

## **Babies at random**

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### **Abstract**

The present study was conducted about the causes of unwanted adolescent pregnancy. The analysis was on pregnant and not pregnant adolescents; was comparatively analysed the circumstances, family situation, self-esteem, life goals and school notes, knowledge on sexual education, attitudes, situation of family integration, dynamic related to pregnancy and its situation later, relationship with the father of the baby. The research was conducted in three stages. The main results were: the pregnant adolescents among the stages show low self-esteem, low school notes, without life goals. They informed their parents at 22 weeks, the 56% abandoned the school, and 90% were abandoned by the father of the baby. In preteens from 10 to 11 years of age, about the sexual information, the source of this information and differences by gender of this education. Boys are significantly more informed than girls; boys received information from fathers, mothers and other members of the family. The girls received information from Internet and adult conversations. 22% of the preteens has adolescent's family members with unwanted pregnancy.

**Key words:** teenagers, unwanted pregnancy; adolescent pregnant; sexual education; low self-esteem.

### **INTRODUCTION**

In the pregnancy in adolescents is not all black or white, in that phenomenon there are shades that are related to implications in prevention and containment, educational interventions are required at home, at school and outside.

A lucky guess, because the adolescents have sex without protection, four or five times before becoming pregnant, like a game of Russian roulette.

The adolescents who want to be pregnant have specific arguments to take that choice, such as: "I want than my grandfather stopped to rape me, I told to my boyfriend and he accepted to help me and we are pregnant" (during this study at medical consultation, girl pregnant of 15 years old), "I wanted to have a child, because I had doubts about my fertility, I had several relationships before without protection and none of my former girl friends were pregnant" (male of 18 years, partner of a girl of 15 years pregnant); achieve exit of the neighbourhood gangs (1); others want to become pregnant because they have few options for personal development or only know their role as wives and mothers (2); in violent areas and gangs territories, the adolescents and their families the pregnancy give them another status they become family of the "leaders" of the neighbourhood; in the lower layers of the society, become pregnant gives idea to break out of that environment; another possible line in the problem is simply the rebel attitude of adolescent girls and the illusion of "love" which makes pregnancy a good option to become part of another family.

In opposition to this situation, the unwanted adolescent pregnancy has been widely studied and identified as potential factors the precarious socio-economic (3) and poverty, others such as the early marriage or simply union, very early sexual activity, unprotected and forced, non-attendance at school and the lack of employment opportunities (4).

### ADOLESCENCE

Adolescence is defined by the World Health Organization (WHO) is the period between 10 and 19 years of age, which is characterized by a number of organizational changes (puberty) as well as the integration of reproductive character functions (Menstrual cycle in women and spermatic cycle in men) with deep psychosocial changes due to adjustment in the sociocultural environment (5) and youth, according to the United Nations, the population between 15 to 24 years of age (6).

Adolescence begins with puberty (appearance of pubic hair), that is unleashed by a series of ethnic and individual genetic codes, factors such as the growth and development of the previous stage (childhood), environmental stimuli, health condition and previous nutrition, psycho-social stimuli are involved in the period of adolescence for the production of hormones from the adenohipophysis that facilitate the maturation of the gonads in both woman and male (table 1), (7).

**Table 1. Stages and characteristics of adolescence**

Main aspects	Early adolescence or pre-adolescence (10 to 14 years of age)	Adolescence media (15 to 17 years of age)	Late adolescence (18 even 21 years of age)
<b>Independence</b>	Lack of interest in the activity of the family Changes in mood	Family conflicts Testing of the family values	Acceptance of responsibilities Acceptance of tips
<b>Corporeal figure</b>	Importance of the appearance. Fashion	Concern for the physical aspect Training and group membership	Acceptance of their figure Expansion of their groups
<b>Adoption of new styles</b>	Friends of the same gender	Values of the friends. Appointments with suitors	Use of their time. Vocation
<b>Identity</b>	Cognitive Thinking Fantasy. Search for privacy	Intellectual ability Feelings share	Realistic Commitments Acceptance of moral and religious values and sexual.

Source: Gorab, R. (2011). *Introducción a la adolescencia en G. R. Fernández PF, Adolescencia y Medicina (595 pp). México, D.F.: Prado-UNAM.*

This period of life is a social-historical construction, because in the past, the human passed directly from childhood to adulthood, despite being a biological period. In the 30s of the twentieth century the psychologist Stanley Hall created the denomination teenager (8) and it was recognized until after the Second World War; from the years 50 of the twentieth century, the improvements in living conditions allowed perceive this stage of life and start his study (7).

It is essentially a time of change that comes with enormous physical and emotional changes, transforming the child in adult and defines the personality, builds the independence and strengthens self-assertion. It breaks with the security of the infancy, behaviours and values of the children and begins to build a new world and own. To achieve this, the adolescent still needed support: the family, school and society, since adolescence remains at a learning phase (7).

The neuroscientific information of transformations and family clashes have been documented by the doctor Kyung Hwa Lee, who coordinated a study of the Universities of Pittsburgh, Berkeley and Harvard In adolescents of 14 years; measured the activity of the limbic system, (zones activated by negative emotions), the prefrontal cortex, where they regulate some emotions and the union of the parietal lobes and temporary, that is activated when we put ourselves in the place of the others. When teenagers listen to critical messages of their mothers, the area of negative emotions, has more activity and the others go to the background. "Young people close social processes and possibly do not take into account the mental states of their parents" as a defence mechanism to prevent problems and not deal directly with the mother (9).

Between the psychological characteristics studied are the selfishness that generates beliefs among adolescents as the fantasy of the invincibility: the conviction of the adolescent that nothing will damage, beaten or affect it, which leads to risk behaviour in sport, sex, drugs, food; another fantasy is when the adolescent believes that is destined to have a unique life, heroic and legendary; and the fantasy of "life public imaginary", the belief that others observe and are interested in their appearance, ideas and conduct (10).

It is a critical period for the development of healthy behaviours, such as the establishment of habits such as physical activity or learning healthy ways to manage stress, but it is also a period of acquisition of risk conducts such as smoking, drug use and sex not protected. (11).

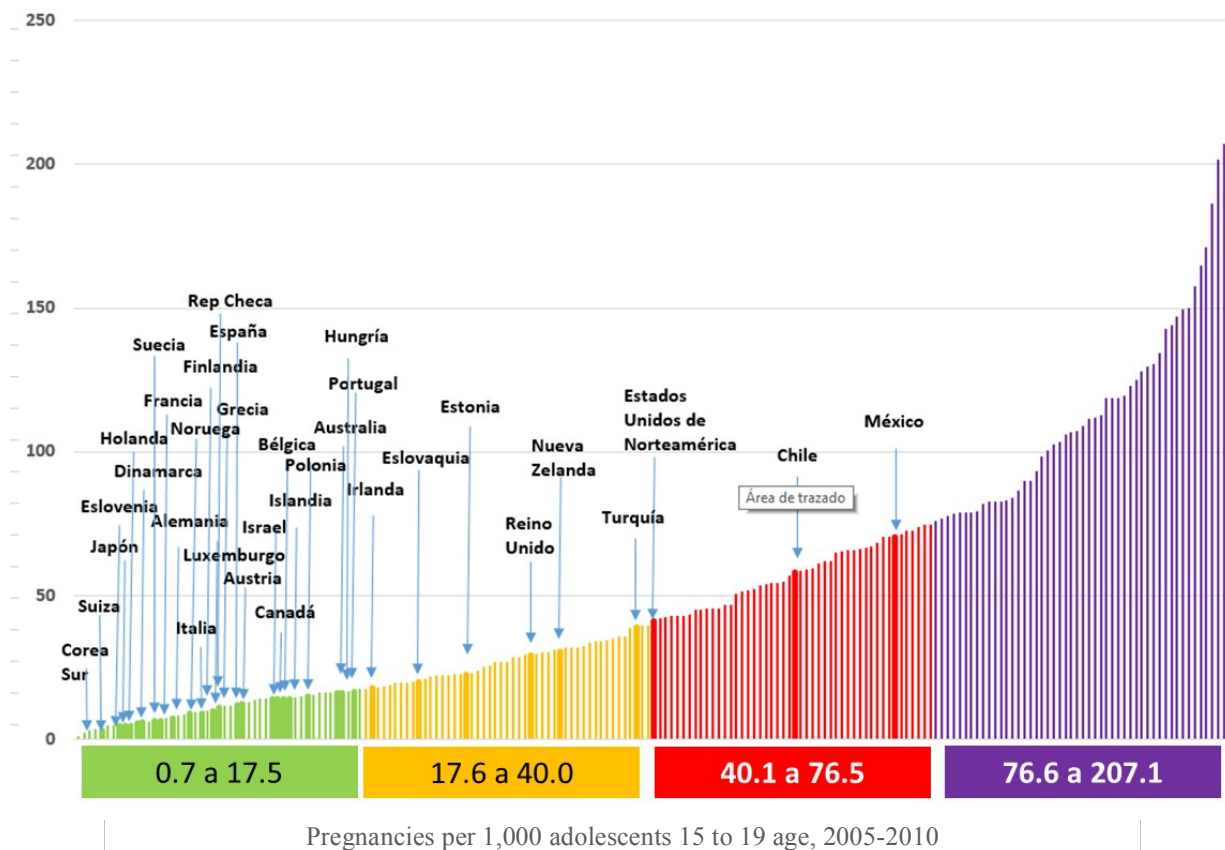
### **MAGNITUDE OF PREGNANT ADOLESCENT**

Among the member countries of the Organization for Economic Cooperation and Development (OECD), Mexico occupies the first place in teenage pregnancies, which represents a problem of sexual and reproductive wellbeing (12) and added to this is that the majority of pregnancies that occur in adolescents, are unplanned and unwanted, like some sexually transmitted diseases, compared with other developed countries of Europe, where teenage pregnancy rates are lower. In developing countries, there has been an increase in the number of young people who delayed marriage at an age a little higher, but tend to have sex before marriage and are increasing the rates of pregnancy and sexually transmitted diseases (13).

At global level with variants related to social development. For example, among the 34 OECD countries the majority is concentrated in the lowest percentages of pregnancy in adolescents. The 73.5% of the countries are in figures lower than 17.5 pregnancies per 1000 adolescents 15 to 19 years, 17.6 per cent of the countries are in figures between 17.6 to 40.0 pregnancies per 1000 adolescents 15 to 19 years and only three countries members of the OECD, the United

States, Chile and Mexico, are in the range of 40.1 to 76.5 pregnancies per 1000 adolescents 15 to 19 years and Mexico is the highest with 70.6 pregnancies per 1000 adolescents, while the world average is 55.7 (Figure 1) (14).

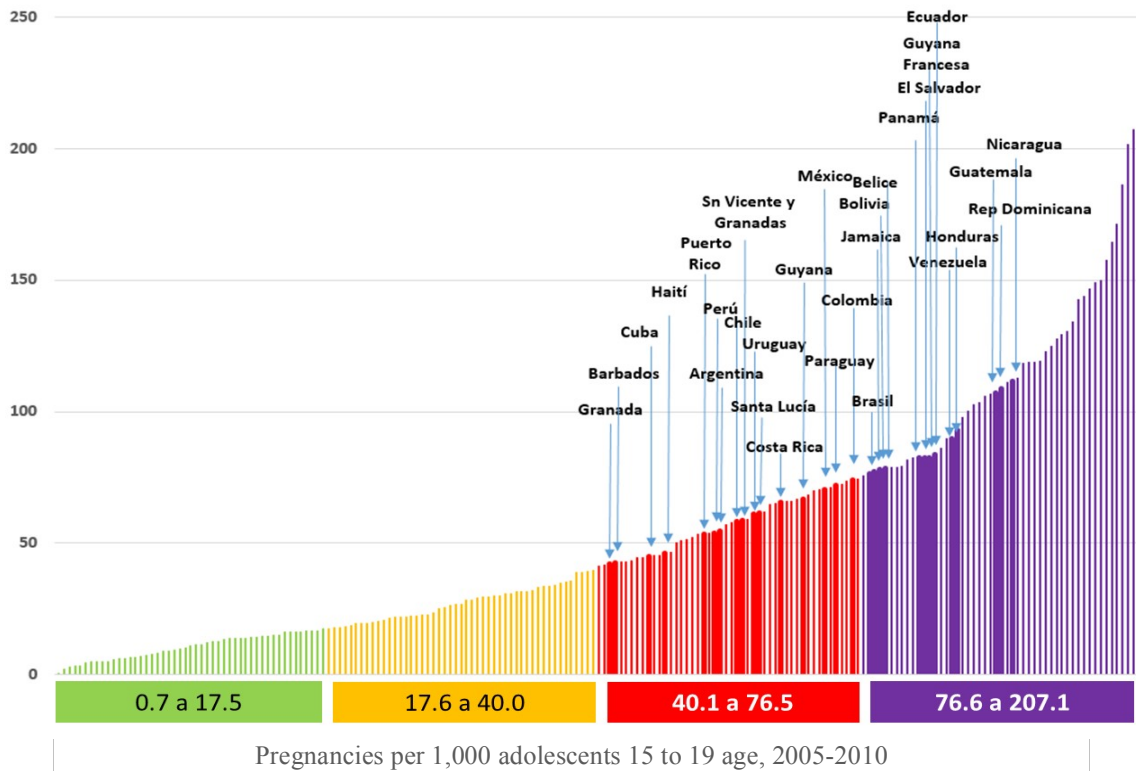
**Figure 1. Proportion of pregnancies in adolescents 15 to 19 years in the countries of the OECD.**



**Source: Based on data from United Nations. (ESA/P/WP.242. 2015). Department of Economic and Social Affairs, Population Division. Obtained from World Population Prospects: The 2015 Revision, metrology of the A Population Estimates and projections.**

In Latin America, all the countries are concentrated between 40.1 to 207.1 pregnancies per 1000 adolescents from 15 to 19 years old (figure 2). The country with the lowest index of pregnancies in adolescents is Granada with 42.4 (just after the United States) and the highest rate in pregnancies in adolescents is Nicaragua with 112.7. In that group, Mexico is in the middle point (14).

**Figure 2. Proportion of pregnancies in adolescents 15 to 19 age in the countries of Latin America**



**Source: Based on data from United Nations. (ESA/P/WP.242. 2015). Department of Economic and Social Affairs, Population Division. Obtained from World Population Prospects: The 2015 Revision, methodology of the A Population Estimates and projections.**

Around the world, the highest indices of pregnancies in adolescents are concentrated in Africa. The table 2, shows the first ten places and its evolution in three periods from 1995 to 2010 (15).

**Table 2. Evolution of the highest rates in the world of pregnancies per 1000 adolescents 15 to 19 years. 1995-2010**

Country	1995–2000	2000–2005	2005–2010
<b>World average</b>	<b>66.8</b>	<b>60.4</b>	<b>55.7</b>
Niger	220.6	213.5	207.1
Democratic Republic of the Congo	242.0	230.6	201.4
Mali	190.9	189.5	186.3
Angola	215.1	201.0	171.1
Chad	193.4	189.6	164.5
Guinea	174.4	165.7	157.4
Uganda	191.0	172.5	149.9
Zambia	143.1	159.6	146.8
Mozambique	117.0	176.4	149.2
Sierra Leona	150.9	143.4	143.7

**Source: Based on data from United Nations. (2013). Adolescent fertility since the International Conference on Population and Development (ICPD) in Cairo.**

In the United States rates of pregnancy in adolescents, pregnancy and childbirth remain very high (Figures 1 and 2), becoming a public health problem, there has been a reduction in the past 20 years, but in 2011 there were 330,000 pregnancies in adolescents, and 12 per cent to 49 per cent of these young women returned pregnant again within the next year, situation associated with a deficit of economic and social development, since teenage mothers who have a second birth before the age of 20, they do not complete secondary education and will not have employment and will be beneficiaries of public assistance (16).

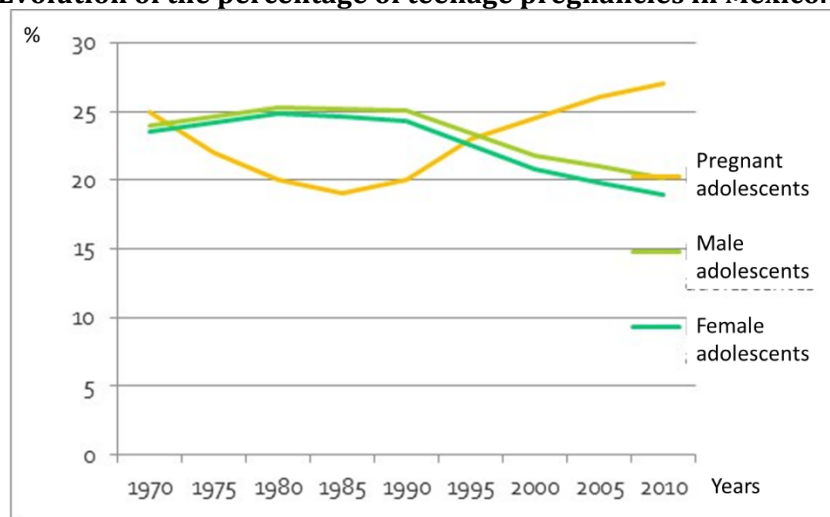
One of the factors involved could be the education; in the United Kingdom the rate of pregnancies in adolescents (26 childbirths in adolescents per 1,000 women) is the highest in western Europe and sex education is not compulsory in schools and some schools of religious inspiration even taught, so that coverage is erratic, while in the Netherlands, which has one of the lowest rates of Europe of pregnancies in adolescents (four births in adolescents by 1,000 women), sex education begins in primary school, (Figure 1).

In Argentina, the data from the National Census since 2001 indicated that 80 per cent of the adolescents and young people who had no children attending an educational institution, while among teenage girls who are mothers attend only 25%. In 2011, the percentage of newborns of teenage mothers (under 20 years old) remains similar to the past 20 years (17). On the other hand, the proportion of mothers among adolescent girls with low education (complete primary education or less) is the triple, in comparison with the adolescents with higher education (incomplete secondary and higher) (18). Each year are born in Argentina, 107-109 sons and daughters from teenage mothers (19) (Figure 2).

### THE MEXICAN PROBLEM

Adolescent pregnancy is a public health problem in Mexico (figure 3). It represents high-risk patients, raise the maternal mortality, increase spending on health care, increase the rate of school drop-outs, affect the social dynamics of family and community and do not take advantage of the potential of the demographic bonus (2).

**Figure 3. Evolution of the percentage of teenage pregnancies in Mexico. 1970-2010**



Source: National Population Program. CONAPO. Mexico 2007.

National Population and Housing Censuses. INEGI. 1970-2010, [Http://www.inegi.org.mx/lib/olap/consulta](http://www.inegi.org.mx/lib/olap/consulta) \*Population Estimates. INEGI. 1970-2005

Mexico have a population of 22.4 million adolescents 10 to 19 years of age, little informed, with limited access to sexual health services and exposed to multiple risks, such as sexually transmitted infections, HIV and unwanted pregnancies (20). The 55.2% are poor, 50% stopped attending school; and the number of adolescents who die increases each year due to traffic accidents, homicides and suicides (4).

The Mexican adolescents female begin sexual activity at the age of 15, each minute three babies are born, one of them to an adolescent mother (21).

In Mexico the northern states: Coahuila, Nayarit and Sinaloa, show the highest percentages of adolescences pregnancies, Durango is the entity with the highest fertility rate among women 15 to 19 years old, with 70.56 percent. The Mexico City, Queretaro and Colima have the lowest number of teenage pregnancies (22), Figure 4.

**Figure 4. Mexican highest rates and lowest in teenage pregnancies. 2012.**



**Source: INEGI. 2012**

### **METHODOLOGY**

The information was obtained by key informants, because is an anthropological method widely used in health-related research (23) and that the qualitative methodology allows flexibility in the proposed analysis (24) in subgroups:

- Non-pregnant adolescents under the age of 19
- Pregnant adolescents under the age of 19.
- Mothers of not pregnant adolescents under the age of 19.
- Mothers of pregnant adolescents under the age of 19.
- Boyfriends of not pregnant adolescents under the age of 19.
- Boyfriends of pregnant adolescents under the age of 19.
- Fathers of not pregnant adolescents under the age of 19.
- Fathers of pregnant adolescents under the age of 19.

The study was divided in three stages:

1. The first phase was an exploratory study with the interview of five cases according to the methodological approach into subgroups by categories to identify possible patterns to treat throughout the investigation and the general views on the subject.
2. The second phase was the interview of preteens from 10 to 11 years of age, students of the sixth year of elementary school about the sexual information, the source of this information and differences by gender of this education.
3. The third phase was the study of the whole population 2014 of adolescent pregnant, daughters of the elements of Auxiliary Police of Mexico City.

## RESULTS AND DISCUSSION

In Mexico, 90% of the pregnant adolescents have an undesired pregnant. Dr. Carlos Welti, a Mexican expert have found that the adolescents become pregnant because motherhood is a role endorsed socially and gives them a status that does not have in other areas (25).

In the City of Mexico was studied groups of pregnant adolescents and found:

### First phase

The risk factors among young pregnant women who did not wish to be are: low self-esteem, without future goals, without a project of life, poor school notes, in some cases verbal abuse in her home. The non-pregnant women did not have these factors:

- All pregnant adolescents and non-pregnant adolescents received information about contraception in the school.
- This girls all of them studied before becoming pregnant and non-pregnant continue studying.
- All pregnant adolescents and non-pregnant women had sexual intercourse.
- None of this girls non-pregnant and pregnant teens wanted to get pregnant.
- All pregnant adolescents and non-pregnant women received the recommendation of their mothers: "take care", and this expression has a lots of different meanings.
- The risk factors involved are not considered previously in the traditional literature as the low self-esteem and the lack of goals in the future.
- In the group of pregnant women the tendency to low self-esteem is very important.
- The low academic performance in the group of pregnant women, with qualifications under 8 of 10 in general.
- The fails in the communication between mothers and daughters especially oriented to the clear explanation of the sex and consequences, since the mothers of pregnant teenagers were convinced that their daughters had sufficient knowledge obtained in the school, the correct use of contraceptives and clarify the myths and explain clearly what mothers want to say with "take care".
- In non-pregnant their mothers influenced the strict monitoring and the injection of future goals for their lives.
- Could not interview adolescent boyfriends or fathers.

### Phase two

In preadolescents of the sixth year of primary school, 4 groups with 77 students, all of them answered a questionnaire and profound interview and the results were: boys receive preventive information from their father, the mother and other members of the family. In contrast, girls are less informed, partially in the school, Internet and mechanisms such as listening adult's conversations. It was a finding, since the difference in education by gender was not expected.

In this age, the adolescents acquired myths (that are going to be permanent) incompatible with the prevention, for example:

During the interview the boys comment: " If, any way the condom does not serve, then, why use it?"; was a rumour spread among children and it was the interpretation of a conversation between the father and older brother: "I recommend you better not to have sexual intercourse because the condom could break".



Also, boys and girls are exposed to stimuli of the television with messages of sexuality and eroticism, without a formal education, through television, radio, internet and communication among their peers, listening furtive talks of adults out of context.

Males receive more information than girls about how to prevent pregnancies in their homes, from their mothers and their parents.

- The girls receive more information about sexual information and pregnancy prevention at school and by friends. The proportion is almost two to one in both cases.
- Girls have a greater understanding of what it is to have sexual relations and their potential consequences.
- Girls (83.7%) know more about preventive methods of pregnancy than boys (73.5%).
- Boys and girls in equal proportion received information by media such as the internet and spying talks of adults.
- Boys and girls know about sexually transmitted infections by sexual intercourse.
- Boys and girls couldn't interpret the sexual abstinence.
- Boys and girls known the name all contraceptive methods but do not know how to use a condom.
- 22 per cent of the boys and girls have in their family other adolescents' girls with unwanted pregnancy.

### **Phase three**

The population of daughters of Police Force Auxiliary of Mexico City from 10 to 19 years old is 9,732 girls and 1.1% are pregnant, compared with the 1.3 per cent at the national level of the same age group; 101 pregnant adolescents were interviewed.

In the pregnant girls studied they knowing the preventive means, but they didn't use, all of them had the idea "pregnancy? It can't happen to me" they had sexual intercourses several times (4 to 5) without protection and "nothing happened"; and repeated factors: low self-esteem, none project of life, low school notes, predominantly). The fathers of the babies abandoned the girls in 90% of cases (link ).

- The girls studied in this stage are 14 to 19 years old, with pregnancies from 4 to 39 weeks.
- The girls informed to their families when the have more than 20 weeks of pregnancy, although adolescents knew that they were pregnant between 4 to 9 weeks.
- Each month in this group become pregnant 6 to 8 girls, 20 per cent of the adolescents got pregnant at November, which currently has no explanation; 30 per cent of pregnancies were grouped in three months, July, August and December that correspond to holiday periods and the last in addition to Christmas celebrations.
- 95% of girls said not to use any preventive method. The remaining 5 per cent referred young be using the condom, be the first time I had sex and that the condom broke and became pregnant (her mother was on the side). The 95% of the pregnant girls said to have had access to the methods but have not used.

We developed in-depth interviews to pregnant adolescents who agreed to participate. It was very emotive moments and that allowed to know the situation of the young girls:

- During the interviews, pregnant teenagers cried and expressed repentance of its "error", "fault", "have failed to the confidence of their parents", a situation similar to that found by Fainsod (18) and Peker (19).
- The non-pregnant adolescents, all with a safe attitude, they use contraceptive methods in their sexual intercourses.

- One preadolescent gets the information of his elder brother, because the mother is convinced that the girl is still small for receive this information. Which coincides again with the profile observed in the study in preadolescents, information is being strengthened for the boys, for the girls is lower and they get the information by other ways.
- The mothers-elements of police force, in general, believe they have the blame of the pregnancy of their daughters, suffer and think that they didn't offer enough time to keep their daughters.
- The mothers-no element of the police, considered they gave the necessary information and are disappointed.
- The suggestion of pregnant adolescents to other girls to avoid unwanted pregnancies was to use contraceptive methods.
- The family integration has no difference between the non-pregnant and pregnant teens in contrasts with the affirmation of the last century still now that pregnant adolescents come from broken families (26), (20), (27), (4).
- 52.6% of pregnant girls continue at school and their lives remain without changes, the 46.4% considers their life has changed and no longer attending school.
- There is less knowledge about contraceptive methods in pregnant adolescent 79%, compared with non-pregnant 83%, which can be derived from the lack of precise information.
- The family environment before becoming pregnant was well in 95% of the cases, only a young noted have problems in the home, specifically with her mother (5%). What also contrasts with the assertion that the youth seek to leave her house for negative environments (2).
- In the 100% of young pregnant the pregnancy is not happened in circumstances of use of drugs or alcohol. In contrast 50% of the non-pregnant women consumes alcohol or drugs.
- 95% is confident of the paternity of the baby and 5 per cent is not secure.
- In most of the cases pregnant girls reported to the father of their babies, 60% of cases offered to take over, but only 10% really support them, which is a much higher (90 per cent of abandonment) that the reported by other authors of the 60% of the cases (28) and up to 70% (29).
- Mothers of pregnant adolescents pointed out the fails in communication, specially oriented to the clear explanation of the sex and how to avoid the unwanted pregnancy and the correct use of contraceptives.
- Could not interview adolescent boyfriends or fathers.

### CONCLUSIONS

1. Is a priority to identify early the cases of low self-esteem, to treat them and to empower this girls in order to prevent unwanted pregnancy or other conducts than could be risky.
2. The profile of pregnant adolescents raised since the 1970s of the twentieth century did not correspond to what is found in the two groups of adolescents studied: do not come from broken families, they are students, they know - although ill- contraceptive methods, did not get pregnant in circumstances of alcohol or drug use, there were no problems in their family environment at the time of becoming pregnant.
3. Test was applied self-esteem Rosenberg, it was found that the adolescents pregnant have low self-esteem.

4. Pregnant adolescents have low school notes, they not have clear goals in the field of education and professional. This association of low school performance, lack of goals and low self-esteem are risk factors for unwanted pregnancy.
5. The sexual education for preteens and teenagers do not meet the needs of the present, is necessary to modify it, make it more in line with the times and interests of childhood and adolescence, and bring it closer to the parents and the school.
6. The communication from mothers to daughters in the field of sexuality is poor and requires to be reoriented and to make clear and explicit the commitments and risks related to the pregnancy during the adolescence.
7. Girls get more information from sources such as the internet, magazines, friends, that of their family. In the preteen the information provided by their parents is practically absent.
8. Evidence an inequality in the availability of information geared more to educate boys and girls between preteens who is reflected in the subsequent interviews in pregnant teenagers.
9. According to the results, the confusion in the information and concerns about sexuality started from the pre-adolescence, and it is therefore essential to generate a systematization of information in an open and correct from these periods and not to wait for the adolescence in which young people are already putting their sexuality.
10. The formal information in textbooks biologically may be correct, but lack of balance between the physical process information and awareness on values, responsible parenthood, which may be influencing the 90% of abandonment of the couple in the studied population, leaving the pregnant adolescent alone.
11. Sex education at school and home should be reoriented, strengthened, be correct biologically, but also seek the awareness of the obligations and commitments with sexuality and the potential fatherhood-motherhood adolescent.
12. The mass media must compensated preventive advertising on sexuality in the same times in which children are exposed to images of sensuality, including explicit sex in the schedules of the evening, without compensatory educational information.
13. It is necessary to promote activities for teenagers which allow to take their time in recreational, educational actions or sports that keep them occupied in a proactive way and reduce the dead times conducive to sex does not protected.
14. It is necessary to promote a system of public access to condoms, so that the adolescents to obtain them easily to avoid that their lack conditions an unwanted pregnancy.

Link to video [https://drive.google.com/file/d/0B-RRlk9I\\_yH4N0U2WVJLbnFSWGs/view?pref=2&pli=1](https://drive.google.com/file/d/0B-RRlk9I_yH4N0U2WVJLbnFSWGs/view?pref=2&pli=1)

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