

Samuel M. Wishik, International Institute Human Reproduction, Columbia University

As the title of this paper indicates, it focuses on evaluation of large scale Family Planning (FP) programs, usually encompassing an entire country or a major portion of a country. The components of evaluation of a national FP program might be represented by the following complex: $I(KAP/F/S)$. The KAP constitutes the immediate concentration of the program's effort to inform people (that is improve their Knowledge), change their Attitudes and value systems (such as about family size), and increase the Practice of contraception among them. These are immediate objectives which are only incidental to what might be called the intermediate goal, that of lowering Fertility. But neither is lowering of Fertility an end in itself. It is a step toward obtaining the benefits that would ultimately accrue to Society and to its members and families. It is obvious, however, that observed changes in any of these parameters could be accidental or a factor of time alone and may not be attributed to the program unless cogent and significant correlations with program Input can be demonstrated.

The present paper focuses on the F or fertility portion of the complex. A previous paper reported on methods of drawing from administrative and service data estimates on the amount of contraceptive practice in a population. In process are studies on methods of utilizing data on prevalence of contraceptive practice to derive numbers of births averted thereby, in accordance with the statement $P_e F \rightarrow B_I$. The amount of contraceptive practice (P) of a measured degree of use-effectiveness (e) in a population of women of a certain level of fertility expectation (F) in the absence of contraception (or of the added contraception contributed by the program) will point toward estimating the number of births averted by the input of that program (B_I). Because of the many unknowns in the statement, we are not yet ready to use that approach. Instead, the present paper utilizes a different tack and tries to measure changes in fertility behavior more directly. The aim is to develop an instrument that can give prompt indication of fertility change and that can be applied to a population as a whole as well as to large sub-groups and therefore can be used as an index for evaluating the effectiveness of different amounts and types of program input over periods of time.

This is merely another effort in addition to the many ways in which demographers have attempted and have in part succeeded in producing more useful indicators of fertility change than the crude birth

rate. Desirable criteria of such an instrument include promptness, simplicity, feasibility and reliability, as well as validity. The possible value of the method here proposed rests in part on the concept and in part on the method of obtaining the data. In a well developed country that boasts of reasonably complete coverage of vital statistics, available data can be subjected to the methods of tabulation and analysis here presented. In the absence of such vital statistics, the relatively simple single retrospective interview method here described would be resorted to.

One aspect of the method is by no means a new idea, that is to group women by certain common characteristics and see whether women with those characteristics show a reduction of fertility over periods of time. Among theoretically relevant factors that might be considered, such as education, income and urban living, two only were chosen. These are the woman's age and the number of living children she has. It is reasonable to believe that these are two factors that influence a couple's actions which do or do not lead to another pregnancy, as well as being related to the physiologic fertility potential of the family. In addition, the number of living children at the time of a retrospective interview seems to be information that could be obtained with greater accuracy than other types of pregnancy history, such as total number of pregnancies, total number of births including fetal deaths, or total live-born babies no longer surviving at the time of the interview. With the substitution of number of living children for parity, this parameter was labeled "Parenthood Status" and the groups of women were classified according to both their age and parenthood status (A/PS).

Although separated into sub-groups according to A/PS classification, the method aims at assessing the fertility patterns in a total population group for comparison over time intervals. The population under comparison might be those dwelling in a selected geographic area, such as a district of a country. Or, they might be sub-groups identified for some reason that might have bearing on the question under study, such as ethnic or religious differences. The comparison of changes in fertility patterns from time one to time two would have meaning if the groups being compared with each other during this time interval are assumed or have been found to be reasonably similar at the outset in such relevant considerations as contraceptive knowledge, attitudes and practice, as well as family size

ideals or aspirations. If the objectives of the program focus on certain women such as those of high parity or those who have recently given birth to a baby, groups of such women would be compared with similar groups over the time period. But in no sense is it intended that this method be applied to differentiate changes in fertility behavior among women who are contraceptive accepters, adopters, users or practicers, whatever term is used, as compared with those who are not accepters, adopters, users or practicers. It would be fallacious to compare those who practice contraception with those who do not, on the assumption that any differences in fertility behavior found after a suitable time period could be attributed merely to that contraceptive practice. What is the nature of the fallacy?

In simplified terms, one might categorize couples in three groups.

a) The couple want pregnancy now, whether on cultural or psychological basis, conscious or less fully recognized, articulated or less clearly planned. The net effect is that they want or need a pregnancy at this time.

b) The couple is indifferent, apathetic or fatalistic. The net effect is a lack of apparent, real or, one might say, appropriate concern about the question.

c) The couple definitely does not want a pregnancy. They want not to have a pregnancy. In the absence of available family planning service or advice or just education about contraception, what would be the fertility behavior of this third group as compared with the first or even the second?

There are conflicting considerations. On the one hand, it may seem to be a reasonable hypothesis that the degree of objection to pregnancy, in this instance most marked in group c, is somewhat correlated with the previously demonstrated fecundability. If there were two women, each married ten years and without access to contraception, the one who has three children is more likely to have a fourth than the other who has only one child is likely to have a second. At least the former may be more concerned about the possibility of another pregnancy at that time; she may feel "more vulnerable". Whatever the differential physiologic fecundability, it is also a reasonable hypothesis that the fertility performance level will be lowered in some subtle way, despite the absence of a FP program, in proportion to the shift to the right on this a-b-c scale. The term used here, "in the absence of a FP program", means the situation as it existed without that planned program effort, whether the situation was one of practically complete absence of modern contraception or whether some part of the population was using traditional or even newer contraceptive

methods. Some individuals in almost any population group will have adopted contraception, usually more so among the better educated and upper socio-economic groups. In other words, dichotomizing users from non-users prejudices fertility expectations, though we do not know how much or for certain in which direction.

The fallacy of making fertility comparisons between users and non-users in response to specific program input is similar to the situation in which the United States tobacco industry has with such apparent effectiveness argued against evidence about the damaging effects of cigarette smoking. They contend that men who are prone to cancer have the personality whereby they prefer to smoke cigarettes. This type of argument is even more appropriate to the contraception-fertility question, since contraception is directly aimed at affecting fertility, whereas the cigarette smoker is not usually consciously trying to shorten his life with lung cancer or coronary thrombosis or cerebrovascular accident. The tobacco question is partially satisfied by such consistent quantitative correlations between the amount of smoking and the incidence of certain diseases that it is difficult to conjecture that there exists a subtle gradation of personality as expressed by the amount of dependence on cigarettes rather than that the smoking behavior is the significant contributor to the pathological outcome.

It does not seem reasonable that one can overcome the argument, however, with respect to contraception and fertility as easily by showing differential fertility behavior among contraceptive practicers and non-practicers unless one instituted the controlled experimental design whereby all the women were offered contraception, but, among those who came up to the very threshold with evidence of desire to go through with it, only some are given the help and others are turned away. It is hardly likely that this type of research is feasible. The closest to this and the one that is considered in the present presentation is a matching of geographic areas or populations as mentioned before and the introduction of different amounts of family planning program efforts, whether contrasting some with none or more with less.

It is inevitable in the early stages of the development of a large national FP program that some "natural experiments" of this kind occur. It is not likely that a program can be launched simultaneously in all areas or developed universally at the same pace. Some areas will get service before others or more than others as well as different types of program effort. Unfortunately, the factors that usually contribute to such differential program investment are also relevant to fertility potential or behavior as well as the pop-

ulation's readiness to accept family planning. For example, programs tend to move first into the more accessible areas among the readier population groups.

On the other hand, a "natural experiment" may occur for reasons of staff differences rather than area differences. One district may be luckier in the quality, dedication or energy of its FP officer and staff. Accidental occurrences of illness, recruitment or staff turnover may produce differences. Searching for considerations of this kind constituted one basis for the selection of some of the areas in which the Survey of Fertility Patterns was done in Pakistan. Because this was a first run (after pretest) of an instrument not yet validated, the initial survey was considered in the nature of research on survey methodology rather than having as its primary purpose the obtaining of definitive national data. Therefore, no attempt was made to do a scientific sampling of the country as a whole. Instead, the respondents were selected about equally from East and West Pakistan. Each of these two provinces was further subdivided into northern, middle and southern areas, corresponding roughly to major ethnic and sometimes language differences as well as gross agricultural and industrial characteristics of these large regions. Approximately one-third of the respondents in each wing of the country were selected from the two largest cities, Karachi in West Pakistan and Dacca in East Pakistan. In the remaining two-thirds, the respondents were rural residents. 18 interviewers and 6 supervisors completed interviews of 12,339 women in eight weeks.

The selection also aimed at seeking for evidence of differential fertility response to differential reports of program accomplishments. In Pakistan, each district (there are more than 50 such districts in the country) submits a monthly report concerning the amount of contraceptive supplies distributed, the number of intrauterine devices inserted, the number of packets of oral contraceptive pills distributed and the number of surgical sterilizations performed. Each district compiles its data from reports it receives from the FP officers at the next lower geographic level, who in turn receive reports from their local area subordinates. In each of eight such predominantly rural districts, four local areas were selected on the basis of their being near the lower or upper end of the range of reported program accomplishments. High and low achievement areas were chosen in each district, on the assumption that the reports reflected in general terms the amount of uptake of contraception among the populations in those respective areas. The aim was to see whether differential fertility could be detected by the method when extremes of

fertility might be anticipated. This and other calculations will be the subject of other reports.

In the geographic zones selected, area sampling of households was done. In each household, women between 15 and 50 years of age and who had been married and living with a husband at any time during the previous 5-year period were interviewed. The usual interview methods for collecting household membership information were followed. Copies of the household and individual respondent questionnaires are attached to this report. Standard practices were followed in selection, recruitment, supervision and monitoring of interviewers.

The interview with each respondent was quite brief, 15 to 20 minutes. The interviewer averaged 16 completed interviews per day. Four pieces of information were obtained.

1. The woman's age at the time of the interview. All the tricks in the trade were called upon to obtain this difficult bit of information with as much reliability as possible, especially by relating the woman's life experience to major political or catastrophic events with which everyone in the community was familiar.

2. The number of living children, that is the number of children born to the respondent who were still alive at the time of the interview. Effort was made to include children living away from home and, for obvious reasons and for others that will become clearer as the discussion of this paper proceeds, special attention was given to be sure not to miss infants under one year of age.

3. The number of children born alive during the most recent five-year period and the year in which each one of those was born. Here, special effort was made to fit the time of birth of each child into the twelve-month periods into which the 5-year study span was divided. Each study year ran from July 1 to June 30. Efforts were made to fix time of birth and age of child with the help of discussion about seasons, harvests and religious holidays as well as important events.

4. The number of deaths of children during the most recent five-year period and the year in which each death took place. Information was also obtained as to which one of the children died. For example, was it the infant born the same year, or a child born more than five years ago? Except for being interested in the total number of living children at the time of the interview, regardless of their ages, no attempt was made to obtain detailed data on children over five years of age or on the woman's pregnancies further back than five years.

It is of interest to interpolate here that in the first round of this survey, information about birth and death of

children was separated into half-year periods so that there were ten such periods during the five-year span of the retrospective interview. When the data were analyzed, it was found, as had been reported earlier in Pakistan and elsewhere, that there was such a definite seasonal fluctuation in the timing of the birth of babies that it became difficult to delineate half-year trends. Therefore, half-years were merged and the data were analyzed in terms of full years. In future survey rounds, the practice of using one-year periods will be followed.

The interview findings were coded in a simple row of five boxes, each representing a one-year period, working backwards from the cut-off date of June 30, 1967. (Table 1) The occurrence of a birth or death in any one of the five boxes was noted. The woman was given her A/PS classification at the time of the interview. From this, the woman's age in each of the preceding years was noted, simply by deducting one year for each. The PS designation in each of the five years was then noted by assigning to each of those years the number of living children the woman had at the beginning of each period. A woman who reported four living children at the time of the interview and who had an infant born in the most recent year would have had a PS designation of three at the beginning of that year. If a death had occurred in any year, the PS was increased retroactively by one since that child had been alive at the beginning of that period. If both a death and a birth had occurred in a given year, that year's PS would be the same as that of the subsequent year, since the birth and the death neutralized each other and the number of living children had not changed from one year to the next. Consequently, the code now confers upon each respondent an A/PS classification for each of the five years in which she was an eligible candidate.

In effect, the method compares women with themselves as an overall group from one time period to another. These same women demonstrated certain fertility behavior in previous time periods and now within the group, the question is raised, "Are they behaving differently from the way they did before?" As will be described, this is in a sense a cohort and yet it is not. The same group of women are assessed over a range of years, but the women in each time period are grouped according to what their age and parenthood status were at that time period. One group of women who were 35 in the most recent year, would not be compared with themselves at 30, but with those women who had been 35 five years earlier. If there has been any change over the five years, the change has occurred among a single total universe of women without extracting from that universe those who

did or did not respond by contraceptive practice to the education or service offered by the national FP program.

Method of Tabulation

For each of the five years, a grid was set up to distribute the women according to their classification in that year by age and parenthood status. Although the information was obtained in single units for number of living children and for year of age, the women were grouped in order to reduce the number of cells in the grid (Table 2). Of course, the type of grouping selected depends upon the particular population and the distribution of the data in that population. In the United States, a family of two children is quite different from one of three. In Pakistan, on the other hand, it was found convenient to set up the following PS groupings: no children, one child, two or three children, four or five children, more than five. For age, the traditional five-year groupings were utilized, although in further analysis of the data it may be decided to combine groups still further. It is possible that the women may be grouped as young, middle child-bearing years and old, with the cutoffs below 25 and above 34. It may also be found desirable to separate the youngest group under 20 and those 40 and over as being atypical and usually having small numbers of cases. Further study will determine this in accordance with the general objective of bringing the method down to the crudest level that will give useful information on trends. Obviously, the fewer cells in the grid the smaller the size of the sample called for in the survey. Ten thousand respondents was found quite adequate in the Pakistan survey. How much smaller than this the sample can go depends on the more particular types of rates sought in each instance.

For each of the five years then, there now exists distribution into the different cells of the grid of all the respondents who were of child-bearing age in that year. In each cell, the number of women constitutes the denominator. The births that occurred to those women in the same year constitute the numerator of a rate, the rate of the number of births that occurred in that year to women of a given PS classification in that same year. It now becomes possible to make comparisons of group-specific fertility behavior over the five years. For example, if among 100 women age 25 to 29, with two living children at the beginning of the study year 1962 (July 1, 1962 to June 30, 1963), 30 babies were born that same year, how does this compare with the number of babies born to 100 women who were that age and who had the same number of living children during the year 1967 (July 1, 1966 to June 30, 1967)? Trends of group-specific fertility performance can be studied.

It is clear that the measurement of fertility during a one-year period is an arbitrary limitation of time. The present method also permits answering the question, "Among women of a given PS classification, what is their fertility performance over a longer period of time than one year, for example, two, three, four or five years"? Table 3 indicates the years of the retrospect for which one-year to five-year fertility rates can be calculated. Obviously, such calculation of fertility rates for progressively longer periods increases accordingly the number of women in each cell who have had more than one birth encompassed in the fertility rate assigned to the total group, although of course, this occasionally occurred in the one-year calculation. Consequently, highly fertile women contribute disproportionately to the total. The utility of the different rates will be ascertained with further experience.

Another interesting by-product of the method may turn out to be an extremely important one. This is the attempt to use the data to relate survival experience of infants with intervals between the time of their births and that of an older sibling. The study gives indication of which child died, such as an infant who is born and dies in the same year, or a child who dies in one year and had been born in one of the other previous years of the five-year retrospect, or a child who dies during the five-year period. With careful attention to comparable periods of observation prior to and after birth, mortality rates of babies will also be derived according to age of older sibling in relation to time elapsing before the next younger baby was born. What does close spacing mean to the baby who is followed and to the one who follows? Obviously, other factors that are correlated with short interval must be kept in mind. It is not implied here that interval alone is the basis for mortality differences that may be found.

We should here like to discuss some possible artifacts that may exist in the method and hope that it will be possible to find ways of testing for them.

1. It is well known by census takers that women respondents often forget to tell about the youngest baby. In the Pakistan surveys, the interviewers were cautioned especially about this. They asked repeatedly about whether there is a little baby in the home. The baby seems less likely to be omitted in a culture where breast feeding is almost universal. More often than not, the baby is with the mother and can be seen by the interviewer even if the mother forgets the baby sleeping on her back. The possible error of forgetting the youngest baby could be a very serious one because the very heart of the purpose of the method is to identify promptly a lowering of recent fer-

tility in a population subjected to a new large national effort. This question will receive attention and possible check in the second and subsequent rounds of the survey, as will be described below.

2. What possible artifacts might be induced by the error of ages of babies being thrown into adjacent years from the ones in which they were actually born? In general, one might say that this should balance itself out, because the three-year old infants would be thrown into either the two-year group or the four-year group and the four- and the two-year groups would in turn throw a similar number back into the three. A mathematical question arises as to whether such neutralizing exchange is as probable in the first and last years of the five-year retrospect as it is in the three middle years. The first year follows an indeterminate period whereas the most recent year is juxtaposed to the future and has room only for backward exchange. In consideration of this possible mathematical artifact, it is important that the interviews occur close to the cutoff date. If there is an artifact for this reason, one would guess that, if anything, it would favor a higher birth rate being recorded in the most recent year. Again, this possible artifact will be subjected to check at the second round of the survey.

3. The usual danger exists of falling into round numbers. The care with which the interviews were conducted in the Pakistan study, especially the utilization of outstanding public events in trying to determine age, may have helped to minimize peaking at round numbers. There is also an impression, which needs validating, that in a culture that is in part numerically illiterate or where numbers are less profoundly a constant feature of everyday living, falling into round numbers is less of a research hazard than in the more number-oriented societies. In trying to answer this question, it is important to differentiate the extent to which the professional or interviewing personnel introduce the tendency toward round numbers in their approach rather than this being the product of the respondents alone.

4. When seeking a very prompt indicator, it would be better to relate fertility patterns to estimated time of conception than to birth. Consideration is being given to what would be required to do this.

5. Study is also in process of the inferences that can be drawn from the use of different types of time bases in the comparisons, such as: annual trends, earliest versus most recent year, most recent versus average of previous blocks of years, blocks before and after initiation of a national program and use of overlapping periods of different lengths. Consideration is also being given to the

appropriateness of producing various types of overlapping combinations from data obtained from different rounds of the survey.

6. The most obvious question in the use of a retrospective method is, "What is the error of recall and does it increase with the length of the retrospective period"? One can hypothesize that the error for the first year which was five years before the time of the interview is greater than that for the most recent year and that there might possibly be a steady gradient of such diminishing error as recency is attained. One might also conjecture whether there is differential error for birth as compared with death and for birth of surviving versus non-surviving infants. It is more than likely, however, that the net effect of error of recall would tend to exaggerate recent fertility rather than the opposite. Therefore, any reduction in fertility that seems to be manifest in the data derived from the method might reasonably be considered as minimized, in this respect at least.

It is obvious from the nature of the method being described that its value would be enhanced by periodic repetition, in order to extend the observation of trends. A second round of the survey would also have the research function of answering questions about the instrument. In Pakistan, this will take place early in 1969, approximately 18 months after the first one. An annual periodicity had been projected but did not prove possible. Regardless of the periodicity, the second round will be so designed that comparable data on coterminous periods will be obtained. A five-year retrospect will be used as in the first round, but the period will be brought up to date so that approximately the first year will be dropped and a more recent year added. No attempt will be made to revisit the same respondents or households as of the first round. Each of the years covered will have been one year further back in retrospect in the second round than it was in the first. With fully random samples in successive rounds, it is therefore theoretically possible to compare findings for a given year when data for that year represent varying lengths of recall. This is a rather unique opportunity to try to answer this old and thorny question.

In an attempt to simplify the method still further and in accordance with recent experiences of other workers, particular attention will be given to shorter recall periods. How much can be learned and inferred from the simple questions, "Was there a birth in the most recent year"? and "How long a time has elapsed since the last birth"? Further studies over the years with attempts at checking by repeated rounds might give understanding of the length of recall period that

is optimum in different settings as well as the extent of increasing error with its increasing length. It is our impression that with the arbitrary five-year cutoff, the first or oldest year in the retrospect is of itself a kind of "buffer" between the previous marriage period not analyzed in detail and the retrospective period included in the tabulation. If this proves to be the case, it may be necessary to have a five-year retrospect in the interview but utilize the data only of the most recent four years. Such use of a buffer might also extend into future decisions to shorten the total retrospect below five years.

Although future survey rounds will not seek a strict cohort, it may well be desirable to go back into some of the same communities. Whatever is done along these lines will be primarily for methodology research and supplementary to the clear intent to use completely random samples in the second round. Many aspects of the benefits of the repetition of the method and comparison of data among different rounds will come up for question in the future. How much variation is introduced by two rounds that cover a given year as compared with four or five rounds for that year? Is there differential reliability between types of respondents, urban vs rural? What are the distribution patterns of the ages of the women or of their PS as well as A/PS classification? Therefore, would the denominators in the different cells differ considerably before one looks at variations in the numerator fertility data.

The measurement of group-specific fertility rates gives only indirect clues to the occurrence of increased spacing or prolongation of intervals between pregnancies. For this purpose, the data can also be analyzed according to pregnancy-free intervals, whether closed by a subsequent pregnancy during the five-year period of retrospect or whether the intervals remain open. A variety of analyses are under way and will be the subject of a separate report.

It has been suggested that the data can be subjected to simpler numerator analysis as described by Ravenholt and Fredriksen.² Consideration will be given to the types of supporting data needed to draw inferences from the group-specific fertility numerators alone.

Without waiting for the checks that will be obtained from future rounds, the method lends itself, in part at least, to other types of reliability assessment. How does the retrospective interview method compare with concurrent interviewing over time where this has been done and with the recording of vital data when the recording is adequate and reasonably reliable? Even in places where vital statistics are admittedly incomplete and inadequate, it would be of interest to find out

whether the data and the inferences being drawn from them are comparable to those obtained by retrospective studies in such countries. The method is now being subjected to a number of such comparisons. Only one will be mentioned here.

In Pakistan during four of the five years covered by the present report, a project has been going on called P.G.E. or Population Growth Estimate. This consisted of a representative sample of approximately 26 areas of the country in which were placed resident registrars who made monthly or quarterly reports of vital events, births and deaths in the households in their sample. The data from that project, which you might say were obtained prospectively although they were intermittently retrospective through frequent home visiting, are being subjected to tabulations according to the same method for comparison. The author would welcome communications and possibly collaboration with investigators who may wish to replicate the method in different settings. A manual of instructions on the Fertility Patterns Survey method is in production.

Although the present paper aims at presenting the method as a research problem, it is of interest to make a brief reference to certain findings of the Pakistan Survey. A drop in fertility seems to have occurred in the most recent year (July 1, 1966 - June 30, 1967). The

intensified national Family Planning Scheme had been launched in September 1965. The most striking reduction in reported fertility, perhaps in the order of almost 20%, occurred among older women, especially in mid-thirties and later, who had more than three living children. This is not an unexpected first response to a new effort.

SUMMARY

A method is presented for retrospectively obtaining information on fertility performance during a five-year period and treating the data as if the women were being observed prospectively in groups classified according to their age and number of living children. The method was used in a survey of over 12,000 women in Pakistan. A second round survey will be done to test the method's reliability. Improved methods of data collection on fertility are needed to help in the prompt assessment of the effectiveness of national family planning programs.

Bibliography

1. Wishik, S. M. "Indexes for Measurement of Amount of Contraceptive Practice", (In Press).
2. Ravenholt, R. T. and Fredriksen, H., "Numerator Analysis of Fertility Patterns" Public Health Reports 83:6 (June 1968), 449

Table 1 Example of Coding

	July 1, 1962	July 1, 1963	July 1, 1964	July 1, 1965	July 1, 1966	July 1, 1967
	1st year	2nd year	3rd year	4th year	5th year	
	birth	birth			birth	
		death		death		
A/PS at beginning of each year	28/3	29/4	30/4	31/4	32/3	Interview A/PS 33 years 4 living children

Table 2 A/PS Distribution Grid for each of the Five Years

		Number of living children-Parenthood Status (PS)				
		0	1	2-3	4-5	over 5
age groups (A)	19 & under					
	20-24					
	25-29					
	30-34					
	35-39					
	40 & over					

Table 3 Group-specific Fertility rates in each cell of grid can be derived for the following:

- 1-year fertility rate for groups as of beginning of years 1,2,3,4,5
- 2-year fertility rate for groups as of beginning of years 1,2,3,4,
- 3-year fertility rate for groups as of beginning of years 1,2,3
- 4-year fertility rate for groups as of beginning of years 1,2
- 5-year fertility rate for groups as of beginning of year 1

HOUSEHOLD INFORMATION

Village/Household/Respondent No.
(Supervisor to fill)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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1. Date of interview: Month _____ Day _____
2. Name of village: _____
3. (a) Name of head of household: _____
(b) Caste of head of household: _____
(c) Name of father of head of household: _____
4. Address: _____
5. How many people slept in this household last night? _____
6. How many of them are women who are now married? _____

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	

Names:

- (a) _____ Wife of _____
- (b) _____ Wife of _____
- (c) _____ Wife of _____
- (d) _____ Wife of _____
- (e) _____ Wife of _____

=====

(For interviewer only)

7. How many women were finally interviewed from amongst the total married women listed in Question 6? _____
8. If any of them were not interviewed, give reasons for each: _____

<input type="checkbox"/>

Remarks:

Fertility Pattern
Study Questionnaire:
Part II.

INDIVIDUAL RESPONDENT INFORMATION

WP/FP/APS/V/8/67

Village/Household/Client#

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7

9a. What is your name? _____

b. What is your husband's name? _____

10a. How old are you? _____

b. How old were you at Partition? _____

c. [Interviewer's opinion about age:] _____

11a. How long ago were you first married? _____

b. [If less than 5 years, nearer to:] _____

12. How many living children do you have? _____

[Do not include children born since June 30, 1967]

List the names of all of these children, starting with the youngest.

(a) _____

(b) _____

(c) _____

(d) _____

(e) _____

(f) _____

(g) _____

(h) _____

(i) _____

(j) _____

13. Mark the ages of all living children under 5 years, starting with the youngest.

4 Years		3 Years		2 Years		1 Year.		Under 1 Year.	
Nearer		Nearer		Nearer		Nearer		Nearer	
5	4	4	3	3	2	2	1	6	Under
Years	Years	Years	Years	Years	Years	Years	Year	Mths.	or
								more	6
								mths.	

(Section below for coding only Note: Code numbers in boxes.)

Deaths	17	18	19	20	21	22	23	24	25	26
All Births	27	28	29	30	31	32	33	34	35	36
# living children at beginning of period	37	38	39	40	41	42	43	44	45	46
Age of mother	47-48	49-50	51-52	53-54	55-56	57-58	59-60	61-62	63-64	65-66
Eligibility	67	68	69	70	71	72	73	74	75	76

Do not mark in
code boxes

8 ☐ ☐ 9
10 ☐ ☐ 11
12 ☐ ☐ 13
14 ☐ ☐ 15

16 ☐

14. Have you had any children who were born alive to you but later died?

(even if they only lived for a few hours).

No _____ Yes _____ How many _____

a. Most recent death: How long ago? [Nearer to]

If less than 5 years ago; how old was child at time of death? [Nearer to]

b. Next most recent death in past 5 years:

How long ago? [Nearer to]

If less than 5 years, how old was child at time of death? [Nearer to]

c. Next previous death in past 5 years:

How long ago? [Nearer to]

If less than 5 years ago, how old was child at time of death? [Nearer to]

[For interviewer to answer]

15. In your opinion, how reliable is the information given by this woman? [Mark with a tick]

1) Very reliable _____

2) Reasonably reliable _____

3) Not reliable _____

16. Remarks:

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Print name of interviewer: _____

Signature: _____

Signature of Supervisor: _____

in
[14, 15]

in
[8, 9]