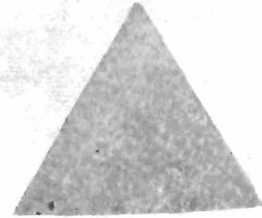


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COMPARATIVE ANALYSIS OF FERTILITY IN SEVEN  
LATIN AMERICAN COUNTRIES

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Chapter I. Considered subjects in the comparative study.

Considering the appreciable significance of fertility in the growth of population it is of unquestionable interest to analyse the evolution - in terms of time and geographic area - of the levels and trends of this demographic feature.

The data concerning both natality and nuptiality in some countries of the region are inadequate, either due to the limited coverage of the registers of vital facts or to the delay with which they are made available to those interested in them. On the other hand, publications of this kind of statistical data do not contain tabulations which enable an analysis to be made of the relationship between fertility levels and the socio-economic characteristics of the population. Furthermore, public health activities in the field of family planning are not adequately supported by service statistics, hence it is not possible to relate the characteristics of the female population served by such programmes to changes occurring in fertility patterns.

It is therefore necessary to conduct national surveys on fertility, based on sample sectors of women in fertile age, in which, apart from recording their reproductive history, consideration is given to the simultaneous recording of information on a broad group of characteristics of a social and economic nature, and of the nuptiality and family planning circumstances related to those interviewed.

// As already implied, ...

As already implied, such surveys may only be carried out by means of selecting a probabilistic sample of women in fertile age within the framework of the universe of the family households existing in the country.

A subject of considerable discussion in connection with the World Fertility Survey programme has been that regarding the types of country in the region which should be included in the study due to their being the most representative of the evolution of fertility trends; and also the maximum and minimum recommendable size of the sample groups. As is known, the need to establish a minimum size is dependent on the degree of disaggregation of data considered desirable for the fertility study, whereas the maximum size will be dependent on the largest admissible cost assigned to the national survey.

In the case of Latin America, adequate compliance has not been given to the first-named requirement - that of country representativity - greater attention having been given to the size of sample for investigation. At the present time the countries which have completed the survey are: Colombia, Costa Rica, Mexico, Panama, Peru, the Dominican Republic and Venezuela. The smallest size of sample was that employed in the Dominican Republic where the number of women interviewed was 2,256. This compares with Colombia, where the sample size was the largest and comprised 5,685 women.

// Since in the...

Since in the countries concerned the types of sample design and samples employed have not been identical, and since the quality of the data obtained in the various surveys has not been uniform, it has become necessary to consider inclusion in this analysis of a chapter describing the types of sample design and size used, the restrictions influencing the selecting of the women to be interviewed, the lack of response (degree of coverage of households and women in the various areas); and analysing in general the reliability of the studies made. In the special chapters of the present document in which specific fertility aspects are examined, further analyses concerning the validity of the information will be dealt with, as well as the most advisable method of estimating the fertility indices for years preceding the survey (study of fertility trends) where such records for the various age groups are not available.

Although in each of the chapters of this comparative analysis, detailed mention will be made of the working hypotheses employed in preparing the comparative tabulations, the present introduction mentions and comments generally on the subjects dealt with in the various chapters, with mention of the variables considered and the different categories adopted.

In the presentation of tables the procedure followed has been to provide in the first place a very small number of absolute and

/relative distribution...

relative distribution tables under a given heading with the purpose of drawing attention to the number of observations used in the analysis of each particular group of women, and how, based on that number, it may be possible to accept or reject the validity of the differences noted.

The distribution tables are supplemented by cross-tabulations in which the fertility indices for each country are compared, either based on observed values (survey data) or typical values (as for instance those based on a model structure of marriage duration).

- Fertility Levels and Trends

In a comparative study, attention must in the first place be given to analysing the similarities or dissimilarities in the variations of fertility in terms of time and general geographic space. In order that comparisons at this general level may be appropriate, the use of indicators must be resorted to, enabling clear distinctions to be made between one country and another.

One indicator of the general level of fertility is the gross birth rate, which should theoretically be calculated for the years previous to the survey to determine the trend movement in the various countries. Apart from the difficulty inherent in such determinations it is known that this indicator is considerably influenced by the different volumes of female population of different ages in the child-bearing period. To overcome this difficulty resort may be made to the use of a measure which considers in combined form the specific fertility rates by age, in order to exclude from the measurement the effects of the different structures

/ of the fertile female ...

of the fertile female population in the countries involved. This may be done by using a common population model of as simple a form as possible, such as a rectangular population. If the specific fertility rates have been calculated for 5-year age groups, this overall standardized rate is the total fertility rate, obtained by addition of the specific rates multiplied by five.

This total fertility rate may be interpreted as representing the final average number of children to be born to fertile women - by the end of their reproductive life - if sustaining the specific age fertility rate at the moment considered. This moment may be: the final year, the last three years, the average values in preceeding three-year periods (five of them), or the average values in the preceeding five-year periods (three of them, etc.).

#### - Socio-economic differentials

The study of the general fertility level should be supplemented by an analysis of the variations occurring in this general level in particular population groups, whose special characteristics are specified. A special characteristic which may give rise to a different general level is that relating to the geographic location of the population. Consideration of this special characteristic

/enables detection of ....

enables detection of the areas which most significantly influence the changes experienced in the country's general fertility level over a period of time.

It is customary in the countries concerned to adopt a strictly census division of the population into urban and rural. This dichotomous classification is however insufficient to detect the areas effectively contributing to changes in the general fertility level.

At the outset it should be emphasized that the combination of population settlement regarded as urban is of too heterogeneous a nature. It is known that, in general, greater development takes place in metropolitan urban areas than in other urban parts of a country.

It is also readily to be expected that in cities of more than 100,000 inhabitants the reproductive behaviour of the population most closely approximates that occurring in the metropolitan urban area; though it is possible that it may be somewhat different due to a lower level of communitarian development. Finally, the rest of the country's urban population differs from the former two classes, and is significantly different from that living in rural surroundings. The foregoing considerations lead to a subdivision of the urban population into three categories, namely:

- Metropolitan area (urban)
- Large cities (over 100,000 inhabitants)
- Urban remain

/At this level ...

At this level of disaggregation of the population the study of fertility levels and trends considers the variations over periods of time in:

- the general fertility level
- specific fertility levels, by age
- specific fertility levels, by age and current place of residence

Analysis of the evolution over periods of time of the levels and trends of fertility considering the variables of age and area of residence represents the initial step for the analysis of differential factors in fertility. The study of fertility, considering certain differential factors, seeks to explain the effect of particular variables on the progressive formation of the family.

The analysis of differential factors seeks to highlight the degree of association observable between the magnitude (or level) of some of these factors and the rapidity of the family's past growth, and what may be the final size of family being reached at present or in the future.

An important group of factors which it is of interest to associate with fertility are those falling under the denomination of socio-economic factors and which are in direct relation to the following types of variable:

- the educational level of the woman
- the educational level of the husband (the sole or last husband)
- social and professional status of the husband (the sole or last husband)

/ participation of the ....



- participation of the woman in economic activities (outside the home)
- geographical mobility of the woman within the country
- survival of live-births
- place of residence of the woman in childhood

Thus, in considering the woman's education, it is to be expected that, to the extent that at the time of her first marriage or union her educational level is lower, the present size of her family (total number of surviving children) or, in cruder terms, the total number of live children to whom she has given birth (parity reached) will be greater than in the case of the women, who, at the time of her first union, was of a higher educational level.

On the other hand the woman's educational level will in most cases correspond with that of her husband, and in the event of a difference of level, it will tend slightly to favour the husband.

Consideration of the educational variable permits separation of the women according to their different fertility levels and enables further progress to be made in the study of fertility, considering other additional variables (nuptiality, for instance) within the specific educational level groups.

Apart from the relationship observed between the woman's fertility and educational levels, it is to be expected that the

/social and professional ...

social and professional situation of the husband will also be closely associated with the parity level reached by the woman. Since the fertility surveys only provide information concerning the occupation of the woman's sole or last husband, this relationship between the fertility level reached and the occupation of the husband may only properly be analysed in respect of those woman who have had only one union, whether or not they are currently married or in consensual union.

The most appropriate manner of relating the total fertility level reached by women who have had more than one union with the occupation of the husband is a matter which has not as yet been resolved.

Although it is possible, in some comparative tables, to adopt a detailed classification of the social and professional categories of husbands, such as proposed by with the World Fertility Survey (WFS) <sup>1/</sup>.

/This category ...

<u>1/</u>	WFS 1	Professional, technical, administrative, executive and managerial workers
	WFS 2	Clerical and related workers
	WFS 3	Sales workers
	WFS 4	Farmers, farm managers and supervisors, fishers, hunters and related workers.
	WFS 5	Self-employed agricultural and animal husbandry workers
	WFS 6	Private household workers: housekeepers, cooks, maids and related workers
	WFS 7	Other service and related workers, members of the armed forces
	WFS 8	Craftsmen; skilled and semi-skilled production workers and transport equipment operators
	WFS 9	Unskilled workers and labourers

This category breakdown will not prove appropriate since it will give rise to unreliable estimates due to the small size of sample groups used in the surveys. This same circumstance will not make it possible to detect significant difference in relation to the fertility levels reached. With a view to achieving greater stability in the estimates, the foregoing number of categories may be reduced to six, namely:

- high level non-agricultural, non-manual workers
- medium or low level non-agricultural, non-manual workers
- non-agricultural skilled manual workers
- non-agricultural unskilled manual workers
- agricultural dependent workers
- employer and own account agricultural workers

Thus opening the way to consideration of a minimum category breakdown, as follows:

- non-agricultural non-manual workers
- non-agricultural manual workers
- agricultural workers

This latter would be the recommendable sub-division where simultaneous consideration is given to other variables.

Participation of the woman in an economic activity, especially when it causes her to be absent from home, is a social and economic variable closely related to her fertility level.

/The main interest ...

The main interest in considering this variable lies in detecting whether the married (or in consensual union) woman working outside the home tends to produce a smaller family. Such an effect would probably be associated with a more prolonged period of employment.

It is thus advisable in the first place to compare two groups of women: those who have worked during the marriage period and those who have not. In the case of the latter group it is moreover appropriate to distinguish between those who have never worked and those who worked only before their marriage.

As regards the group of women who have participated in economic activities during marriage, it is advisable to divide them into two sub-groups showing whether or not they were engaged in such work at the time of the survey. Furthermore, to avoid combining a group of women with excessively differing periods of employment it is advisable to consider the relative importance of the length of time worked while married.

Three categories may conventionally be adopted in respect of the relative importance of time worked during marriage.

- low participation (less than 1/3 of the period of union)
- medium participation (from 1/3 to 2/3 of the period of union)
- high participation (more than 2/3 of the period of union)

Due to the size of samples used and the low degree of participation of women in economic activities, it is not possible to

/prepare tabulations ...

prepare tabulations showing simultaneously the relative significance of length of time worked and the condition of engagement in such work at the time of the survey.

Reference will now be made to the internal geographic mobility variable since in general it is to be expected that changes of residence may influence the reproductive performance of the women.

Relatively prolonged residence in a given geographic location will enable the woman to follow the life style corresponding to the social group to which she belongs. If the change from a rural to an urban area occurs in adulthood (15 years or over) the result on reproductive behaviour in the new area of residence, once the woman has married (or become consensually united) will differ from that had she remained indefinitely in the rural area.

It would appear that, in the World Fertility Survey, it is considered that the place of residence of the woman in childhood (up to 12 years of age) influences her reproductive behaviour regardless of her habitual area of residence at the time of the survey.

On the other hand, information is not provided by the survey regarding the woman's place of birth, but only regarding whether or not she resides permanently at the place of the survey. As an alternative, the survey provides information on the type of place of the woman's residence in childhood (up to 12 years of age): whether in the country, or in a town or city. This manner

/of classifying ...

of classifying the place of residence in childhood is not fully reliable for the purpose of studying the relationship between the woman's internal geographical mobility and fertility level reached. As an alternative, and in the absence of information regarding place of birth and duration of place of residence prior to the survey, consideration may be given to whether the woman is or not a native of her current place of residence. Since the qualification of current area of residence, as already mentioned, involves the use of four categories, a sub-division of these four categories into native or non-native population will lead to use of a set of eight categories, enabling appropriate association of the woman's internal geographical mobility with her current fertility level. Although it would be possible to make a more detailed analysis of the association of infant mortality and mortality occurring in the four years following birth with fertility levels, it will be easier in a first phase of comparative analysis of the countries concerned, to consider only the extent to which the number of the woman's surviving children at a given age may be associated with the subsequent growth of her family.

A first difficulty in the analysis of this type of relationship consists in the election of the most advisable group of women for such a study. For instance, the advisability may be accepted of considering the women who have been married (or in consensual union) for at least 10 years and who have, or have had, sufficient time ahead of them to replace any deceased children. A further limitation might be to select women who have

/had only one ....

had only one husband (or consensual partner) during their fertile life in union. Finally, the analysis will consider the influence of early marriages or consensual unions on the survival of the children.

- Nuptiality and intervals between births

As already mentioned on commencing to consider the socio-economic variables, the basic purpose of the analysis is to identify those groups of women whose levels of fertility reached may differ significantly.

It is agreed that socio-economic variables do not directly influence the reproductive behaviour of women but that the variables in what we shall refer to as "nuptiality" are those of more direct influence in the formation of the family. On the other hand, in their conjugal life the woman and her partner may take appropriate steps to space their children and raise a family of conventional size. These further variables, which add interest to the analysis of nuptiality, will be considered later in greater detail on analyzing the variables in what we shall describe as "family planning".

In the study of the association between nuptiality variables and fertility the intention is to examine directly the manner in which family growth varies in direct relation to permanence in the union of the couple.

/The union ...

The union of the couple is known to be either legal or consensual in nature. In the surveys it is permissible to deduce that the union is legal if the woman declares she is "married". This kind of answer, however, will not necessarily mean that the woman is legally married. Furthermore, situations may occur where due to the short duration of consensual union of a couple, and especially if this form of civil status took place some time before the date of the survey, the woman may declare herself to be a single. Similarly, the possibility exists that some married or separated women, being recently in consensual union, may not declare their true marital status.

Although the type of union implies a greater or lesser duration, clear distinction between a legal and a consensual union is not possible. Consequently, in the intended comparisons, these two marital statuses are placed in one sole category.

The same unstable circumstance in some unions may be found in the case of a woman who remarries or becomes consensually united more than once after widowhood or separation from her first husband. The growth of the family is associated with such sequence in status to the extent that a greater or shorter length of neutral time may have occurred between each period of union.

/For the study ...



For the study of intervals between births it is necessary to distinguish between those women who have had only one union and those who have had two or more unions. If the length of neutral time - i.e. lack of husband or consensual partner - elapsing between two successive periods of union is relatively short, it may be assumed that the rate of family growth will not be appreciably effected and, at the same time, that the effect of such a circumstance on variations in the length of interval between births will not be significant.

Finally, if it is desired to compare the marital structures of the population in fertile age at the time of the survey or at a uniform time in different countries - bearing in mind that the dates of the various surveys carried out do not coincide - the "current" structure of marital status will always be of interest.

In the intended analyses associating current nuptiality with fertility, the following categories of civil status are considered:

- women currently married or in consensual union having had one union only
- women currently married or in consensual union having had two unions

/women currently ...

- women currently married or in consensual union having had three or more unions
- widows
- separated or divorced women
- single

In other types of analysis it is necessary only to consider if the woman has at any time been married or united. In this case the categories of civil status considered are the following:

- married or in consensual union, with one union only
- married or in consensual union, with two unions
- married or in consensual union, with three or more unions

These sub-divisions of marital status should be related to the duration of the first union (or the sole union in the case of most women) or to the total duration of all the woman's unions (addition of the duration of each period of union).

Moreover, the duration of the first union should be associated with the age at which it took place, being it reasonable to expect that in some cases where the union has taken place at too early an age it could mean a shorter duration of such a first union. Similarly, a significantly late first union may be of a shorter duration to the extent that the woman may have worked before becoming united.

/In the case ....

In the case of women who have had more than one union it is extremely difficult to associate the total duration of such unions with the level of fertility reached, since the age at which the first union ended and the duration of subsequent unions may be expected to influence the finding.

If the first union takes place at a very early age and is of short duration, and the second occurs before the age of 25 and is of relatively long duration, it is to be expected that the fertility level reached by the women will not differ from that of women united only once, and whose first marriage or consensual union took place at a later age.

It is for all these reasons that in the comparative tables that have been drawn up, the duration of union represents in some cases the duration of the first union only, whereas in others it refers to the total time of the woman's marital experience.

An analysis of the association between nuptiality and fertility in the case of a woman who has had only one union will undoubtedly be that which presents the least difficulty. Some women who have had more than one union may also be included in some of the comparisons presented, provided their periods of non-exposure to conception have been relatively short and they may thus be considered as being under continuous risk.

To sum up: the basic nuptiality variables considered are:

- marital state, present and past
- age at first marriage or union
- duration of first union
- total duration of unions

/As regards ...

As regards marital status, reference has already been made to the various categories to be used whether the analysis refers to recent or past fertility.

As regards the various categories which may be considered in dealing with age at first marriage or union, the World Survey considers the following seven age categories:

- under 15
- 15-17
- 18-19
- 20-21
- 22-24
- 25-29
- 30 or above

However, this breakdown will prove to be too extensive in a comparative analysis in which, apart from this variable, it is necessary simultaneously to consider other variables.

Furthermore, the comparative tables are cross-tabulations showing summarized measurements of fertility. For these reasons it is advisable to reduce the foregoing seven categories to five, namely:

- under 15
- 15-19
- 20-24
- 25 -29
- 30 or above

/since these age ...

since these age classifications are more in accordance, with the traditional five-year age groups for which fertility measurements, recent or past, are customarily calculated.

Since the number of women who marry or become consensually united for the first time at the age of 25 or more is very small, these five categories may be further reduced by combining the last two groups.

It has been judged inappropriate to reduce to less than four the number of categories of age at first marriage or union unless strictly necessary due to the comparative tabulations comprising more than three variables simultaneously. In this exceptional instance, consideration could perhaps be given to employing the simple binary sub-division.

- under 20 years; 20 or more years

As regards duration of union, no problem occurs in the analysis of its association with fertility in the case of women who have been united only once. Since the comparative analysis does not, for the present, require the construction of nuptiality tables, in order to compare summarized indicators inferred from those tables the categories to be employed for the duration of union are:

/- 0-4 years ...

- 0-4 years
- 5-9 years
- 10-14 years
- 15-19 years
- 20 or more years

In some cases it will be advisable to exclude the comparisons the first-mentioned category since, where the duration of the union is less than five years, it is improbable that the reproductive behaviour of women will differ significantly or that any definite tendency will be observed in regard to the final future size of the family.

It has been considered advisable that, together with the study of the association between different types of union and fertility, consideration also be given to the analysis of variations in the intervals between births. Similarly, it is of interest to examine the length of time elapsing between the moment of first union and first birth.

The comparative analysis takes into account the relative significance of women according to their level of parity reached. In the determination of the interval between first union and first birth, all women who have had at least one child are considered; in the first interval between births all women who have had at least two children are considered, and so on. Moreover, in these comparisons the groups of women are sufficiently differentiated since parallel consideration is given to the duration of union.

/The availability of ....

The availability of these relative parity values enables measurements to be deduced of their progression (or growth in size of family) which may be used to compare women of different social and economic levels.

Although it is not appropriate in a comparative study to include figures of the relative variability of the intervals between births, calculation of the measurements of relative variation of these parameters has been envisaged, with a view to detecting the differences which may effectively exist in different groups of women.

The length of the various intervals between births constitute appropriate measurement bases to estimate the growth expectation of families currently in process of formation, or alternatively to estimate their final probable size.

As is well known, the length of these intervals, under conditions of natural fertility, depends to a considerable extent on the level of fecundability. This variable probability in conception is closely associated with the woman's age, this being a feature of increasing significance to the extent that the order of live births increases. Some investigations have shown that, in certain groups of women, a further relatively important factor in the variation in length of the intervals between births, is that relating to the temporary infecundity of the woman after termination of the period of pregnancy.

• Family planning

On the other hand, the length of interval between births may vary to the extent that the women's pregnancies end in abortion (spontaneous or induced) or that family planning methods are being employed for the spacing of children.

The size of family at a given time during the course of marital life may have been regulated by the effects of family planning commenced some time previously. In respect of family size, family planning may be defined as the combination of measures taken by the couple to enable the woman to produce children at the times considered most appropriate. Family planning may be carried out through the use of contraceptive devices or products, or by the adoption of rules of conduct in sexual relations to prevent the woman from becoming pregnant.

It has been proved that rules of conduct are not sufficiently efficacious to avoid pregnancy and that it is more advisable that the woman adopts the use of certain devices or products for contraceptive purposes. As is well known, the efficacy of contraceptive s depends, not only on their clinical efficiency but on their uninterrupted use. It may always be expected that some woman will become pregnant involuntarily in spite of using a particular contraceptive. This probability will progressively

/diminish to the ....



diminish to the extent that the contraceptive is efficacious. On the other hand, some contraceptive devices or products may have the disadvantage of causing collateral consequences which may appreciably affect the woman's health. In such cases it becomes necessary temporarily to discontinue use of the contraceptive; or to discard it permanently if the collateral effect is severe.

No attempt will be made in the comparative analysis to quantify the relative effect on fertility of family planning in general or of the use of the various contraceptive methods in comparison with the effect of other variables.

As in the case of the variables already considered, the analysis attempts only to highlight the degree of association existing between the use of family planning methods and fertility levels.

In accordance with this principle, the study of the relationship between family planning and the fertility level commences with consideration of the significance of certain groups of women in respect of their contraceptive practices.

The information on family planning at the present time is in principle the most reliable and that of the greatest use. It opens the way subsequently to relate the different marital conditions of women with their parity performance.

/After the woman's ...

After the woman's last live birth, she may have been using some form of contraceptive method to avoid pregnancy, success in this respect depending upon the efficacy of the method employed. In respect of efficacious methods, the case may occur of women who have discontinued using the method because they wished to conceive and who are already pregnant at the time of the survey.

Other women previously using contraceptive methods may have discontinued them with a view to pregnancy, but due to their fecundability level, are not yet pregnant at the time of the survey.

An interesting group is that of the women who, having used contraceptive methods, are currently pregnant due to the low efficacy of the method used (involuntary pregnancy). A further group of interest is those women who, not having been sterilized nor actively employing family planning methods at the time of the survey, had been engaged in the latter practice prior to the birth of their last child. To the foregoing groups should be added those women who have never resorted to family planning methods, and those who have been sterilized.

Thus the various categories considered in regard to the use of active family planning, are as follows:

- currently in use, no further children desired
- currently in use, children being spaced

/ - method discontinued ....

- method discontinued, desired pregnancy having occurred
- method discontinued, pregnancy currently wished
- method discontinued, for other reasons
- method discontinued, due to involuntary pregnancy
- has used method prior to last live birth
- has never used method, currently pregnant
- has never used method, currently not pregnant
- sterilized

Although mention has been made that the information on the current family planning situation is to/fully relied on, it is also worth while examining what has occurred with the use of contraceptive methods since the woman first began to use them.

For this purpose the comparative analysis considers the circumstance of active family planning in relation to a woman's entire marital experience (ever-users).

The categories adopted for this purpose are:

- currently in use, with use in previous intervals
- currently in use, without use in previous intervals
- has used only in latest closed interval
- has used in latest and former closed intervals
- has used only in open intervals
- has used in open and former intervals
- has never used
- currently sterilized

/It may be ....

It may be assumed that sterilization has taken place when the woman has had certain health problems during her pregnancies. It may also happen that the woman has had problems in the use of contraceptive methods and that, prescription of a particular method not being possible, sterilization has been resorted to because of a wish to avoid the woman's pregnancy.

Mention has also already been made that a woman who has been using a particular planning method may fail in the attempt to avoid pregnancy, this being associated with low efficacy of the type of method used. Always bearing in mind that the comparative tables are cross-tabulations and should be easy to analyze, it is advisable to assemble the family planning methods into two large groups according to their relative efficiency, namely:

- efficient methods: IUD, pill, injection
- inefficient methods: condom, rhythm, withdrawal, others

leaving in a separate category though of relatively small significance, the group of women who have been sterilized.

Under these conditions the circumstance of the woman's activity in regard to family planning, considering the relative efficiency of the methods employed, may be summarized by using the following categories:

/-currently uses ....

- currently uses an efficient method
- currently uses an inefficient method
- no method in use, though has used previously
- no method ever used
- sterilized

It is understood that these categories, according to the relative efficacy level of the methods concerned, serve as a basis on which to analyze the association existing between the level of parity reached and other variables such as those of a socio-economic nature.

In a small number of comparative tables it has been considered necessary to give prominence to the relative importance of an specific contraceptive method in comparison with others. For such comparison, the categories used are:

- for the efficient methods: IUD, Pill, other
  - for inefficient methods: condom, rhythm, withdrawal, other
- other inefficient methods, such as the use of diaphragm or jellies, being dealt with separately from the above group.

The information concerning family formation obtained in the surveys so far carried out shows in the case of certain sectors of population, especially those in rural areas, that the proportion of women using contraceptive methods is very small.

/This circumstance ....

This circumstance points to the necessity of analyzing the association existing between generally high fertility levels with an absence of the practice of family planning methods.

This leads us to examine in particular the group of woman who have never made use of family planning methods. From the results of the various fertility surveys, it is possible to determine that this group is numerous, enabling it to be appreciably disaggregated to analyze the relationship between the non-use of contraceptive methods and the parity levels reached.

Initially, it is possible to analyze the extent to which the non-use by women of family planning is associated with the degree of knowledge concerning contraceptive methods. In the case of women who are aware of the methods but have not resorted to their use, it is likely that this is due to their considering but the number of their surviving children is below the number planned and, so long as the current number of children is inferior to that figure, they will not wish to use contraceptive methods.

The case may occur where, being aware of efficient contraceptive methods and wishing to use them, the woman is not able to do so due to lack of convenient access to family planning services. Nor is it possible to overlook the group of women who, having knowledge of contraceptive methods, will on no account use them.

In the case of the woman who is ignorant of contraceptive methods, this situation will not be significant if she has been married or consensually united for a few years only, but the case will be different where woman, because of the greater duration

/of their marriage ...

of their marriage or high parity reached, are inducing abortion of their pregnancies.

This variety of circumstances leads us to divide the women who have never employed contraceptives into the following categories:

- those who have knowledge of methods but reject their use
- those who have knowledge of methods and intend to use them in the future
- those who have knowledge of methods, wish to use them, but do not have access to family planning services.
- those who are unaware of methods and do not resort to abortion
- those who are unaware of methods and resort to abortion

Of all the above groups, that of greatest interest for purposes of action is the group that has never made use of family planning methods because of unawareness of their existence and for this reason are resorting to induced abortion in order to control the growth of their family.

Similarly, the group of women who, having knowledge of contraceptive methods, reject any possibility of using them at present or in the future, deserve special analysis in future studies.

Both the third and fifth groups in the foregoing listing should be examined in the light of the different classes of social

/ and economic ....

and economic variables already referred to, and it is even possible to devise some tabulations taking into account the existence in the home of means of oral diffusion of information such as the possession of a radio; and the possibility of the woman making use of mother-and-child health services.

The two latter aspects have not been considered in the comparative study, only a few tabulations having been designed in which the lack of contraceptive practices together with absence of knowledge concerning methods is associated with variables such as the current place of residence of the woman and her educational level.

#### - Expected size of family

On examining the association between family planning and fertility levels in the various circumstances considered as characterizing or distinguishing the woman's current or future contraceptive practice, some categories were established in which the woman's desire to have an additional number of children or not is considered.

By reference to the various intended comparative tables, it is hoped to examine the relationship which should exist between the wish to have additional children and the adequate achievement of this objective through family planning methods.

/It is known that ....



It is known that the fertility surveys carried out in areas where vital statistical systems have not yet been sufficiently developed have as their primary purpose the determination of measurements of the levels and trends of fertility.

In the comparative analysis of fertility data where a high level of positive comparison exists as between the countries surveyed, this type of study constitutes one of the basic aspects of analysis.

The present comparative analysis should be continued with subsequent chapters designed to examine the association existing between fertility levels and the particular levels of certain variables in order to enable identification of the groups of women showing significantly different levels of fertility.

As has already been mentioned, these are the socio-economic variables, among which the differentiating effect of the woman's educational level is of importance, as in the area of residence and participation in economic activity outside the home.

But if, in effect, variables of this type enable the analysis of fertility differentials, it becomes necessary to expand this examination and incorporate other groups of variables which are more directly linked with reproductive behaviour, such as the variables in nuptiality and family planning.

Although it would theoretically be possible, based on the analyses carried out, to estimate the future family sizes of the various groups of women of fertile age, it would not prove

/redundant to confirm ...

redundant to confirm such forecasts with reference to the survey data concerning the number of additional children desired.

It is to be expected that this type of information is not fully reliable since the quality of the information depends not only on the woman's current age, the length of time of her marriage or union, and the future stability of the union, but on a series of socio-economic and psychological factors. On the other hand, in providing information regarding the "ideal" number of children, the surveys constitute an opportunity for different types of comparison. Such information could, in effect, be combined to create the variable: "number of children foreseen", obtained by adding the number of the woman's children (parity reached) to the number of additional children desired.

By reference to the various comparative tables it may be confirmed, for instance, that in the case of women marrying at an early age, the number of children foreseen is greater than that regarded as ideal, the reverse occurring in the case of women marrying at a later age.

Consequently, in the comparative analysis proposed, the closing chapter would examine the association which may exist between the foreseen size of family and the differentiation variables already mentioned.

/To sum up:...

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To sum up: the comparative study comprises the following chapters:

- Chapter 1 Introduction
- Chapter 2 Sample designs and their feasibility
- Chapter 3 Fertility levels and trends
- Chapter 4 Socio-economic differences in the patterns of reproduction
- Chapter 5 Nuptiality and its relationship with fertility
- Chapter 6 Family planning and fertility
- Chapter 7 Differentials in foreseen size of family