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The fertility surveys in Mexico and the upsurge of adolescent fertility as a research issue

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Abstract

This article makes reference to some of the most important aspects of the fertility research in Mexico, through the analysis of demographic surveys carried out in a period of forty years —since the sixties—, whose aims were to estimate the level and trends of fertility and its determinants. The author tries to show how each successive survey includes new areas of interest which reflect the characteristics of the fertility decline paying special attention to the analysis of adolescent fertility. The fertility decline that took place in Mexico has been so significant that in recent years the total fertility rate has reached the replacement level, this means around two children per woman. Although women in all age groups diminished their fertility, the contribution of women under age 20 to the total fertility has been more and more important and a subject of special concern not only demographically, but also for its social implications.

Key words: adolescents, fertility, demographic surveys, population growth, Mexico.

Introduction

Given the opportunity to identify research priorities in a discipline such as Demography, whose study object is directly linked to people’s lives, it is convenient to have a historic review, superficial at least, of the
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subjects of interest for this discipline in the recent past, as well as of the way in which its study has been approached with a methodological instrument such as the demographic surveys, because the specific subjects’ research is originated in the individual and organizations’ concern to modify the demographic dynamics with the aim to improve the population’s life conditions. The outcomes of these researches have undoubtedly been used for this purpose. i.e., the issues approached in the research do not only come from the interest in widening the scientific knowledge, but also from proposing solutions to social issues.

The facts studied by the Demography are directly perceived by the individuals in their every day experience, related to significant events in their lives, as the birth of a child, a relative’s decease or the change of residence; individual facts that once together constitute the Demography’s study object, for it is by means of the fertility, mortality and migration that the demographic change factors are presented.

The decrement in fertility and mortality or the life expectancy’s development and the increment in spatial mobility which have taken place in Mexico in the last decades and whose quantification is a part of the formal Demography’s object, are also phenomena perceived by the individuals in a relatively simple way: nowadays’ couples do not have as many children as couples in the previous generations; deaths have a lesser relative incidence, especially among infant population, and the possibilities to survive up to older ages are each day more evident, however, with this some causes of death acquire an importance they did not have in the past; at home three and even more generations live together; migratory movements are each time more frequent at the extent that, among other things, the media facilitate them and the need to obtain a remunerated job demands these migrations happen.

However, the social origins of these facts are not easy to understand, so their explantion constitutes the objective of the Sociology of the Population.

A lengthwise analysis of the socio-demographic research of the fertility in Mexico allows us to learn the way the country’s own evolution imposes a researching style and the appearance of specific problems, at the same time of the priorities’ definition —not always nationally established— imposes themes and methodological approaches that become fashionable.

This is a reflective text on fertility research, particularly on adolescent fertility, whose objective is to locate the research subjects’ definition on this variable from the recent past experience.
When performing a review through more than four decades of fertility research it is convenient to pay attention to the generation of information upon which it is based, for it is how the conceptual framework and the objectives of that\(^1\) are best perceived.

Considering that most of the data sources to estimate and analyze the levels and tendencies of fertility and to try its sociological explanation have been the surveys,\(^2\) special attention to these information-gathering instruments must be paid, taking as a reference the most representative national surveys performed in Mexico during the last four decades of the 20\(^{th}\) century, including the most recent, performed in the year 2003, and on which the author has a close knowledge for having been involved in at least one of its stages.

**Background**

Demographic research on fertility has paid special attention to establishing the causal relations among the social determinants of the Mexican women’s reproductive history and their results. This has been done on a scene where it has been supposed that economical progress is related to the diminution in the number of children and on which, besides, the macro-economic processes are influenced by the demographic processes observable at an individual level, which altogether produce a certain demographic growth rate.

From the mutual relations between economic process and demographic process, identified by several authors, it was stated that the high population’s growth constitutes an obstacle for the economic growth.

This kind of argument constituted the origin of the population’s policies and programs that from the 1960’s decade were proposed so that fertility rate would decrease by means the massive use of modern contraceptives. These policies and programs also guided the research on fertility. For three decades, from the 1960’s until the late 1990’s, this was the most ingrained perception of the demographic problems among Mexican society.

\(^{1}\) Any reader interested in reviews on the subject from other perspective can appeal some of the texts in the book *La fecundidad en México: cambios y perspectivas* (*The fertility in Mexico: changes and perspectives*), where the research on fertility up to the 1980’s decade is approached (Figueroa, 1989).

\(^{2}\) Surely, the Population Census and the vital statistics have worked as information sources for the socio-demographic research on fertility, but in a proportion not comparable at all to that made from the specialized surveys.
Similarly to other countries, in Mexico the argument that identified the high population growth rates as the origin of sub-developing has just changed. The empiric evidence forces this argument to change, since the most elemental data show in a large number of countries a fall in the per capita income along with the descent in the demographic growth, i.e., contrary to what the mechanical relation between population and development allowed foreseeing, the life conditions of increasing wider sectors of the population deteriorate independently from the fertility rate fall.

This transformation in the argument can be observed in the concrete manifestations that justify the state intervention in the individual reproductive sphere at two different levels: by means of the messages in the media that promote the advantages of contraception and in the intellectual production on the implications of the high fertility for the individual wellbeing.

So, for instance, the slogan “The small family lives better”, which constituted the axis of the family planning diffusion campaigns in Mexico suddenly disappeared, and was substituted by that of ”Less to be better”, until reaching ”It is up to you” in reproductive issues, to refer to the population’s rights and specially the youths’ rights.

Separately, the intellectual production centered in showing the families the negative effects of having a large number of children, and the high fertility and birth rates for the societies conceded its place to the work which showed the women’s necessity to have access to fertility control methods as an action related to their health, and more recently to their reproductive rights. A radical change in the analysis perspective was produced from a new concept: reproductive health.

The most recent argumentation in order to justify the public intervention in the reproductive sphere is the reference to reproductive rights and the equality between genders. It can be said that the need to legitimate the actions directed to control the fertility and to influence on the demographic growth in a period of increasing social iniquity has made the argument on the positive effects of restraining the number of children by means of the use of contraceptives add new arguments focused on the reproductive rights.

Otherwise, it must be emphasized that there is a stronger agreement on the fact that the relations between the social processes and the fertility are more complex than they can seem if it comes to explain the fertility level when considering only the economic value of children, and that the vision "the best contraceptive is development" turns out to be at least as limited as attributing the
source of under-development and poverty to the demographic growth high rates and to the large number of children.

It seems evident that in front of the difficulty of still keeping the idea that the decrease in fertility is justified by its effects on family life conditions, the arguments are transformed and the expected effects of a lesser fertility are more often of a longer run.

**Fertility’s social research and the demographic problems**

The reference to the demographic growth high rates as an obstacle to national development suddenly appeared in the political argument from the 1970’s. The mortality’s sheer decent in the previous decades made the determinant of this increase to be constituted by a birthrate that reached figures of slightly more than 45 births per a hundred inhabitants. A magnitude never before documented in Mexico’s history and if it were to be sustained, there would have been a growing rate from which Mexico’s population would have duplicated in only 20 years.

Before this period, birthrates or its specific component, fertility rates, only worried some specialists who made every attempt to drag the attention to the determinant role of that variable in the Mexican population’s evolution. Hence, there was not a demographic problem that made research pay special attention, with the idea that its results work to promote from any society sector public policies or specific programs to face it.

In 1960, The Milbank Memorial Fund and the Population Council organized the Conference on Family Planning Research in New York, which from my point of view sets a milestone in the priorities’ definition in fertility research, for the country in particular as well as in many countries from different continents.

A significant number of works presented in this conference was dedicated to analyze teh case of India; a country where from 1951 there had been filed researches in order to acknowledge the population fertility levels as well as their attitudes toward the use of contraceptives.

For the Latin American region, the analyses were devoted to the Caribbean Countries which were considered "ideal laboratories to research", and from this sociological point of view were used for researching the population’s attitudes toward contraception.
The performed studies allow identifying three necessary conditions for a population’s society to adopt contraception: a) the existence of means and values to explicitly favor a smaller family size than the existent without contraception; b) the knowledge of the means to limit the fertility; and c) the social acceptability of this knowledge.

In the case of the Latin American continental region, in this reunion there was only one work presented, the one by the Latin American and Caribbean Demographic Centre by Tabah and Samuel. It was a study of a descriptive nature devoted to produce fertility estimations and to learn the attitudes toward family forming with emphasis in the ideal number of children, in this study there were no questions related to contraceptive practices, "for it was thought the interviewed female would consider this enquiry on intimate aspects censurable" (Tabah and Samuel, 1962: 303; in Kiser, 1962).

Besides the LACDC representation, Raúl Benítez Zenteno attended as the only Latin American expert, he was in Mexico directing the Latin American Comparative Surveys on Fertility Program, (PECFAL in Spanish), in urban as well as in rural areas (Urban PECFAL and rural PECFAL).

Leon Tabah published in 1964 the text which would constitute the theoretical and methodological foundations of the first fertility surveys in Latin America, where their objectives are defined, and among other things it is read that,

What is pretended… is not a general explanatory theory of the behavior concerning to the Latin American populations, but more modestly, the concrete hypotheses formulation and the preparation of the sort of information more appropriate to try to prove such hypotheses (Benítez, 1968).

In an interesting way, the author recognizes the need to incorporate the male population into the fertility study, "For almost all of the birth limitation methods suppose the cooperation between men and women" but their no-inclusion in these surveys is justified in practical terms because of the difficulty to interview men. It is stressed the exploratory character of the surveys and the need to generate information to answer very elemental questions on the factors that influence fertility (i.e., age at the start of sexual intercourses, willing fertility control).

Hence, when recognizing that a first step to apply in a country a series of actions that incise on fertility is the knowledge of the demographic scene and its population’s attitudes and practices related to this variable, the International
Population Program of the University of Cornell (started in 1962) and the LACDC (founded in 1958) join forces to realize the first program of comparative surveys in Latin America, with a specific purpose as it is described by Stycos (1968):

Massive family planning programs are being launched with no real understanding of how and why certain sort of families adopt family planning… if we know closer this process by means of which these people adopt family planning, this will be employed to accelerate its adoption in other families.

Facing the lack of information in order to estimate fertility and to learn about attitudes and practices related to contraception, it could be understood that fertility’s socio-demographic research would have as a first objective the generation of information, with which it was calculated in a direct way the general and marital fertility and in a framework described by Bogue (LACDC and CFSC, 1972) as essentially exploratory to gather information on variables that could be useful to understand why people respond the way they do in relation to fertility and family planning the first large survey on fertility is performed in Mexico.

The questionnaire used in the Family and Reproduction Demo-Sociologic Survey in Mexico City, performed in 1964 by the Institute of Social Researches of UNAM altogether with LACDC, besides allowing for the first time an estimation of the fertility from data from women’s pregnancy histories, it obtains information on the knowledge and use of contraceptives and includes an important proportion of questions on the interviewed population’s perception of the country’s demographic growth, of fertility ideals and special sections dedicated to investigate the spouses’ empathy degree in relation to domestic and reproductive relations, and to build a "scale of psychological predisposition to the use of contraceptives".

In the conception of this comparative research project of the fertility in Latin America there is no explicit argumentation that relates fertility to society’s socio-economical conditions, nor is there in the analysis of its results an interest in this issue. The main finding is constituted by the estimation of a larger proportion of women who do not want more children and who are interested in extending their knowledge about contraceptives methods. From here it is inferred the existence of what years later would be conceptualized as a "contraception unsatisfied demand".
It is possible to declare that in spite of having information on variables such as social structure as well as the called intermediate variables that act on fertility, this survey’s information was insufficiently used.

This survey was useful to identify the responsible factors for a potential change in the fertility level of the Mexican population residing in Mexico City, these factors were divided into socio-demographic and socio-psychological, in such a way that "an understanding of the factors which seem to explain the propensity to use contraceptives includes, by definition, a ‘theory of the fertility descent’" (LACDC and CFSC, 1972: 248).

From the first systematic analysis of the information from this survey, it is observed that the sociological explanation ignored the explanation for the differences in fertility, according to some socio-economic variables, and it was focused on the analysis of the contraception adoption process.

Some other researches based on this survey analyze the change in the Mexico City’s fertility level when comparing this survey’s results to those obtained from the Mexican Survey on Fertility performed 12 years later, to state that even if the contraception impact has been important to explain this variable’s descent, "the results also shown this factor on its own does not lead to a sustained diminution in fertility’s level in the absence of a change in the women’s social situation" (Welti, 1980: 310).

With the knowledge from the Program of Comparative Surveys on Fertility in Latin America (urban PECFAL), on the situation in the largest urban concentration in Latin America in relation to fertility and contraception, a second phase focused on the country’s rural and semi-urban areas was developed (rural PECFAL).

Fertility levels were graded as those of a natural fertility regime, according to the terminology proposed by Henry, and so with an absence of deliberate birth control.

In 1969-1970 the Rural Fertility Survey was carried out. Its questionnaire tries to gather information to test some interesting hypotheses, fashionable at the time, to explain the differences in fertility among social groups, for instance, the social mobility hypothesis, in order to do this the ideals of social mobility and children education are identified and it is considered that families who have less children are those who want their children to have a higher status. It is then enquired what "mothers and fathers think of the way of life they want for their children" (questionnaire’s 25th question), specially education level and job.
The information is thoroughly analyzed as for the included subjects, although most of them only describe the results (Quilodrán and Benítez, 1983). A significant proportion of this limitation is explained by an eminently technical situation worth mentioning. In those years there were not technical computing programs as the ones any analyst has access to nowadays (for instance SPSS, just to mention the most well known and most used); hence generating a tabulation implied a programming work that sometimes took weeks.

The information showed that among certain women’s population sectors it was expressed by the end of the 1960’s, there was a desire to reduce the number of children, however, their integrants had a scarce knowledge of the contraception and an access to it almost inexistent. The analysis of the fertility levels, according to age groups, with data from this survey it does not seem to be important or, at least, it is not mentioned the under 20’s total fertility’s share.

In the early 1970’s decade, altogether with the expansion of the family planning programs, there is a stressed insistence from international organisms in reducing the population’s growth as a condition to guarantee the success of the economic assistance programs. In Latin America, a considerable proportion of the demographic research is dedicated to study the high fertility levels’ persistence and its differences among socio-economical groups with the aim to identify the roles of the intermediate variables. The works presented into the Latin America Regional Conference of Population held in Mexico in 1970 (IUSSP, 1972) are a sample of the subjects which attract fertility researchers the most and they are concentrated in estimating the fertility rates’ evolution, taking advantage from the large volume of information generated by specialized surveys.

Surveys data and the nature and reaches of the family planning national programs allow concluding that the use of contraception is the fundamental variable to explain the differences in fertility.

For more than a decade, fertility’s socio-demographic research was focused on the analysis of the fertility’s socio-economic determinants based on the observation of the differences in the number of children, with a functionalist approach, where the fertility diminution is explained by the fact of getting incorporated to a modern society whose conceptual definition can only be understood in contraposition to a traditional society (i.e., it is modern what is not traditional).

The theory of the demographic transition works as the most general reference framework to the interpretation of the fertility differentials; on its own, the fertility differentials’ intermediate variables schema proposed by Davis and
Blake (1956) since the 1950’s decade, which allows establishing the influences of the social structure on fertility when identifying each one of the factors that directly affect the production process, is not applied due to the lack of information until the 1970’s decade.

The kind of analysis developed with the information from the fertility surveys leaves the specialists dissatisfied, they who are grouped in the Work Commissions From the Latin American Council of Social Sciences (CLACSO), try to go beyond the differential fertility analysis and come up with diverse methodological proposals in order to explain the fertility as a social phenomenon linked to the wide concept of population’s social reproduction.

The whole of presented works in the coming meetings of these Work Commissions show from the study of concrete situations to the theoretical proposals, the interest in confronting the historic-structural analysis to the modernization theory since it is considered insufficient to reckon the socio-demographic changes happening in the Latin American nations (CLACSO, 1982).

The existence of more accessible birth control methods to the population and the appearance of programs to influence fertility supported by governments or private institutions, as well as the lack of information to evaluate their results and to design intervention strategies justify the development of the Global Survey on Fertility in the second half of the 1970’s decade as a great comparative research international project, which leads to confirm the beginning or the persistence of an accelerated fertility descent among the population who used modern contraceptives.

The advances in the fertility research in the 1970’s decade are reflected in the questionnaire used in the Global Survey on Fertility in 1976 and in the analysis performed from its information.

In order to keep the international comparability a standard questionnaire was used, however, due to the interest in including structural explanations to the reproductive behavior an ample section on the interviewed woman and her spouse’s occupations was included; such information has been analyzed with the aim to associate fertility with the social differentiation processes (Mier y Terán and Rabel, 1980).

Each one of the following surveys generates information on the most of the intermediate variables, and so information on the factors that affect the exposure to sexual intercourse by means of the conjugal history analysis is produced. The frequency of the sexual intercourses is not researched even though in Davis and
Blake’s schema the frequency constitutes a significant variable at this reproduction’s stage. A vast inquiry on the factors that affect conception risks, especially contraception, is kept.

A review of the texts devoted to the fertility’s socio-demographic analyses based on the information from the Mexican Survey on Fertility shows two research lines: the analysis of the differential fertility according to socio-economic characteristics, whose specific approaches have been analyzed in detail by Rubin (1989) in the researches performed up to the middle of the 1980’s and the identification of the determinant factors of the contraceptives’ use, that would explain in a significant proportion the differences in fertility.

On the other hand, the interest in studying the characteristics of the individuals’ social environment to identify the factors that influence their reproductive behavior caused the information from the community to be obtained and analyzed by means of questionnaires created with this aim in the Mexican Survey on Fertility. One of the few analyses performed for Mexico with this information showed that for the case of the use of contraceptives is the availability of these methods is what explains the differences in use at a local level rather than knowledge or socio-economic characteristics of the population (Tsui et al, 1981).

The aforementioned intermediate variables schema, when formalized by Boongarts as a mathematical model, allowed several works to estimate the quantitative contribution of variables such as marriage, children breast-feeding, use of contraceptives and abortion upon fertility levels, from the information from the 1976 survey.

This survey enabled the analysis at home-structure level for it supplied detailed information on the kinship relations. The home questionnaire has been scarcely analyzed though.

In 1982, having much more than just the interest in confirming the fertility’s descent already observed in the previous survey, the Demographic National Survey was carried out.

Besides keeping the comparativeness with the previous surveys, a new aspect is the socio-economic data module, which was included

From the idea that the behavior followed by the demographic variables… does not exclusively respond to biological patterns… but, first of all, it has a found of a socio-

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3 In the 1969-1970 Rural Fertility Survey (rural PECFAL) a local questionnaire was applied, however, it was never analyzed.
economic character, derived from the individuals and families’ insertion to the social structure (CONAPO, s.f.: 47).

From here, we can go to the conceptual definition of the social strata according to the Marx’s theory and the Lenin’s proposal and its operation is described in the questionnaire.

It is worth mentioning that this effort of conceptual definition was poorly corresponded by the information analyses, which did not manage to overcome the ones elaborated with descriptive processes in this and previous surveys.

The only thing achieved was to excessively extend the questionnaire on the occupation of the interviewees and their husbands or fathers, inquiring in detail their position in the occupation, the production means’ ownership and the insertion of the activity’s product in the circulation sphere.

In 1987, the National Survey on Fertility and Health and within this, the prioritized inclusion of health issues already reflects the interest in associating contraception to women’s health once the reproductive health concept is worldwide known.

A large percentage of the information this survey generated is related to women and their children’s health, and it is worth noticing the questions’ series dedicated to find out the conditions in which the woman was made sterile in order to determine if she was sufficiently informed and whether this operation was done under her consent or not. Hence, there is a real interest in analyzing aspects related to the reproductive rights.

Fertility analysis by age and its impact on the total fertility evolution do not appear as prioritized issues in the research based on the aforementioned surveys, however, it is already evident the need to pay attention to the younger age groups’ fertility.

The National Institute of Statistics, Geography and Informatics, (INEGI) carried out in 1992 the first National Survey of the Demographic Dynamics (Enadid-92) that includes information to perform estimations at a geographic disintegration level which were impossible to do with other surveys; however, in respect to factors directly linked to the children’s number and spacing, there is only information on the first union and a vast section on the use of contraceptives.

In spite of the limitations that the lack of information on explanatory factors can represent when, for instance, a marital history is not included, this survey’s dimension —where almost 58 million homes were visited and 69 537 women,
aged between 15 and 54, were interviewed—allowed performing multi-varied analyses with a spatial segregation never registered before, because of the sample size in previous surveys.

An important aspect to be distinguished is the possibility to incorporate the home structure analysis in fertility’s explanation and its closer determinants.

The texts produced with the information from this survey were basically devoted to this variable estimation in order to observe differences among the different states of the country or among the sort of localities according to its rural or urban character (Cervera, 1994; Paz, 1995).

In 1995, the National Council of Population (CONAPO) carried out the National Survey of Family Planning (Enaplaf-95) fundamentally dedicated, as its name indicates, to estimate family planning’s coverage, methods usage profile and to estimate the satisfaction degree of the services institutes offer in this field.

The questionnaire includes a section previously used in Enfes-87 on the conditions in which the interviewed woman was made sterile, and it was also inquired if for this decision she had been previously given information, and if the woman had given her consent to be operated, i.e., the institutional preoccupation to estimate if this action can be considered a free and informed decision was still present.

A novelty in this survey is the inclusion of a questions’ battery that had already appeared in a survey carried out 30 years before in relation to decision-making way between spouses, then even if in that moment it was theoretically justified to estimate the empathy degree between them and it was considered that a higher or lower empathy makes it easy or difficult the adoption of family planning, in this survey they try to establish an approach to the power relations within the couple, which would explain not only the use of contraceptives but also some other actions that as a whole constitute the reproductive behavior. For the first time the interest in understanding women’s autonomy at home and her possible relation to the reproductive decisions appears.

By the end of the century, the Enadid-97 is carried out, that differently from the 5-year-before survey, includes a spousal history that enabled the estimation of unions’ formation and stability modification patterns which were foreseen in previous surveys.

The low fertility shown in the following surveys led to thoroughly estimate the contribution to the total fertility from each one of the age groups, which made evident the growing participation of the younger-than-20 women’s fertility.

There is a central interest in studying adolescent fertility for it seemed evident
that fertility evolution would increasingly depend upon the youths’ reproductive behavior.

In the year 2002 we were waiting for the Enadid realization, that years before INEGI expected to realize in order to fulfill with a five-year periodicity which enabled it to make comparisons: this survey was not carried out, instead the National Autonomous University of Mexico, in response to a Ministry of Health’s petition, carried out the National Survey on Reproductive Health (Ensar-2003) in the year 2003, that besides taking advantage from the experience in fertility research by means of surveys, allows an analytical approach to subjects such as sexual practices and domestic violence.

The problem of adolescent fertility

This historic overview, using the fertility surveys as reference, allows observing that a substantial part of the research is constituted by measurements growingly elaborated with the information from each survey; besides, it is possible to identify some subjects that concentrate the specialists’ interest.

Some of these works are the feminine work’s analysis and the reproductive behavior, the social status’ modification between woman and fertility, the incorporation to contraceptives use and adolescent fertility.

From the strictly demographic point of view, the increasing relative contribution that makes younger-than-20-years-old women’s fertility to the total fertility is seen as a problem which acquires meaning by means of its effects on the population’s growth and makes the need to act upon the age at the birth of the first child evident if it is intended to keep the descent in the total fertility rate once that women significant proportions have incorporated to contraception practices.

We, who have seen the early motherhood start as a manifestation of a situation linked to a lack of developing opportunities for the youths from wide population sectors, have an interest in researching this problem, beyond its demographic implications, since we suppose that a girls’ large proportion in disadvantaged situations become mothers for they have limited access to education or employment and so they enter to poverty’s vicious circle.

Whichever the objective of studying the adolescent fertility has been, the results of the research in this field make the need to act upon early fertility evident and once again the arguments related to health in the center of the action programs in population issues appear.
Adolescent fertility analysis from the reproductive health perspective, for instance, is limited to consider early pregnancy as a problem derived from a lack of information or family planning services, leaving behind or even ignoring the motherhood value for feminine population with no personal growth opportunities by means of education or employment.

The socio-demographic research shows that adolescent pregnancy is more than just a problem linked to population growth.

In recent years the attention paid to the adolescent population behavior is increasing and it is assumed that this situation’s social origin is to be found into three interrelated processes: secularization, industrialization and modernization. From a demographer’s point of view, in order to explain the adolescence’s discovery or invention and so the interest in studying it, there is the need to add the life expectancy enlargement, which makes a stage in an individual’s existence that constitutes the change from childhood to adulthood be a increasingly more ample period and that incorporates specific demands and behaviors socially defined for the population.

The socio-demographic adolescent fertility phenomenon must be presented in its two dimensions: in relation to the population’s growth and other demographic phenomena and in relation to its effect on the involved population’s life conditions, beyond the individual who gives life to another being and, in this case the social groups’ sphere.

About the population’s growth, when defining the motherhood’s early start and so with implications on the total average of children at an individual level and on the global fertility rate and the crude birthrate, it is increasingly important the contribution made by the adolescent mothers to the total fertility, especially on a stage distinguished by a fertility descent in Mexico. The effects of the motherhood’s beginning in the adolescence on the total fertility rate are such that the difference between mothers who gave birth before being 20 years of age and the ones who did after that age represent two children more before being 35 years of age and three children by the end of the reproductive period.

The effects on mother and infant mortality are also significant, for in the extremes of the reproductive period the mother and child’s death risks are larger in relation to those presented at different ages.

Adolescence takes in a transition period from childhood to adulthood during the individual’s second decade of existence. This stage is definitive in the development of the individual. In Mexico, up to 10 years of age, most of children still go to school, and it is in the coming years that their future generally takes two
directions: employment or education. If any of this options turns out to be productive, i.e., useful for the adolescent’s development, it would mean to take advantage of personal growth opportunities that in another way will have to be substituted by roles which enable them to acquire a status in the society and so be recognized.

It is in this stage where sexual intercourses can cancel the two options previously mentioned either because of an unwanted pregnancy or because it is the only option left to be socially recognized.

I consider adolescent pregnancy as a problem and I think supposing "the pregnancy of a female adolescent can be a natural phenomenon in an agricultural society and a social problem in an industrialized society" (Silber et al, 1995) is making extremely relative the origins and consequences of the demographic behavior. This stance would be as much as accepting that infant mortality is a problem among the higher strata whereas it is not be for the lower strata, since the latter are going to have a life so full of limitations that is not worth living it.

In any context, precocious pregnancy limits the women’s developing possibilities, or at least it gives them a heavier responsibilities’ load and reinforces their dependency character when limiting their roles as family members to motherhood exercising.

Data from the diverse national fertility surveys or socio-demographic ones in general have worked to draw our attention on the importance of the fertility of the population who is younger than 20 years of age in relation to the total fertility. Nowadays the most recent information clearly shows that, in a stage of accelerated decrease of the fertility in Mexico, adolescent fertility constitutes a component of the reproductive pattern related to fertility level as well as the differences among social groups, with implications beyond the strictly demographic.

In the last 20 years, general fertility has deceased more than a 50 percent in Mexico, whereas the fertility of women from 15 to 19 of years of age decreased in a lower percentage, this has made this group’s participation in the total fertility increase.

In absolute terms, births from adolescent mothers constitute slightly more than 15 percent from the total, which means almost 400 000 births a year. However, these are not the numbers that take us to pay special attention to this population’s group, but the implications that a motherhood early start has for the women and specially for those in disadvantaged social conditions.
It is possible to observe clear relations among the generation history that starts in adolescence and the result from the first pregnancy, the beginning of the marital life and the total fertility.

Adolescent pregnancy constitutes, for a woman in disadvantaged social conditions, an additional burden that limits her personal development. For instance, it has been thoroughly discussed if the pregnancy among young students subtracts them definitely from school or the women who got pregnant during adolescence are those who are restrained from studying because of a lack of resources.

When one researches by means of specialized surveys the reasons why a woman did not stay at school, pregnancy is not a significant reason, although marriage is so and this reason is only surpassed by the lack of resources. A detailed analysis shows that, in an important proportion, marriage during adolescence legitimates the birth, product of a prenuptial pregnancy, and it is then pregnancy the main reason why an important proportion of adolescents did not stay at school.

At a national level, slightly less than 40 percent of the women in child-bearing age older than 20 years of age had their first child during adolescence. The percentages are marginally lower for the younger generations’ women and according to the education level great differences are observed in the percentage of women who started their reproductive history during adolescence: 60 percent of the women who did not attend school have been mothers before being 20 years of age, whereas among women with high school education level this figure is reduced to 10 percent.

This data explain a tendency toward a slight diminution in the adolescent fertility which is originated in an important proportion in the socioeconomic compositions changes of the more recent generations, where a rise in education level is observed.

However, a fact that must be discarded is that the analysis by generations and education level shows an increment in adolescent fertility among women born after 1962, compared to those women born in the previous years in all of the education groups, with an exception in the women with a high school level.

There has been an attempt to explain adolescent fertility as a result of an earlier sexual activity start without the protection to avoid pregnancy, even though data suggest this can be true in the case of adolescents with a higher education level, among who pregnancy can be considered "an accident", for the youths in disadvantaged economic conditions, adolescent pregnancy is the
beginning of an intense reproductive history, manifested as a significant average of children before being 20 years of age. Similarly to the women who did not attend school and had their first child during adolescence already have on average two children when they are 19 years old. In other words, this information makes it doubtful that the simple information diffusion on contraceptive methods, which would lead to an increment in their use, would be enough to significantly reduce the adolescent pregnancy, since motherhood is a goal to gain access to from an early age.

One of the situations that largely lead to consider as a problem the adolescent pregnancy is its relation to mother and child’s health, specifically to the higher death risk the children of young mothers face during the first year of life. The origins of this higher infant mortality have not been clearly stated, this has allowed doubting the existence of a causal relation between mother’s age and a higher mortality. The analyzed information shows a larger proportion of deaths during the first year of life among the children of mothers younger than 20 years of age in relation to the women who have their first child after that age. Among adolescent mothers out of 100 of their first births, 6.2 die during the first year of life, compared to 2.9 percent for the women who become mothers at an older age. This situation has been demonstrated by other authors at an international level with the information from the Worldwide Fertility Survey and it is confirmed in Mexico in the recent years.

It can be thought this higher mortality risk is originated in the fact that a large proportion of adolescent mothers come from social groups with a limited access to health services; however, if we accept that the education level reflects the women’s socioeconomic condition, the information shows that infant mortality is higher among the children of younger-than-20 mothers, not considering their education level, compared to the firstborn mortality of those who were born later.

On the other hand, when relating the firstborn’s birth and the start of marital life it is observed that only 10 percent of the births are produced outside marital union, either the woman remains single or gets married after the birth. These percentages are considerably lower than those among first births from adult women.

In the case of adolescents in marital union, in a period up to seven months after the beginning of the union a 12 percent of the first births is produced, and in the case it is possible to suppose that the birth is legitimized by means of the union or that the pregnancy hastens the union.
The legitimation of the births by means of the union acquires a clearly differential profile according to the education level. Adolescents with a lower education level are the ones who in a larger proportion unite after the birth of the first child. On the other side, as education level increases, the birth percentages within the first seven months of the union also do it, which suggests that among certain population sectors, not precisely the marginalized, once the youth gets pregnant it seems to make the birth as though it had happened within a young couple, whereas among women who did not attend to school this seems to have lesser importance.

This demographic effect, which impacts on the population’s growth, seems to reduce the main reason to pay attention to adolescent fertility and trying to reduce its incidence spreading the information and the access to contraceptive methods.

The fertility surveys more often incorporate a higher health information component, but if we wish to maintain in the fertility’s socio-demographic research a structural vision, it seems to be increasingly important think of the reproductive behavior from a wider perspective of links among sex, and society, power and autonomy. It is from this perspective that the socio-demographic research subjects have to be defined.

With this, socio-demographic research can make contributions in order to clearly articulate in the policies and population programs concepts and practices linked to the women’s social conditions and to incorporate the in fertility analysis the social differentiation processes that too often have been ignored.

This turns out to be fundamental nowadays and it can constitute a true contribution from the scholars, for reproduction is found in the center of different social issues.

**As a conclusion**

It is possible to observe that the stage of reliable information generation on fertility based on sample surveys happened at the same time as the Mexican reproductive patterns’ modification, valid for long historic periods and characterized by an early motherhood start, short inter-reproductive gaps and pregnancies at older ages among an important women’s proportion.

The fertility fall leads us to discover new problems, not previously and sufficiently cared for; one of them was the adolescent fertility.

I would like to mention that in the research’s priorities definition, fertility’s socio-demographic research must state clearly that contraception has a
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preponderant role to achieve freedom and not to become a control element when it does not take into consideration the most elemental individuals’ rights, so the adolescent fertility study must make this fact evident.

Finally, it must be stressed it is indispensable to analyze the reproductive behavior in its wider extension, i.e., include the analysis of the union formation patterns, sexual practices, the contraceptive use and the children appreciation, so as it would be possible to estimate the weight that each one of these factors has in the construction of reproductive behavior whose result is a lower fertility level and better options for this country women’s development.

I wanted to make evident that the design of the large socio-demographic fertility research projects by means of surveys have been originated in temporary approaches that not necessarily respond to the national problems research’s needs and that in a significant part of the information generated by means of these instruments has been insufficiently used, especially in relation to adolescent fertility.

It is clear that some of the most significant social processes in Mexico are the increasing incorporation of women to the economic activities and to higher education levels, however, the way this has modified the social condition and has affected the women’s reproductive behavior has been scarcely studied, in spite of the importance it has for the design of the population policies.

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