S23 Values, orientation and reproductive behavior
P23.3 Reproductive behavior in ethnic groups in Mexico

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Abstract

In Mexico the fertility have decrease from 7 children per women to 2.6 in twenty years. However, the indigenous communities hold high rates of mortality and fertility; and theses are significantly different to the national mean. Be part of a group socially different suggest a different demographic pattern. Moreover, the recent changes in Mexican society imply changes in the reproductive behavior including indigenous communities.

The anthropological approach is face to demographic approach. This exercise is based in two main material of Mexican indigenous reproductive behavior. The first aim in reproductive health, the second focus in the ethnography of the six major indigenous Mexican groups. Thus, the characteristics of the data imply a major effort to face qualitative and quantitative data.

The research have found as two major results: 1) there are differences and likeliness between the indigenous communities. Every single community have their own different culture universe. 2) the changes result of "modernization" impact in younger generation principally, in contrast, the oldest generation have less differences between they.

The conclusions of the research focus in the useful mix of anthropological and demographic approach. The research aim in the fact of understanding social phenomenon, like fertility, specially in multicultural context, need more than just one approach.

1   Problem

This research focus in reproductive behaviour in Mexican indigenous communities. When we speak about reproductive behaviour we automatically think in aspects as real number of children, desired number of children and social norms about of the number of children and the desired family sizes.

The establish relationship between fertility and the reproductive behaviour is inside of a fertility regime. It is important to differentiate between controlled fertility and natural fertility: the first uses modern family planning method, and with this the children can be spaced and avoid undesired pregnancies, in the second the population does not have any knowledge about this methods, even though appeals to certain cultural practices used in order to avoid undesired pregnancies (Pullum y Shah, 1993). In this way, in a regime of natural fertility, the offspring depends more of biological and cultural aspects than individual decisions of desired family sizes. Actually, in the Mexican ethnic groups, there is

being giving a change of the natural fertility to the controlled fertility, in which the culture plays an important paper.

The objective of this research is to know the relationship between the reproductive behaviour and the culture in the context of the Mexican indigenous groups. The topic of the fertility has been approached from different explanatory frameworks, mainly from economic models and of personal decision. However, it exists other current associated with study of the fertility from the culture since the models before mentioned were not achieving realise of a phenomenon so complex. Therefore, to accomplish a work in anthropologic demography is essential to understand the reproductive behaviour of populations in which the demographic transition is beginning.

1.1 Theoretical framework

As we said previously, the reproductive behaviour has been studied from different explanatory frameworks. One of this more appealed explanatory frameworks is the based on economic premises. However we consider that this framework does not achieve to explain of satisfactory way the phenomenon of the reproductive behaviour in six Mexican ethnic groups. For this reason, we analyse the concept of culture for the comprehension of the demographic phenomena: the contribution of the anthropology to the demography.

1.1.1   The economic theories on the children

A good part of the theories of the fertility have an origin in the economy. In these theories the family is seen in it dimension of reproduction kernel economic as well as social. In this context, the decrease of the fertility is result of economic changes. One of the greater contributions in this current was made by of Becker (1976) who analyses the determinant factors of the fertility from the economic perspective in which the children are seen as commodities. But this supposes that each family has a perfect control of the quantity of children to have, and have control of the moment to have them; in an expansion framework of the family planning methods and abstinence of the natural methods (Becker, 1976). Though these assumptions are not applied to our investigation context, the elements that provides Becker are of great usefulness in the comprehension of the study problem. The children are defined as commodities, produce emotional and psychological satisfaction to the parents and, as production goods, they can provide monetary income.

Caldwell (1978) provides to the discussion on the fertility the concept of "Net Wealth Flows", that is to say the benefit flows among generations. In the so called traditional societies, those flows go from children to parents, while in the modern societies the generation flows changes of sense; this because there is a change in the production manners. Currently, they are preferred the small families as opposed when it was beneficial to have large families.

In this vein, the families are inserted in production manners that defines a demographic standard. It is as soon as the families in rural communities needs more members to guarantee their survival, while the urban trend is *au contraire* (Caldwell, 1978).

In the economic models of the fertility we have two important elements: the offer and demand. The supply is understood as the number of surviving children without using contraceptive method, that it say the potential number of children (Lee, 1983). While demand is defined as the number of children that are wished and it is determined by the relation between preferences of children, the restrictions that faces the couple and the social

norms (Lee, 1983; McCllelland, 1983); the number of real children is resulted of several elements: the norms of the social group where is lived; the own experience; the restrictions that they could be had and the biological conditions (McCllelland, 1983). These elements give us some result: desired number of children has an association with the real number of children, but this in not a linear relationship.

Certain analysis applied to fertility, for example modern consumer theory demand, they do not permit to see beyond a relationship cost-benefit in merely individual terms (McNicoll, 1980). However, the individual level not always explains the fertility. Therefore it is imperative to understand the cultural context where are given the changes. Continuing the argument of McNicoll (1980), exist two types of human being: the economic and the administrative. The administrative, in oppose to the economic, it is not a global optimizer but has a adaptive behaviour within limits. These limits could be the culture where the individual is unfolded.

1.1.2   Use of the anthropology and the demography

The investigation problem of this project is framed in the theoretical discussions that outline disciplines as the demography and the anthropology in relationship to the reproductive preferences in specific contexts.

The principal interest of the demography has been established generalisations in the behaviour standards of the principal study phenomena: fertility, mortality and migration (Caldwell, 1996). The demography is based on a positive epistemology with the use of some tools as the censuses, vital records and surveys. In a survey, the social life is reduced to a series of discreet variables that they can be measured and where the relationships can be modelled mathematically (Kertzer y Fricke, 1997).

To complement their boarding, the demography has established a close relationship to other social sciences. For example, from the eighty years ago, begun a discipline designated "anthropologic demography" or microdemography. This one consists, in its first attempts, of a qualitative and quantitative data combination by investigating personally involved with their places of study (Caldwell y Hill, 1988). In recent years this discipline has made advances beyond the field norms upon studying kinship, culture and upon using theories and concepts of the traditional anthropology. For Basu (1998) exist two principal aspects in those which has been given a contribution between the two disciplines. In the first place, it has been begun to work with questions opened in the traditional surveys sociodemographic. In second place, also it has been given a involvement of the demographer in the work of data compilation. In the context of the anthropologic demography response categories as "other", "does not knows" and "no answer" are of interest beyond the difficulties for the measures calculation. Therefore it results imperative to understand the questions and the answers in their sociocultural context. Such is the case of the question of the age where the social can defer of the biological (Basu y Aaby, 1998). For our case this proposal is of great importance due to the quality of the information. Exist you ask more difficult to understanding in other cultural contexts and, therefore, they have a greater rate of not response.

Finally, it is considered that to understand the behaviour of the fertility and of the contraception in large impersonal surveys in a traditional society is difficult, therefore, different methodological approximations permit to make a microdemography where it is imperative the field work. The approximation between the demography and the anthropology enrich the work on reproductive preferences. In this work is given a constant

movement between these two approaches: the two types of information are enriched mutually to achieve to understand the phenomenon of the reproductive preferences.

1.1.3 The culture concept and their application to the reproductive behaviour

As explanation to the demographic behaviour, the culture has been mentioned in a tangential manner, frequently bound with the residual, that is to say with what is not known what is. In spite of this theoretical sustenance lack, in the demography is spoken of cultural standards, cultural norms or cultural factors. In this demographic bibliography, the culture seems be defined as the trends of group in opposition to the individual election.

The relationship demography with the theory has been criticised by the separation between agency and culture (Carter, 1998). Agency is understood as the rationally taken decisions isolated of the context and as a universal possibility of the autonomous individuals. Culture are the institutions and social norms those which stay would be of the individual restrict their decisions. This division come from a theoretical character but also to a methodological restrain: one of the principal tools with the one which demography works are the surveys, in which is asked to you to the individual on elections that we are talking about. Then, the culture that it is unconscious in the individual, maintain outside of the possibilities of the survey. However, this agency and culture division is not so clear in question as the reproductive behaviour where is given a constant interaction between those. In this work, we go to speak of agency as individual decision and of culture as social norms that are reflected in the institutions and in the roles that assume the individuals and that integrate a common perception. The reproductive preferences answer to the negotiation that is given between these social behavioural dimensions.

Pollak and Watkins (1993) mention the individual election. Depart from theories that explain the fertility from an economic dimension, in the one which the individuals choose it "better", that is to say that maximise their earnings. However, they find that the culture is an important aspect in the reproductive preferences. Other aspect that mention these authors is the diffusion in this close relationship to the communication mass media those which can be responsible for good part of the decrease of the fertility in the developing countries. The rational election models and of diffusion have explained the reproductive standards of general way, but it is important to study these reproductive standards in specific contexts (Pollak y Watkins, 1993).

A proposal to understand the culture in the demographic systems, according to Hammel (1990), it must realise to the culture is a continually modified and elaborate system where is given a constant production and values reproduction resulted behavioural evaluative of the actors.

In this work, the culture is defined as the common perception of the individuals submerged in a social interaction. The foregoing within an institutional context where the values are the base of the constant cultural construction (Hammel, 1990). This work part of the premise that the culture is a social product and historically built by various actors. An aspect of the social life in the one which the culture is resumed is the fertility, for our case the reproductive preferences.

1.2 Ethnic groups in Mexico

Mexico is a country with a great cultural diversity. This diversity not only is expressed in which almost a 10% of the population belongs to some ethnic group, but also to the great quantity of indigenous languages that are spoken. An other element of the diversity in Mexico is that, though exists indigenous population in nearly all the national territory, the distribution of the speaking of indigenous language is not uniform within country.

The principal problem upon working with indigenous groups is to specify the object of study: how to define a heterogeneous phenomenon? From the census of 1885, the indigenous population was identified by the language. This question presents problems: exist indigenous that they deny to speak the language and persons that they can be identified as indigenous but that they have lost the use of the indigenous language.

Exist few projects devoted to the specific topic of the fertility in indigenous populations in Mexico. Customarily the social phenomena that are worked with indigenous are approached from the ethnography or the social anthropology, setting aside the quantitative approximations.

The work of González (1988) in the state of Puebla, has important data of indigenous fertility. He Found out a large differences in the Gross Reproduction Rate between indigenous women and not indigenous. While the indigenous women were reaching an Gross Reproduction Rate of 4.13, the not indigenous women had an Gross Reproduction Rate of 2.63 in 1984. With respect to nupciality, if the union and the conception are very united is wide the potential period of reproductive life. In the case of Populates, is found that the indigenous women have in average 17 years to the first union (González, 1988).

Another effort to describe indigenous fertility can be made it using National Survey of the Demographic Dynamics (ENADID) of 1997 data. Working with woman of 40 years old or more with three types of population: traditional indigenous, indigenous not traditional and not indigenous we can find out important difference. Indigenous women have the apex of the fertility in the groups of 20-24 and 25-29 years old for then to descend, while the indigenous women have an apex delayed from 20-24 years. As reflex of this behaviour, in the Global Rates of Fertility exists a difference of a son in the final descendants between the indigenous women (6.5) and the not indigenous (5.3). In the indigenous women as well as in the not indigenous is note a decrease of the fertility in the last twenty-five years. In spite of this, the decrease is not equal between the indigenous women and the not indigenous. However, upon comparing the generations most youths, the standards of fertility of both populations begin to be similar (Fernández & Serrano, 2000).

It is important to know the standards of nupciality, taking into account to the great majority of the pregnancies in Mexico occur within marriage (Quilodrán, 1991). In this variable are found large differences between the indigenous population and the not indigenous. While 90% of the indigenous women already they were married to 24 years, this percentage reach it the not indigenous women 28 years. If we take to the women of 30 years, we find that 95% of the indigenous women, indigenous in transition and not indigenous are married something which confirms the universality of the union in Mexico. The indigenous women present a greater spacing between pregnancies that not indigenous, probably by practice of the nursing (Fernández & Serrano, 2000).

2 Reproductive Behaviour

To continue we get to define the explanatory variables that were used for the reproductive behavioural analysis. After we analyse the norms of family size, the surviving children and the children wished with these explanatory variables.

The variables elected in this investigation are those which frequently are used for the analysis of the fertility: the age, the sex and the schooling. The others variable selected, religion, monolingual status and knowledge of family planning methods were added for a greater comprehension of the studied phenomenon. Taking into account the characteristics of the sample, this survey also permits us to approach us reproductive behaviour differentiating by ethnic group.

Ethnic group: The survey was accomplished in Hidalgo (Nahuas), Oaxaca (Zapotecos and Mixtecos), Hñahñus (Puebla), Chiapas (Tzeltales) and Campeche (Mayan). This sample corresponds to the 40% of the languages spoken by the indigenous population of Mexico.

Groups of age: For this thesis were worked groups of fifteen age years taking into account to in the first fifteen years are assimilated the contents sociocultural. The seconds fifteen years are designated youth and it is when are acquired the adult responsibilities. In the quarter time, of 30 to 45 years, it is when the persons have consolidated their familiar and community situation. In the following time, 45 to 60 years, it is where the persons have a great weight of authority. In the following years, already the individuals are marginal of the power, though some of their members yet may hold an public office (Freyermuth, 2000).

Sex: This survey permits us to approach us reproductive behaviour of the men and of the women of the studied ethnic groups.

Schooling: The schooling is important by the relationship that it has been seen between the great schooling and the desire of having less children (Berman, Duryea et al., 1999). Furthermore by the changes that it has meant in the socialisation of our population of study. The schooling of the rural zones is one of the greater changes in the dynamics of the ethnic groups since to be imposed the rural schools is given a greater interaction between the sexes.

Monolingual status: The monolingual status permits us to know the degree in which the here studied ethnic groups is related to the national society.

Religion: This variable has been frequently used to explain the differences in the reproductive behaviour (Lesthaeghe y Surkin, 1988) for the normative component of the same (Maldonado, 1969). In the analysed survey there are persons of several religions: catholic, Protestant, evangelical, others and persons that declare that they do not belong to no religion. The distribution of those religions within each ethnic group is quite regular, something which confirms the diversity of religions and the expansion of this diversity in Mexico (Casillas, 2000).

Knowledge of family planning methods: Change from a regime of natural fertility to a controlled fertility has been one of the greater changes in the human reproduction. The diffusion of family planning methods is an essential element in this regime change and has a strong impact in the reproductive behaviour of the populations. In our case, where it is being giving a change in the standards of fertility, to know if the persons believe that they can control their descendants is important.

2.2 Surviving   children

The first element that we go to analyse behavioural reproductive is the number of surviving children. Normally the demographic analysis analyses the live born children and after the surviving children. However, in the survey was not included the question of live born children. For this motive, only we can analyse the number of surviving children. Setting aside this methodological problem, we go to analyse the number of surviving children taking into account to can not estimate the effect of the mortality.

The most important question that we outline ourselves is to know if the ethnic groups analysed in this work have a number of surviving children greater than similar populations. To answer this question we compare the ethnic groups with the localities of less than 2,500 inhabitants of the National Survey of the Demographic Dynamics of 1997. We find that the indigenous communities have a much more high average that similar localities.

2.3 Norms of family size

Sociology considers that social norms restrain or favour the individual behaviour (Mason O, 1983). One of the presumptions is that the social norms constitute an expectation on the behaviour and not only a description of this. The norms are rules that establish how the persons should behaved, thought or felt in particular circumstances or in social situations. It is as soon as the norms are a social phenomenon, not only an individual fact. This concept is central to understand why the populations are behaved of given way, for the human behavioural forecast and for the cohesion of the groups.

In the demographic literature exists consensus on the existence of the norms though it is not clear that all the societies may have reproductive norms. These discussions have taken a numerical form, for example an acceptable range of wished number of children. However, they exist other approximations that support that the norms regulate the moment of having the children and when let of having them (Mason O, 1983).

In the studied survey, the questions on the norms of family size were seeking to know the perception on large and small families. The question that we make ourselves at this time is to know that so much consensus exists between the norms. We observe that the norms are similar for all the groups of age. Upon accomplishing the hypothesis tests to compare the norms of family size between the groups of age do not find meaningful differences. This occurs so much for the norms of family size small as large. In the number of children in a small family we find differences between the ideas of the men and the women. The women think that a small family has less children that in the ideal expressed by the men. In a nutshell, we find a great consensus between the perceptions of the men and of the women in the question of the number of children that has a large family and a small family. The results of the hypothesis tests between the six ethnic groups suggest extreme two in the norms of the children of a large family: that of the Zapotecos with 11 children and of the Tzeltales with 9 children, with meaningful differences mutually.

2.4 Desired number of children

The desired number of children has been used to understand the reproductive behaviour though not preach the fertility real. The foregoing is due to two motives: the strong weight that has the ideal in the question and the rationalisation that the persons make of the children that already have.

What is first that we need to know if the desired number of children defers depending on the local context. To know this, we go to compare the desired number of children in each state, without importing the size from the locality, with the number in each entity from the localities from less than 2.500 inhabitants and with the indigenous sample. To accomplish this goes to use information of the National Survey of the Demographic Dynamics (ENADID) of 1997.

The number of desired children is, in all the cases, greater for the ethnic groups that the national average and the state. It is difference is quite meaningful in the case of all the ethnic groups, an average of 4.21 children wished against a 1.95 of wished children national average.

The desire by the small families is very under with only a 0.6% of persons that declare to wish to have between 0 and 1 children. The persons that wish six and more children, add a 21.8% of the cases. We find the few preference by small size families. Only a 0.1% of the persons declare not to want to have children. While 0.6% declares to want to have a son. These 24 registered cases belong to person minors of 31 years, therefore we can explain this behaviour in relationship to the age.

Now we need to know if exist differences between the ethnic groups that here we have studied. All the ethnic groups present atypical cases concentrate in persons of more than thirty years and in women. In the case of the Ñhañhus have the number of smaller wished children (3.23). The results of the others ethnic groups do not defer in the average like in the distribution. The Mixtecos have a desired number of children of 4.04, with values between one and seven. The Zapotecos have a range of zero response to ten children. The Nahuas have in average 4.41 desired children, with values between zero and ten. In the Tzeltales 50% of the cases is concentrated on the average of 4.71 desired children. Finally, the Mayans have an answers range between zero and ten children, with an average of 4.5.

As a rule, in all the ethnic groups, the men wish to have more children than the women. An explanation to the greater desire of the men to have children can base in which they do not have the physical weight of having the children. Other explanation has to do with the construction of the masculinity: the men consider to have more children.

With the variable of schooling occur changes between the categories: a person without schooling degrees desire two children more than a person with secondary complete or technical training. Also they exist differences between the persons monolingual and the bilingual, the first desire children more than the second: the differences are meaningful. Upon observing the desired number of average children in the religion categories do not exist differences between the groups. Occur what is same with the variable of methods knowledge of family planning.

3 Qualitative Analysis

In this chapter is analysed the qualitative information of the Ñhañhus and of the Tzeltales. These two ethnic groups offer us different panoramas of the indigenous in Mexico. In the first case it is considered a group assimilated to the national culture, while in the second case to tries to a group most traditional. For this motive, I consider that the reproductive desires of the Hñahñus are nearest to those of the national society that the desires of the Tzeltales. We analyse three elements: the gender roles, the marriage as social institution and the sexuality.

3.1 Gender

An important category to analyse the qualitative information is the gender. This category has been little worked in the demography though the differences of sex have been worked constantly (Riley, 1997). In a perspective of gender is emphasised in the analysis simultaneously what is symbolic and what is structural, what is ideological and what is material, the institutional level and of interaction. With the gender we can understand not only the biological differences of the sexes, but the differences that are outlined for the feminine and masculine roles. In this sense, this work uses the gender category to analyse the differences in the reproductive process between men and women. The gender category is important to understand the reproductive behaviour of the populations. It has been found that a relationship most equitable between men and women help to reduce the fertility (Mason O, 1992).

A conventional approximation to the topic of the gender has been found that the division between public and private, in many societies, it is the reason to the subordination of the women. In the case of our two populations of study, the Hñahñus and the Tzeltales, we find gender roles in the daily life of the persons interviewed. The principal role assigned to the men is that of providing, while the woman stays in the role of reproductiving. In this plan the women declare to have little control over their lives. It is the husband or, in their replacement, the father-in-laws who give the orders. The father has power on their daughters and imposes her a series of restrictions to leave of the house, be dressed and accomplished domestic activities. In the case of the daughters-in-law, these are hidden when there is a visit. For the Tzeltales, the control bases more on the community than on the family. Exist mechanisms to avoid that the women leave alone, without importing their age.

3.2 Social Institutions: the marriage

For McNicoll (1980) the fertility must be understood in the specific context that is been working. An element to understand the fertility are the characteristics of the institutions and the institutional change that is given in given moments (McNicoll, 1980). Departing of this proposal we go to analyse the marriage as a social institution that affects directly to the reproductive behaviour.

To be adult and to have the possibility of be married it should be of having of 18 to 20 years old for the men and of 14 to 16 in the women. In these ages the body of the woman is prepared to have children. According to the interviews, the marriage between the Hñahñus is related to the first children.

The types of marriage that are given in the region Hñahñus are: civil, religious and the free union. The persons with more money are married by the church, this form from marriage results very costly by that it should be of making holiday and to pay the church. For this motive some couples appeal to the civil marriage, in this case only it should be to invite to the godfathers to eat to the market of Ixmiquilpan. The other form of marriage, the free union, it is the result of the pregnancy. In the interviews do not appear statements of the fact that the marriages will be arranged by the parents but au contraire: they are the couples whom have decided be together.

The marriage is related to the first son. One of the objectives of the marriage is to have descendants, element that legitimates the union socially. In the case of occurring a

prematrimonial pregnancy, the solution is the marriage to find the same social legitimacy. That is to say that these two events, marriage and first son, they can not be separated.

For the Tzeltales interviewees exists a strong difference between the form of traditional marriage and the current. The traditional form of be married was consisting drag it of the woman while now is given a negotiation between the parents of the bridegrooms. Drag it of the women was forbidden in the eighties. It is as soon as according to the interviews now the couples decide be gone to live together. No of the persons interviewed in free union declared to want be married neither by what is civil nor by what is catholic. This element outlines a strong difference with the Hñahñus with who the marriage is an important element.

A cause of separation of the couples is the sterility. Exist two possibilities in a case of sterility: if the woman is not embarrassed, the couple is separated and the man is going to seek to other woman. The other case is that the woman is not embarrassed because does not has the sufficient age, in such a case the man waits one or two years but is despaired and ended seeking to other woman. According to the Hñahñus interviewees, the sterility is not presented in the community. Upon asking on this topic the persons perceive it as a mainly feminine problem.

3.3 Pregnancy

The pregnancy and delivery is attended by midwives, though this is a usage that it has gone being changed by the medicalisation of the process. The midwives recommend to go to the health services. However, they are complained of the fact that they are not well attended and scold them by not to make thing as lavatories construction and to boil water. Las generations more youths perceive differences between the experiences of their greater and they: while their grandmothers had the children in the house, they prefer to have them in the hospital.

For the Hñahñus, it is important the sexual prohibition in the postpartum. The suffering by infringing the prohibition to have sexual relationships during the quarantine is called *ranuxhi* in indigenous language. The time of nursing is suffering a shortening. Between the Tzeltales the women do not limit conscientiously the lactation. Normally they let of suckling when they return to remain pregnant when the son has some two years.

In the two ethnic groups exist abortive natural practices. This can be seen as a form of control of the population by means of the contraception instead of the modern techniques of the contraception.

Conclusions

The anthropologic - demography approach let us a better understanding of reproductive behaviour in indigenous communities while this is transmitted to the specific context where take this place.

There exists important changes in the reproductive dynamic of the ethnic groups studied here. The reproductive behaviour of each group is different as cultural patterns too. Therefore the weight of the explanatory variables used in the demographic analysis is different for each one of these groups as well. This element is a challenge for the population policies. In Mexico, one of more important actions is the natal control. I say natal control because it is an action far away from an reproductive health policy, such have been proposed at the Cairo Conference. Evidently the speech of the reproductive health and of the family planning is very difficult to understanding in indigenous contexts where the reproduction is an event of vital importance for the re - production of the groups here studied. It is considered groups where persists a high mortality yet and a high fertility is the answer to avoid the extinction of those groups.

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