected developed countries:

Country	Year	Percentage currently using, with		
		No Children	One Child	Two Childern
Belgium	1966	49	75	82
Great Britain	1967-68	55	62	82
Hungary	1966	30	70	80
United States	1965	42	56	79

[8]For a critical commentary on the methodology of questioning on visits to "town/cities" instead of "tehsil/district headquarters" see [19, p. 160].

Table 9

Percentage Reporting Ever-Use and Current Use of Family Planning Methods by Number of Living Children : Urban and Rural Wives, 1968-1969

Number of living children	Respondents (Number)[1]		Percentage Reporting Ever-Use and Current Use			
			Urban		Rural	
	Urban	Rural	Ever-Use[2]	Current Use[2]	Ever-Use[2]	Current Use[2]
0	156	275	3.2	0.0	2.2	0.0
1	148	285	5.4	2.7	4.2	2.8
2	170	266	14.7	7.1	4.5	2.3
3	173	257	17.9	6.4	7.8	1.9
4	157	230	20.4	12.7	15.2	7.4
5	145	158	24.1	11.7	12.7	6.3
6	100	140	36.0	20.0	18.6	8.6
7+	131	119	45.0	24.4	24.4	7.6
Total	1180	1730	19.6	9.8	9.2	3.9

[1]Base number of respondents in categories of independent variables in this and subsequent tables is the same in computing percentage reporting ever used and currently using. Opposing percentage for those reporting " never used " and " not currently using " are omitted.

[2]All distributions significantly different by X^2 test at $< .001$.

of age is as high as it is among those 30-39 years of age, and considerably higher than that among their sisters 40 years of age and above with 4 or more children. One distinct difference, however, between urban and rural women is that within each broad age category the proportion of both ever-users and current users at each level of number of living children is substantially higher among urban women than among their rural counterparts. The data in both Tables 9 and 10 suggest that the use of contraception up to the late 1960s was for limiting family size rather than for spacing.

Literacy Status. Since the inception of family planning programmes in the second half of this century (Pakistan being the second country, after India, to establish a national programme), there has emerged a persistent debate among those concerned with population control through the avenue of decreased fertility over most effective approaches. At the World Population Conference in August 1974 governments were encouraged to place at least as much emphasis on equality of opportunity, promotion of distributive justice, and enhanced educational opportunities as on programmes aimed at effectively providing couples with contraceptive services.

[9]It is conceivable that perceptions of subfecundity or the factor of menopause in the age category 40-49 could largely explain lower current use. Lower reported ever-use by these older women could also be related to the factor of recall.

Pakistan, like many other countries experiencing pressures of rapid population growth, has opted for vigorous attention both to widespread socio-economic development and to the provision of family planning delivery systems. Its educational policy, for example, projects the universal enrolment of both females and males of ages 5-9 in primary school by 1984 and of ages 10-12 in middle school by 1987, with universal enrolment of boys projected at somewhat earlier years [20]. Indeed, the argument for increased education as an avenue for increased attention to family limitation is given substantial support by the data in Table 11, especially

Table 11

Percentage Reporting Ever-Use and Current Use of Family Planning Methods by Respondent's Literacy Status and by Number of Living Children: Urban and Rural Wives, 1968-69

Number of living children and literacy status	Respondents (Number)		Percentage Reporting Ever-Use and Current Use			
	Urban	Rural	Urban		Rural	
			Ever-Use[1]	Current Use[2]	Ever-Use[3]	Curret Use[3]
0-1 Child	304	560	4.3	1.3	3.2	1.4
Illiterate	248	547	2.0	0.4	3.1	1.3
Literate	56	13	14.3	5.4	7.7	7.7
2-3 Children	343	522	16.3	6.7	6.1	2.1
Illiterate	262	508	10.7	3.1	5.5	1.8
Literate	81	14	34.6	18.5	28.6	14.3
4-5 Children	302	288	22.2	12.3	14.2	7.0
Illiterate	257	379	16.0	7.8	13.7	7.1
Literate	45	9	57.8	37.8	33.3	0.0
6 + Children	231	259	41.1	22.5	21.2	8.1
Illiterate	198	355	36.4	19.7	20.8	7.8
Literate	33	4	69.7	29.4	50.0	25.0
Total	1180	1730	19.6	9.8	9.2	3.9

[1]All difference within categories of number of living children significant by X^2 test at $< .001$.
[2]All differences significant by X^2 test at $< .05$.
[3]Because of few cases literate in rural areas statistical test of significance cannot be applied.

for urban women. For example, more than a third of literate urban women with 2-3 living children report ever-use of contraception compared with about 10 percent of illiterate wives having 2-3 children. Almost a fifth of literate wives with 2-3 living children report current use as compared with three percent of illiterate women. Differences in proportions are as striking at each level of the number of living children. Since less than 3 percent of all rural wives under 49 years of age in the 1968-69 survey were literate, statistical comparisons of contraceptive use by education are tenuous. To the extent that these data reflect the "true" relationship between literacy and contraceptive acceptance in the late 1960s, one plausible inference for population policy might be to promote widespread literacy programmes as a means of bringing about a rapid increase in family planning acceptance. Assuming effective use by users of contraception, it would appear that Government investments, in the short run, on adult education programmes and on primary education might yield substantial returns in reduction of population growth rates in both the intermediate and longer-range periods. Whether the nation can, in fact, provide the level of educational opportunities envisaged in its current educational policy has been questioned in a recent analysis of projected population growth and its implications for education costs [20].

Husband's Education. The influence of education on family planning as well as on other behavioural aspects of family life is not through either the wife or husband individually but through varying combinations of the educational experiences of the couple. Empirically, education must also be considered in its partial relationship with other factors influencing behaviour. Thus, ideally, the education of wife and husband should be taken as a combined variable, i.e. "couple" education rather than education of each spouse. Such an analytical approach has been reported from the Impact Survey data [23, p. 117]. It was found that couples with both spouses having had schooling reported a very high proportion of ever-use, 67 percent in rural and 61 percent in urban areas. From the data in Table 12, the relationship between the educational level of husbands and their wives' reported use of contraception is less clear than is the relationship between wives' education and contraceptive use when number of living children is used as a control variable. Because of small cell frequencies in categories of number of living children and husband's education in rural areas, no statistically significant inferences may be drawn. It would appear, however, that there is no relationship between husband's education and wife's reported use of contraception among rural wives. On the other hand, in urban areas there is highly significant relationship between husband's education and reported ever-use of contraception among women with two or three children and among those with four or five children. A highly significant relationship is also observed for reported current use among women with four or five living children, though not for those with fewer children.

Adequacy of Living. Increasing attention is being given to testing the hypothesis that enhanced economic and social well-being among larger proportions of people in developing countries will have a significant effect on reducing fertility [see, e.g. 15 and 21]. From the general theory it

Table 12

Percentage Reporting Ever-Use and Current Use of Family Planning Methods by Husband's Education and Number of Living Children: Urban and Rural Wives, 1968-69

Education of husband and number of living children	Respondents (Number)		Percentage Reporting Ever-Use and Current Use			
			Urban		Rural	
	Urban	Rural	Ever-Use[1]	Current Use[1]	Ever-Use[1]	Current Use[1]
0-1 Child	303	560	4.3	1.3	3.2	1.4
Illiterate	145	381	2.8	0.7	3.1	1.0
1-5 grades	45	60	0.0	0.0	1.7	1.7
6-9 grades	47	67	0.0	0.0	4.5	3.0
10+grades	66	42	13.6	4.5	3.8	1.9
2-3 Children	340	523	16.5	6.8	6.1	2.1
Illiterate	140	388	6.4	2.9	5.9	1.8
1-5 grades	46	58	13.0	4.3	3.4	3.4
6-9 grades	58	49	19.0	10.3	4.1	0.0
10+ grades	96	28	31.3	11.5	17.9	7.1
4-5 Children	301	388	22.3	12.3	14.2	7.0
Illiterate	145	284	11.7	6.2	12.7	6.7
1-5 grades	52	37	26.9	17.3	16.2	5.4
6-9 grades	62	46	24.2	11.3	19.6	13.0
10+ grades	42	21	50.0	28.6	19.0	0.0
6+ Children	299	257	40.6	21.8	21.4	8.2
Illiterate	97	190	33.0	16.5	20.0	8.4
1-5 grades	45	23	40.0	24.4	26.1	8.7
6-9 grades	42	38	50.0	23.8	28.9	7.9
10+ grades	45	6	48.9	28.9	0.0	0.0
Total	1173	1728	19.5	9.7	9.3	3.9

[1]Differences for categories 2-3 children and 4-5 children significant at < .001. Cell frequencies in category 0-1 child too small for use of X^2 test.

[2]Differences for category 4-5 children significant at < .001. Cell frequencies in 0-1 and 2-3 childern categories too small for use of X^2 test.

[3]Cell frequencies too small for use of X^2 test.

might be assumed that couples who perceive their general living to be adequate would be more likely to report practice of family planning than those who do not. Innumerable attempts have been made by social scientists to derive empirical measures of socio-economic status, level of living, social well-being, social class position, prestige level, etc. Whether simple indicators or composite (multi-variable) measures are used, the same problem exists—viz. to what extent does the empirical observation adequately measure the criterion variable, i.e. the person's or the family's position in some hierarchical scale? The choice of a single question in the Impact Survey as a useful measure of varying levels of socio-economic status might be subject to professional criticism. In Table 13 are shown cross-tabulated responses on contraceptive use and responses to the following question asked in the survey: "Would you say that during the past 12 months what you and your family had for living was not adequate, adequate, or more than adequate?" Responses are construed to measure the respondent's self-perception of the family's socio-economic level—low, medium, high. While responses are perceptual, being thus subject to different interpretations among respondents, it can be argued that the respondent's summarization of composite factors might be as valid as would be an empirically derived three-point scale (low, medium, high) based on a number of independent indicators. Because of small cell frequencies, the responses "adequate" and "more than adequate" were combined for this analysis. While there is some evidence in urban areas that wives reporting an "adequate" level of living also report proportionately higher contraceptive use, there is no such tendency observed among rural wives. Only within the category of urban wives having 6 or more children is there a statistically significant relationship—specifically, reported current use of contraception. Thus the finding provides little support for the assumption stated earlier. Further research on this hypothesized relationship is needed. It is interesting to note that proportionately more urban wives reported inadequate living (45 percent) than rural women (37 percent).

Number of Living Children in Relation to Ideal Number. KAP surveys have been subject to considerable professional criticism in terms of methods used in attempting to obtain data having high validity and reliability; and the subject of "ideal" and "desired" family size has perhaps been questioned most severely [see, e.g. 14]. Questions on various surveys have been worded differently. The following question was used in the Impact Survey: "In your opinion, what is the appropriate number of children for a family like yours?" It is hypothesized that respondents' having achieved or surpassed their ideal number of children as defined above as well as their desire for having or not having more children would have a significant influence on their use of contraception. This relationship for both urban and rural wives is found to be highly significant in respect of both ever-use and current use (Table 14). However, it would be observed that among those reporting the number of their living children as equal to or greater than the ideal number and also reporting use of contraception, the low level of current use in both urban and rural areas (21 percent and 8 percent, respectively), suggests a basic incongruity between reported desire for no more children and behaviour in support of that desire. It could further indicate less than adequate services through

Table 13

Percentage Reporting Ever-Use and Current Use of Family Planning Methods by Reported " Adequacy of Living " and Number of Living Children : Urban and Rural Wives, 1968-69

Number of living children and reported adequacy of living[1]	Respondents (Number)		Percentage Reporting Ever-Use and Current Use			
	Urban	Rural	Urban		Rural	
			Ever-Use[2]	Current Use[2]	Ever-Use[2]	Current Use[2]
0-1 Child	304	555	4.3	1.3	3.2	1.4
Inadequate	120	176	1.7	1.7	4.0	0.6
Adequate	184	379	6.0	1.1	2.9	1.8
2-3 Children	343	522	16.3	6.7	6.1	2.1
Inadequate	156	184	14.7	5.8	5.4	1.1
Adequate	187	338	17.6	7.5	6.5	2.7
4-5 Children	301	388	21.9	12.3	14.2	7.0
Inadequate	138	147	17.4	8.7	15.0	5.4
Adequate	163	241	25.8	5.3	13.7	7.9
6+ Children	231	258	41.1	22.5	20.8	7.8
Inadequate	114	123	36.0	14.9	20.3	6.5
Adequate	117	135	46.2	29.9	21.5	8.9
Total	1179	1723	19.6	9.8	9.2	3.8

[1]Adequacy of living is based on responses to the following question: " Would you say that during the past 12 months what you and your family had for living was not adequate, adequate or more than adequate ? " In this table the latter categories were combined.

[2]Differences not significant at $< .05$ by X^2 test except for category of urban wives with 6 or more children reporting whether or not currently using.

Table 14

Percentage Reporting Ever-Use and Current Use of Family Planning Methods by Number of Living Children Relative to Ideal Family Size and Whether Want More Children: Urban and Rural Wives, 1968-69

Living/ideal number of children and whether want more	Respondents (Number)		Percentage Reporting Ever- Use and Current Use			
			Urban		Rural	
	Urban	Rural	Ever-Use[1]	Current Use[1]	Ever-Use[1]	Current Use[1]
No specific number given[2]	43	80	16.3	7.0	1.3	0.0
Living < Ideal						
Want more	427	738	7.3	2.3	4.5	1.6
Don't want more	147	174	19.0	6.8	9.8	3.4
Living ≥ Ideal						
Want more	42	64	19.0	9.5	56.3	3.1
Don't want more	149	481	36.5	21.1	20.0	8.3
Total	1067	1537	20.9	10.6	9.8	3.9

[1] All differences within categories of Living/Ideal number of children significant at <.001.

[2] Includes cases who did not mention a specified number of additional children wanted or who responded, "It is up to God.....fate, etc." to question: "In your opinion, what is the appropriate number of children for a family like yours ?"

the programme to meet the "demands" for family planning, as has been suggested in another analysis of the Impact Survey data [22]. It might be, of course, that the "ideal" number and desire for additional children as gathered from responses to two independent questions lack sufficient validity.

Knowledge of Family Planning Services. Having knowledge about methods of contraception and, even more, having some knowledge of family planning services do not necessarily indicate that couples will use contraception, even if they might feel a desire to do so. The process of adoption of a new practice may be either slow or rapid, depending upon many factors. Nevertheless, on the basis of the data in Table 15 it appears that having knowledge of persons or places or both could have had an important bearing in the late 1960s on whether or not women reported ever-use of contraception. With only three exceptions, differences in reported use between those having knowledge or no knowledge of various

programme services are statistically significant within the categories of number of living children. For example, the highest percentages of ever-use reported by either urban wives or rural wives are for those with 5 or more children and knowing both persons and places (54 percent and 40 percent, respectively). It should be observed that rural women with 5 or more children reporting no knowledge of services also reported proportionately very low ever-use.

Husband's Opinion of Family Planning. It is usually assumed in Pakistan that decision-making within the family is essentially the responsibility of husbands. Thus, an extension to family planning practice might be that wives who know their husbands' approval of family planning would more likely report use of contraception, even though the practice is a couple-phenomenon unless the wife secretly decides to use pills or have an IUD inserted without her husband's knowledge (and the husband's consent for IUD insertion has not been a programme requirement). In both urban and rural areas wives who knew their husbands' opinion about family planning and reported that they approved also reported significantly higher levels of ever-use than did those wives who did not know their husbands' opinion or knew that they disapproved regardless of the number of children (Table 16). Differences within the categories of number of living children (less than 4 and 4 or more) were all highly significant. Similarly, reported current use by non-pregnant wives in both urban and rural areas is also significantly higher among those knowing that their husbands approved of family planning than among those who knew their spouses did not approve or had no knoweldge of his opinion. Findings of Tables 16 and 17 clearly suggest, though more refined analysis is needed, that educational and motivational programmes in Pakistan should be directed towards both husbands and wives.

Summary and Conclusions

This study was designed as a part of a more comprehensive analysis of change and differentials in the knowledge of, attitude towards and practice of family planning in Pakistan. The study relates to the period of the 1960s ending in mid-1969 and utilizes data only for women.

Five objectives have guided the analysis :

(1) to examine changes which may have occurred in the knowledge of, attitude towards and practice of family planning;

(2) to examine differentials in knowledge-attitude-practice;

(3) to analyze effects of knowledge and attitude on the practice of family planning;

(4) to examine possible programme and policy implications of the findings from this study; and

(5) to identify areas of future research and analysis which would appear needed.

Table 15

Percentage Reporting Ever-Use of Family Planning Methods by Knowledge of Specified Family Planning Services and by Number of Living Children : Urban and Rural Wives, 1968-69.

Number of living children	Percentage Reporting Ever-Use by Knowledge of Specified Family Planning Services					
	Persons[1]		Places[2]		Both Persons and Places[3]	
	Know	Don't Know	Know	Don't Know	Know	Don't Know
Urban						
0-2 Children	14.1 (128)[4]	5.8 (346)[4]	16.0 (156)	4.1 (318)	18.9 (90)	5.5 (382)
3 Children	29.2 (65)	11.1 (108)	29.9 (77)	8.3 (96)	32.7 (49)	12.1 (124)
4 Children	31.3 (48)	15.6 (109)	32.2 (59)	13.3 (98)	30.1 (40)	17.1 (117)
5+Children	46.6 (148)	26.8 (228)	52.4 (187)	16.9 (189)	53.6 (112)	26.5 (264)
Rural						
0-2 Children	8.5 (258)	1.4 (568)	9.0 (200)	1.9 (626)	11.9 (135)	2.0 (687)
3 Children	15.2 (99)	3.2 (158)	11.3 (71)	6.5 (186)	12.5 (56)	6.5 (201)
4 Children	21.0 (105)	10.4 (125)	26.8 (71)	10.1 (159)	25.9 (58)	11.8 (170)
5 +Children	30.6 (183)	8.1 (234)	37.4 (155)	6.5 (262)	39.5 (114)	9.9 (303)

[1]All differences within categories of number of living children significant by X^2 test at $< .05$.
[2]All differences within categories of number of living children significant at $< .01$ except for 3 children, rural.
[3]All differences significant at $< .05$ except "4 children" category for urban and "3 children" category for rural.
[4]Numbers in parentheses indicate sample size for each category.

Table 16

Percentage Reporting Ever-Use of Family Planning Methods by Husband's Opinion of Family Planning and Number of Living Children: Urban and Rural Wives, 1968-69

Number of living children and whether know husband's opinion	Respondents (Number)		Percentage Reporting Ever-Use	
	Urban	Rural	Urban[1]	Rural[1]
0-3 Children	641	1081	10.8	4.6
Don't know opinion	273	669	1.5	2.5
Know opinion and he disapproves	169	193	7.7	3.6
Know opinion and he approves	199	219	26.1	11.9
4+ Children	528	647	30.5	17.0
Don't know opinion	173	329	11.6	8.5
Know opinion and he disapproves	151	136	21.2	12.5
Know opinion and he approves	204	182	53.4	35.7
Total	1180	1730	19.6	9.2

[1]All differences within categories of number of living children significant at $< .001$.

Table 17

Percentage Reporting Current Use of Family Planning Methods by Husband's Opinion of Family Planning and Number of Living Children: Urban and Rural Wives not Pregnant at Interview, 1968-69

Number of living children and whether know husband's opinion	Respondents (Number)		Percentage Reporting Current Use	
	Urban	Rural	Urban[1]	Rural[2]
0-3 Children	524	901	5.2	2.1
Don't know opinion	236	563	0.4	0.9
Know opinion and he disapproves	130	156	4.6	1.3
Know opinion and he approves	158	182	12.7	6.6
4+ Children	484	584	17.8	8.0
Don't know opinion	160	300	5.0	3.7
Know opinion and he disapproves	136	121	8.8	2.5
Know opinion and he approves	188	163	35.1	20.2
Total	1019	1485	11.2	4.4

[1]Differences within both categories of number of living children significant at $< .001$.

[2]Difference for category 4+ children significant at $< .001$. For category 0-3 children, cell frequencies too small for use of X^2 test.

Changes in Knowledge-Attitude-Practice

The data available for an analysis of changes over time have severe limitations; thus, our interpretation of changes is made with caution. Data from only one study on knowledge-attitude-practice conducted during the 1960s, viz. the National Impact Survey 1968-69, can be considered as representative of Pakistan.

From the limited evidence derived through retrospective questions, it aapears that a substantial change may have occurred by the late 1960s in the proportion of women knowing at least some family planning method.

Available data suggest that, except in some segments of the population, the level of practice remained low during the 1960s. In the 1968-69 survey, about 12 percent of all currently married women under 50 years of age (19.6 percent of urban and 9.2 percent of rural women) reported ever-use of any method. Among urban women who said they had ever used any method, slightly more reported first use before the national programme of 1965 began than those who reported first use afterward. The reverse was true among rural women. The first use of modern (or programme-sponsored) methods among both urban and rural women predominantly occurred after the 1965 programme began. A substantial proportion of urban literate women and of those whose husbands had higher levels of education began using contraception before the 1965 programme began. Thus, among women over 30 years of age, 40 percent of all those who were literate and 36 percent of those whose husbands had completed 10 or more grades in school reported first use of modern contraceptive methods before the commencement of the 1965 programme. It is recognized that the factor of recall limits the degree of confidence that can be placed in these findings based on a single cross-sectional survey.

Differentials in Knowledge and Attitude

Whether wives had heard about family planning and whether they reported positive or negative responses about its meaning to them was found to be closely associated with educational level of their hubsands. Similarly, whether wives knew their husbands' opinion about family planning and whether they approved|disapproved is associated with their perception, positive or negative, of family planning. Also, wives reporting greater exposure to mass media were much more likely to have positive perceptions about family planning. Age, number of living children and education of both the wife and her husband were all positively associated with reported knowledge of persons giving advice or help on family planning and places where advice|help could be obtained.

Differentials in Practice

The reported level of ever-use of contraception among urban women in 1968-69 was about twice as high as among rural women (19.6 and 9.2 percent, respectively); while the level of current use was slightly more than twice as high (9.8 and 3.9 percent, respectively). Relatively few urban or rural women with fewer than four living children reported current

use. With more than four children, proportions currently using increased substantially among urban women but only slightly among rural women. Education of both the wife and her husband is highly associated with both ever-use and current use, especially in urban areas. Low literacy levels among rural women preclude definitive analysis. On the basis of methodological studies of KAP surveys in other places, it is quite likely that reported use could have been lower than actual use [14]. It should also be noted that the reported use by husbands and wives in a matched analysis of data from couples in the Impact Survey revealed a considerable degree of incongruity between wife's and husband's reported use [23, p. 106].

Regarding contraceptive use, a wide incongruity was found among women who reported a desire for no more children but were not using contraception. Even among urban women with their number of living children equal to or greater than the reported "ideal", about 80 percent were not currently using contraception. Among corresponding rural women the percentage not using was 92.

Effect of Knowledge|Attitude on Practice

Low contraceptive use in 1968-69, three to four years after the 1965 programme began, might partially be explained in terms of inadequate services [22]. This explanation has some support from the fact that reported knowledge of programme services was found highly associated with ever-use of contraception. On the other hand, effective demand also seemed to be relatively weak [22]. An attitudinal factor of significance in the level of contraceptive use reported by women is that of their husbands' opinion about family planning. Wives saying their husbands approved reported significantly higher family planning practice than wives not knowing their husbands' opinion or knowing that he disapproved.

Implications of Findings

While the rate of contraceptive use remained low, except among the more educated in urban areas and among those with four or more living children, our analysis lends support to an earlier observation that "Under the Third Five Year-Plan knowledge about modern contraception became widely spread throughout urban and rural areas and in all age groups" [19, p. 149].

Our analysis would especially suggest the following in terms of future programme and policy considerations:

(1) Special emphasis might be placed on influencing younger couple into using contraception. Educational programmes aimed at both encouraging higher age at marriage for females and delaying birth of the first child through contraceptive use would seem particularly relevant.[10]

[10] A recent analysis indicates that the mean age at marriage of both females and males rose between 1961 and 1972 and that this factor may have had considerable effect on fertility [4].

(2) Since contraceptive use among women appears to be highly associated with education, more emphasis should be given to adult education programmes and to primary education as these would appear to have important short-term effects on contraceptive use (in the case of the former) and longer-term effects (in the case of the latter).

(3) Greater attention should be paid to informational approaches aimed at both men and couples.

(4) Programmes aimed generally at increasing the level of modernization in the population, especially in rural areas, should be encouraged and promoted as they are likely to have a significant effect on family planning practice.

A further implication of this analysis is that increased attention should be given in future to collection of appropriate data for periodic assessment of change in family planning practice, including explanatory variables for more detailed analysis of data collected. For example, only one of the studies reviewed for possible comparative analysis with the Impact Survey reported cross-tabulations of responses on the dependent variables (knowledge-attitude-practice) with those on independent variables (demographic and socio-economic). It is recommended that an exhaustive analysis of the data from the 1975 Pakistan Fertility Survey be undertaken and that existing data on more limited studies, which have been carried out in the early 1970s, be also exhaustively analysed. It is felt that the analysis reported in this paper demonstrates the particular relevance of looking at differences among subgroups of sample populations. As educational levels increase among the rural female population it will be possible to study in more depth the relationship between education and the changing use of contraception. Conducting periodic national surveys similar to the 1968-69 Impact Survey and the 1975 Pakistan Fertility Survey at intervals of three to five years would seem highly relevant. Also a series of more localized studies in rural areas having comparable research design would very likely add greatly to the understanding of factors (economic, social and psychological) tending to militate against lower family size norms and effective adoption of contraceptive practice.

Appendix Table 1

Number and Percentage Reporting Time of First Hearing about Family Planning by Source of First Hearing : Urban and Rural Wives, 1968-69

Source of first hearing about family planning	Number and Percentage Reporting Time of First Hearing about Family Planning[1]											
	Urban						Rural					
	Less than 3 years ago		3 or more years ago		All Respondents		Less than 3 years ago		3 or more years ago		All Respondents	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Medical personnel[2]	88	57.9	64	42.1	152	100.0	216	85.0	38	15.0	254	100.0
FP personnel	15	83.3	3	16.7	18	100.0	35	97.2	1	2.8	36	100.0
Friends/relatives/neighbours	432	76.2	135	23.8	567	100.0	674	87.6	95	12.4	769	100.0
Husband	28	60.9	18	39.1	46	100.0	36	83.7	7	16.3	43	100.0
Radio/TV	38	64.4	21	55.6	59	100.0	28	93.3	2	6.7	30	100.0
Publicity sources[3]	24	43.6	31	56.4	55	100.0	6	37.5	10	62.5	16	100.0
Other	17	81.0	4	19.0	21	100.0	17	89.5	2	10.5	19	100.0
Total	642	69.9	276	30.1	918	100.0	1,012	86.7	155	13.3	1,167	100.0

[1]Responses to Questions : " Have you heard about any method that delays or prevents pregnancy? When did you first come to know about Family Planning ? " To the first question, 16 percent of urban and 25 percent of rural wives, respectively, said they had never heard about any method ; and these respondents are not included in this table.

[2]Includes Doctor, Hakim/Kaviraj, Lady Health Visitor, Nurse, *Dai* (Midwife).

[3]Includes newspapers, magazines, mass meetings, posters, cinema, etc.

Appendix Table 2

Percentage Reporting whether First Used any Family Planning Method before or after September 1965 by Age : Urban and Rural Wives, 1968-69

Whether ever used any method and when first used	Percentage Reporting Whether Ever Used and When First Used by Age													
	Urban							Rural						
	<20 (N=112)	20-24 (N=215)	25-29 (N=273)	30-34 (N=201)	35-39 (N=187)	40-49 (N=192)	Total (N=1180)	<20 (N=231)	20-24 (N=366)	25-29 (N=346)	30-34 (N=258)	35-39 (N=271)	40-49 (N=258)	Total (N=1730)
Ever Used	2.7	12.6	14.7	27.8	30.5	22.9	19.2	1.7	6.6	8.4	15.9	12.2	9.7	9.0
Before 9/65	0.0	1.9	6.6	13.9	20.9	17.9	10.3	0.0	0.8	2.6	6.2	3.3	3.9	2.7
After 9/65	2.7	10.7	8.1	13.9	9.6	5.7	8.9	1.7	5.7	5.8	9.7	8.9	5.8	6.3
Never Used	97.3	87.4	85.3	72.1	69.5	77.1	80.8	98.3	93.4	91.6	84.1	87.8	90.3	91.0
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix Table 3

Percentage Reporting whether First Used any Modern Family Planning Method before or after September, 1965 by Age : Urban and Rural wives, 1968-1969

Whether ever used any method and when first used	Percentage Reporting Whether Ever Used and When First Used by Age													
	Urban							Rural						
	<20 (N=112)	20-24 (N=215)	25-29 (N=173)	30-34 (N=210)	35-39 (N=187)	40-49 (N=192)	Total (N=1180)	<20 (N=231)	20-24 (N=366)	25-29 (N=346)	30-34 (N=258)	35-39 (N=271)	40-49 (N=258)	Total (N=1730)
Ever used	1.8	9.3	7.7	19.4	12.3	5.2	9.8	1.3	4.9	5.2	9.3	9.6	6.6	6.2
Before 9/65	0.0	0.5	0.0	0.5	0.0	0.5	0.3	0.0	0.0	0.3	0.0	0.7	0.0	0.2
After 9/65	1.8	8.8	7.7	18.9	12.3	4.7	9.5	1.3	4.9	4.9	9.3	8.9	6.6	4.9
Never used	98.2	90.7	92.3	80.6	87.7	94.8	90.2	98.7	95.1	94.8	90.7	90.4	93.4	93.9
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix Table 4

Percentage Reporting Whether First Used any Family Planning Method before or after September 1965 by Literacy Status and Age: Urban Wives 1968-69

Whether ever used any method and when first used	Percentage Reporting Whether Ever Used and When First Used					
	Under 30 years of age			30 years of age and over		
	Illiterate (N=477)	Literate (N=123)	Total (N=600)	Illiterate (N=488)	Literate (N=92)	Total (N=580)
Ever used	7.7	26.8	11.7	21.5	56.5	27.1
Before 9/65	2.7	7.3	3.7	12.9	40.2	17.3
After 9/65	5.0	19.5	8.0	8.6	16.3	9.8
Never used	92.3	73.2	88.3	78.5	43.5	72.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

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